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Homeschooling's Harms: Lessons from Economics

George Shepherd

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HOMESCHOOLING'S HARMS: LESSONS FROM ECONOMICS

*George Shepherd**

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I. INTRODUCTION

Homeschooling is the most radical form of private education and potentially the most destructive to maintaining a democratic society. It is the most extreme form of school choice: the home-schooled child does not move to a different school—to a different local public school, to a private school, or to a school in another district. Instead, the student

* Emory University School of Law. I am grateful for comments from Sasha Volokh, Robert Ashford, and seminar participants at Emory University School of Law, the Society of Socio-Economics 2013 Annual Meeting, and the 2015 Workshop on Vulnerability and Education, Amherst, Mass. I thank Jessica Seares and Silver Xiaoxuan Yu for able research assistance.

attends no school at all. In the United States, homeschooling is a large, growing movement. After many states eliminated regulations on homeschooling in the early 1990s, the number of home-schooled children has increased to between two and four million.¹

Using vulnerability theory, Martha Fineman and I write elsewhere² that homeschooling harms children, public schools, the marketplace of ideas, and the democratic process. Accordingly, we conclude that homeschooling should be prohibited, as it is in many other countries.

In this paper, I focus on the economics of homeschooling and school choice. Proponents of various forms of school choice—including not only homeschooling, but also vouchers, charter schools, and private schools—often attempt to support their arguments by using economic analysis. They argue that the competition from school choice will cause public schools to improve. I show, to the contrary, that economics reveals that homeschooling and school choice will harm public schools.

First, I focus on economic theory. Economic theory suggests that homeschooling and other forms of competition with public schools would be expected to make the public schools worse, not better. Unfettered competition should be expected to lead to the inefficient destruction of public schools. The competition will harm all students in public schools, including the underprivileged. This is so for four theoretical reasons. First, public education is a public good. Second, public education enjoys network externalities. Third, in many communities, permitting people to opt out of public education harms public schools because of adverse selection. Fourth, allowing competition creates a harmful prisoner's dilemma that creates a worse equilibrium than if competition were prohibited.

Using empirical evidence, I then confirm that the economic theory is correct. The harms of homeschooling and school choice are indeed shown by empirical economic analysis. Competition indeed harms public schools.

This Article proceeds as follows. In Part II, I review both the performance of public schools and how school choice has been proposed as a solution to the public schools' problems. Part III describes how

1. *Homeschooled: How American Homeschoolers measure up*, <http://www.topmastersineducation.com/homeschooled/>; Roy Hanson, *HSLDA: The Homeschooler's Preeminent Legal Resource*, PRIVATE & HOME EDUCATORS OF AMERICA, (2010), <http://www.pheofca.org/HSLDA.html> (last visited Mar. 9, 2016); *State Laws*, HOME SCHOOL LEGAL DEFENSE ASSOCIATION, <http://www.hslda.org/laws/default.asp> (last visited Mar. 9, 2016).

2. Martha Albertson Fineman & George Shepherd, *Home schooling: Choosing Parental Rights Over Children's Interests* (Working Paper, Emory University, 2014).

economics has been invoked for two centuries to justify school choice: specifically, it describes libertarian economists' theoretical arguments of why competition benefits public schools. Next, Part IV shows that this economic theory is wrong. Instead, economic theory shows that the market for education has characteristics that cause competition to inefficiently harm public schools. In Part V, I survey the strong evidence that the theory is true empirically. Homeschooling and other forms of choice and competition do not improve public schools. Instead they harm them. Finally, Part VI offers conclusions.

II. PUBLIC EDUCATION'S PERFORMANCE AND SCHOOL CHOICE

Today, American public education, K-12, is routinely criticized. It is characterized as archaic, ineffective, and even corrupt.³ We are constantly told that American students are falling far behind their international peers in comparative measurements, and corporations complain that American high-school graduates cannot perform as required in the workplace.⁴

Much of this criticism is misplaced. Approximately 70% of U.S. public schools are doing fine, with the performance of their students comparing favorably with their foreign peers.⁵ These are the public schools that serve predominantly middle-class and affluent white students. The 30% of public schools that are not succeeding are the schools that serve predominantly low-income students, often schools in urban areas with high numbers of African-American students. "For those who look carefully at the performance of our schools, the real problem is not that the United States is falling behind, or that the entire system is failing. It is the sorry shape of the bottom 30 percent of U.S. schools, those in urban and rural communities full of low-income children."⁶

3. An example is the Atlanta school testing scandal. See Richard Fausset, *Trial Opens in Atlanta School Cheating Scandal*, N.Y. TIMES (Sep. 29, 2014), http://www.nytimes.com/2014/09/30/us/racketeering-trial-opens-in-altanta-schools-cheating-scandal.html?_r=0.

4. See Richard Haass & Klaus Kleinfeld, *Lack of Skilled Employees Hurting Manufacturing*, USA TODAY (July 3, 2012), <http://www.usatoday.com/news/opinion/forum/story/2012-07-02/public-private-manufacturing/56005466/1>.

5. JAMES E. RYAN, FIVE MILES AWAY, A WORLD APART: ONE CITY, TWO SCHOOLS, AND THE STORY OF EDUCATIONAL OPPORTUNITY IN MODERN AMERICA 279 (2010). See also Jay Matthews, *Bad Rap on the Schools*, WILSON QUARTERLY 15-20 (2008); Paul Krugman, *Self-Inflicted Confusion*, N.Y. TIMES (Apr. 25, 2008), <http://www.nytimes.com/2008/04/25/opinion/25krugman.html>.

6. See RYAN, *supra* note 5, at 278; Matthews, *supra* note 5, at 15-20; Krugman, *supra* note 5.

This group of low-income public schools certainly has undergone significant changes, often for the worse. They are more dangerous, less funded, and under more political scrutiny than in the past.⁷

As might be expected, these problems of the bottom 30% have provoked widespread calls for change. One of the main responses to the troubled urban schools has been to promote so-called “choice.”⁸ The whole point of these “choice” programs is for students to abandon publicly-provided education in favor of privatized provision.⁹ Accordingly, an equally appropriate term for the programs is “abandonment” programs.

Choice programs come in several varieties. One example is vouchers: the government provides funds for students to attend private schools. Another example are various tax schemes and credits in which the government reduces the taxes of those who send their children to private schools.¹⁰ In their effect, these have the same impact as vouchers, but the impact is achieved in an indirect, concealed way. A third example is charter schools, in which the government pays for alternatives to the normal public schools, with the alternative schools sometimes being run by for-profit corporations.¹¹ A final example is homeschooling.

This choice approach takes us in the wrong direction. Choice makes it impossible to achieve the public schools’ traditional civic objectives; it is impossible for students to learn to live together when entire demographic groups have used choice to abandon public schools. Moreover, economic analysis shows that the abandonment can deeply harm the public schools that are abandoned.

III. THE RECURRING ATTEMPTS TO USE ECONOMICS TO JUSTIFY SCHOOL CHOICE

Proponents of various forms of school choice—including not only

7. RYAN, *supra* note 5.

8. The other main response is widespread testing, such as the No Child Left Behind program.

9. Vouchers, charter schools.

10. See Valerie Strauss, *Welfare for the Rich? Private School Tax Credit Programs Expanding*, WASHINGTON POST (Feb. 28, 2013), <https://www.washingtonpost.com/news/answer-sheet/wp/2013/02/28/welfare-for-the-rich-private-school-tax-credit-programs-expanding/>; KEVIN G. WELNER, *NEOVOUCHERS: THE EMERGENCE OF TUITION TAX CREDITS FOR PRIVATE SCHOOLING* (2008).

11. Jason Horowitz, *Charter School in Miami Fails, but Proves Useful on Jeb Bush’s Resume*, N.Y. TIMES (Mar. 7, 2015), <http://www.nytimes.com/2015/03/08/education/charter-school-hailed-by-jeb-bush-ended-in-ruin.html>.

homeschooling, but also vouchers, charter schools, and private schools—often attempt to support their arguments by using economic analysis. These attempts are not new. Beginning in the 18th century, libertarian economists such as Adam Smith and John Stuart Mill proposed systems where education was funded by the government but not controlled by it.¹² Like conservatives today, they stressed the supposed benefits of subjecting public schools to competition. For example, in 1859, Mill argued that students should not be forced to attend public schools because “a general State education is a mere contrivance for moulding people to be exactly like one another.”¹³ Instead, public schools, if they existed at all, should be only “one among many competing experiments.”¹⁴ Like current advocates of vouchers and charter schools, Mill argued that the government should pay for private schools, if a student could not pay himself.¹⁵

The United States chose the opposite path, embracing Horace Mann’s teaching that students learned best when they learned together in public schools that taught a common core of civic values: that “government-run and government-funded schools were the path toward social equality and the creation of good citizens.”¹⁶ For the next century, after Mill, public schools and public education were a core means by which the United States mixed the melting pot of immigration into a functioning democracy.¹⁷

In 1955, a conservative economist tried to revive these long-rejected ideas. Libertarian economist Milton Friedman offered the same arguments for vouchers and educational competition as Smith and Mill had made earlier. In a short essay and then a later book, Friedman argued that competition in education would improve choices for children and their families.¹⁸ The competition would also force public schools to improve.¹⁹ Perhaps he did not help the prospects for the adoption of his proposals by arguing at the same time that, because of the supposed magic of markets, licensing requirements for physicians should also be

12. Adam Smith, *The Wealth of Nations* 393 (Simon & Brown, eds. 2010); RYAN, *supra* note 5, at 202; John Stuart Mill, *On Liberty and Other Writings* 89 (Stefan Collini eds. 1989).

13. Mill, *supra* note 12, at 106.

14. *Id.*

15. *Id.*

16. See RYAN, *supra* note 5, at 203.

17. DAVID B. TYACK, *TURNING POINTS IN AMERICAN EDUCATIONAL HISTORY* (1967).

18. Milton Friedman, *The Role of Government in Education*, in *ECONOMICS AND THE PUBLIC INTEREST* (Robert A. Solo, ed., 1955). See also MILTON FRIEDMAN, *CAPITALISM & FREEDOM* 89 (1962).

19. *CAPITALISM & FREEDOM*, *supra* note 18, at 89.

eliminated.²⁰

Friedman's proposal quickly caught on, but in a horrific way. After *Brown v. Board of Education*,²¹ several southern states started using vouchers as a main weapon in their bitter "Massive Resistance" against desegregation.²² They offered vouchers to white students so that they could abandon the newly-integrated public schools and instead attend all-white private schools—Segregation Academies, as they were proudly called.²³ Rather than helping the urban public schools, vouchers helped to destroy them.

It took several decades before the nation could forget vouchers' racist past: the discredited means to evade the Supreme Court and to maintain segregated schools. Many African-Americans who survived this period have a visceral revulsion for vouchers, charter schools, and other forms of so-called educational competition.²⁴ They remember how the arguments about the supposed benefits of vouchers and competition were untrue.²⁵ They remember how vouchers were used as a means not to improve education, but as a weapon to re-segregate education and to abandon African Americans and the public schools that served them.²⁶

After several decades, memories of school choice's racist past and its role in destroying the urban public schools had faded sufficiently that school choice again could be proposed. In a book that appeared in 1990, *Politics, Markets & America's Schools*,²⁷ John Chubb and Terry Moe noted the many flaws of inner-city public schools, contrasting them with the virtues of private schools and suburban public schools. They argued that the inner-city public schools are bad because they are not subject to competition. The students and their families have nowhere to go.²⁸ This is because the students have insufficient assets to afford private schools, move to the suburbs, or have a parent stay home and provide homeschooling.²⁹ They argue that, in contrast, the private schools and suburban public schools are better because they are disciplined by competition.³⁰ Private schools can attract students only through

20. *Id.*

21. *Brown v. Bd. of Educ.*, 347 U.S. 483 (1954).

22. See RYAN, *supra* note 5, at 22.

23. KEVIN M. KRUSE, *WHITE FLIGHT: ATLANTA AND THE MAKING OF MODERN CONSERVATISM* 169-72 (2005).

24. See RYAN, *supra*, note 5, at 38, 182.

25. *Id.*

26. *Id.*

27. JOHN CHUBB & TERRY MOE, *POLITICS, MARKETS & AMERICAN'S SCHOOLS* (1990).

28. *Id.*

29. *Id.*

30. *Id.*

excellence. Similarly, suburban schools must achieve excellence for fear that the affluent students that attend them will move to other school districts, attend private schools, or homeschool.³¹ They conclude that competition, such as that from homeschooling, would cause urban public schools to improve.³²

Chubb and Moe's analysis is exactly backward. Competition does not benefit public schools. Instead, it kills them. The cause of the decline of urban public schools was not the absence of competition. Instead, the urban public schools were destroyed by competition's presence—competition from vouchers, private schools, and schools in neighboring counties. The competition permitted whites to abandon the urban schools and destroy them; after the white, middle-class families fled to private and suburban schools or homeschooled, the inner-city public schools inevitably declined. If the availability of obliging choices had not encouraged white families to abandon the inner-city public schools, then the inner-city public schools would not have declined.

Now that memories have faded of school choice's starring role in both segregation and the decline of urban schools, choice proponents have used the Friedman essay, and arguments of Friedman's followers, to argue that abandonment of public education, whether by homeschooling or other means, somehow helps public education. They argue that choice is beneficial because the competition disciplines public schools and causes them to improve.³³

The details of the standard argument from those supporting school competition is as follows. Without the alternative of homeschooling and private schooling, public schools are a monopoly.³⁴ Microeconomic theory indicates that the normal impacts of a monopoly are to restrict output and to reduce quality. Thus, the argument goes, monopolist public schools offer too few services. And because they do not face competition, they have little incentive to improve their services. Thus, according to critics, public schools pay their unionized teachers too much and allow bad teachers to continue teaching.³⁵ Because there is no threat that students and families can go elsewhere for their education, inefficient, bad instruction persists.³⁶

31. *Id.*

32. *See id.*, Chapter 2.

33. *See* Caroline Hoxby, *Does Competition among Public Schools Benefit Students and Taxpayers?*, 90 AM. ECON. REV. 1209 (2000).

34. *Id.*

35. *Id.*

36. *See* Eric Westervelt, *Teacher Job Protections vs. Students' Education In California*, NPR (Jan. 26, 2014), <http://www.npr.org/2014/01/26/266515292/teacher-job-protections-vs-students->

Moreover, the argument goes, the lack of competition eliminates any escape route for disadvantaged students from the defective public schools. A public-school monopoly not only makes the public schools bad but also cuts off any alternative for the disadvantaged students. Although affluent students may be able to afford private schools, underprivileged students are condemned to remain in the defective public schools.³⁷ These arguments have been used extensively to lobby for various forms of educational competition, including unregulated homeschooling.³⁸

The argument continues that competition and choice solve these problems while harming no one and making everyone better off. Choice allows students in bad schools to leave them. And with seeming magic, the discipline of economic competition will not harm the abandoned public schools but will cause them to improve. Because they are now subject to competition, the public schools will be forced to operate more efficiently and to serve their students better. The public schools will be forced to improve, just as a local hardware store monopolist will be forced to offer lower prices and better service when another hardware store moves in nearby. Choice and competition produce an enchanted win-win: parents can abandon the public schools, but feel good about it, knowing that their abandonment is actually helping both the abandoned schools and the children that they are leaving behind.³⁹

However, educating children is different from selling nails. Although competition might force a hardware store to improve, economic theory predicts that competition will injure a public school system and its remaining students. Homeschooling and other educational alternatives do not cause public schools to improve. Instead, permitting parents to abandon public schools has already harmed public schools, and will continue to do so. Educational choice is destroying public schools, not saving them. Both economic theory and empirical evidence confirm this, as I now discuss.

education-in-calif.

37. Teresa Stepzinski, *Prudential donates \$1 million to help poor children go to private schools*, FLORIDA TIMES-UNION (Aug. 24, 2012), <http://jacksonville.com/news/metro/2012-08-24/story/prudential-donates-1-million-help-poor-children-go-private-schools>.

38. Dan Lips & Evan Feinberg, *Homeschooling: A Growing Option in American Education*, The Heritage Foundation (last visited June 6, 2015), http://www.heritage.org/research/reports/2008/04/homeschooling-a-growing-option-in-american-education#_ftn34.

39. See Hoxby, *supra* note 33.

IV. HOMESCHOOLING IS INEFFICIENT AND HARMFUL ACCORDING TO ECONOMIC THEORY

Because of special characteristics of the market for education, the claims of competition's benefits for public schools are false; economic theory indicates that homeschooling and other forms of competition with public schools would be expected to make the public schools worse, not better. The competition will harm all students in them, including the underprivileged.

This is so for four theoretical reasons, which I now discuss in turn. First, public education is a public good. Second, public education enjoys network externalities. Third, in many communities, permitting people to opt out of public education will destroy public education because of adverse selection. Fourth, allowing competition creates a harmful prisoner's dilemma that creates a worse equilibrium than if competition were prohibited.

A. Public Education is a Public Good

"Public goods" are a special class of goods in which a government monopoly may well be efficient. A public good has two characteristics. First, it is non-rivalrous: one person's enjoyment of the good does not subtract from other people's enjoyment of it. Second, it is non-excludable: it is impossible to exclude anyone from enjoying the good.⁴⁰ A standard example of a public good is national defense. The armed forces' protection of me does not reduce its protection of you, and there is no way to exclude me from its protection.

Public goods are an important example of market failure. The free market will not produce the efficient amount of the public good. This is because of the so-called "free-rider problem."⁴¹ Because, by definition, people cannot be excluded from enjoying the public good, they have an incentive to pay little or nothing for it, and instead to "free ride" on other's provision of it. For example, if the government did not force me to pay taxes for national defense, I would have an incentive to pay nothing, and instead to enjoy the defense that other people would pay for. If everybody did this, then inadequate resources would go to national defense. Another way of saying this is that public goods have "positive externalities." People who purchase them provide benefits to

40. HAL R. VARIAN, MICROECONOMIC ANALYSIS 253 (1984); Inge Kaul et al., Providing Global Public Goods: Managing Globalization 80 (2003).

41. VARIAN, *supra* note 40, at 256.

everyone else too. If I privately pay for an army to guard the coast, then I benefit not just myself, but everyone else who lives near me. Everyone else will have an incentive to let me pay for the army, and not to contribute themselves.

Because of the free-rider problem, the free market will provide an inadequate amount of a public good. Therefore, to achieve efficiency, the government must intervene to force everyone to contribute their fair share to paying for the public good. For example, the government will tax people to pay for national defense. Or it will tax people to provide a lighthouse; again, a lighthouse is a public good both because one ship's use of it does not exclude another ship's use of it and because a ship that does not pay for it cannot be excluded from using it.

In important respects, public education is a public good. First, many of the benefits that public schools provide are non-rivalrous. The benefits of public schools can be freely enjoyed by people other than those who send their children to them. Another way of saying the same thing is that a child's attendance at a public school has many positive externalities that benefit the rest of society.

These non-rivalrous benefits are many. For example, all students in a public school benefit from some parents devoting themselves to improving the school. These parents' efforts in serving on the PTA, complaining to the principal about bad teachers, helping with fundraising, leading committees, among other valuable contributions, benefit not only the parents' children. They also benefit all other students at the school. When parents remove the child from the school to homeschool, the parents affect not only their child, but they also harm all of the other students at the school.

Similarly, all of society benefits when students are exposed to other students and families of diverse backgrounds. A student who is exposed to diversity is more tolerant and able to participate with greater empathy and success in the economy and political process as an adult. In contrast, students who are educated in isolation from diversity become intolerant of those who are unlike themselves because they have never dealt with the others. For example, a child who has been excluded from meeting any homosexual or disadvantaged people may be intolerant of them when the child grows up.

In addition, not only the individual child, but also all of society benefits when the child is exposed to diverse views and values, whether on religion, politics, the role of women, the disadvantaged, minorities, or many other issues. The child certainly benefits. Only by being exposed to the different views can the child freely decide what their own views

will be—rather than having their parents decide for them by isolating the child from contact with all views other than the parents' own views. Indeed, this is the reason that many parents indicate that they homeschool their children—they fear that their children will be exposed to (or they may use the words “corrupted by”) views that differ from their own.⁴²

Yet allowing children to choose their own way through the marketplace of ideas, rather than permitting parents to rig the market to exclude all other ideas but their own, benefits not only the children, but also everyone else. A society in which people have been exposed to diverse views and values is a society in which people can more easily work together in the economy, and in which they can more easily reach common political ground, rather than being paralyzed by the clash of political extremes.

It may be no coincidence that the rise of Tea-Party extremism and the resulting political gridlock has arisen as the first big generation of homeschooled children has reached voting age. Homeschooling increases intolerance and extremism in both children and their parents. The children grow intolerant because they are not exposed to diverse views and values. This is also true of the homeschooling parents. The parents too are isolated from the diverse people, views, and values that parents and children encounter in a public-school community.

In addition, we all benefit when a child receives a sound education in science, math, reading, writing, history, and other subjects. A well-educated person can be an effective citizen and employee, contributing more than an imperfectly-educated person to an employer and to making the world a better place. We all benefit when any child receives an education that prepares him well for the world: to work hard in a productive job and invent things.

Likewise, a sound education will permit a child eventually to pay more taxes than she otherwise would have, benefitting everyone. A sound education will also allow the student to obtain a higher-paying job, and thus consume fewer government resources, such as unemployment support, food stamps, and publically-subsidized health care.⁴³

42. See Catherine J. Ross, *Fundamentalist Challenges to Core Democratic Values: Exit and Homeschooling*, 18 WM. & MARY BILL RTS. J. 991, 997 (2010).

43. A sound education will also reduce the possibility that the student will commit crime; those with good educations and good jobs tend to commit less crime. Avoiding crime benefits us all in many ways, from reducing the threat of violence to reducing the amount that the government must spend to prosecute and incarcerate criminals.

One might think, at first glance, that these benefits could also be obtained by homeschooling. However, for many students, this is incorrect. That is, for many students, the non-rivalrous benefits that would be created are greater if the student attends a public school than if they are homeschooled. Two reasons are especially important here. First, some homeschooled students receive little or no education at all because the parents do not even try to educate their children effectively.⁴⁴ Twenty-seven states impose no requirements at all on what parents teach home-schooled students. Thirteen states do not even require parents to notify the state of their homeschooling.⁴⁵ Undoubtedly, some home-schooled students receive excellent educations. However, an unknown number of home-schooled students receive little or no education other than being abandoned in front of a television by lazy parents.

Second, other homeschooled students receive a grossly defective education not because the parents are lazy, but because the parents zealously teach material that is wrong. Because many states do not regulate the material that homeschooling parents teach, many homeschooling parents undoubtedly teach a curriculum that includes material that is demonstrably false. For example, evangelical Christian textbooks, used by many homeschool families, insist that the bible presents literal truth.⁴⁶ These books teach that:

Evolution is false.⁴⁷

Noah's ark was real.⁴⁸

People's lifespans are shorter than they were 5,000 years ago.⁴⁹

The earth is 15,000 years old.⁵⁰

Dinosaurs existed at the same time as people.⁵¹

44. *Homeschooling & Educational Neglect*, COALITION FOR RESPONSIBLE HOME EDUCATION, <http://www.responsiblehomeschooling.org/policy-issues/abuse-and-neglect/educational-neglect/> (last visited July 23, 2015).

45. A list of states' laws on homeschooling is provided by a national advocacy group for homeschoolers. HOME SCHOOL LEGAL DEFENSE ASSOCIATION, STATE LAWS, <http://www.hslda.org/laws/default.asp>. See also Matthew Ladner & Dave Myslinski, REPORT CARD ON AMERICAN EDUCATION: RANKING STATE K-12 PERFORMANCE, PROGRESS, AND REFORM (18th ed., American Legislative Exchange Council 2013) available at https://www.heartland.org/sites/default/files/reportcard_18_edition.pdf.

46. WILLIAM S. PINKSTON, JR. & DAVID R. ANDERSON, LIFE SCIENCE FOR CHRISTIAN SCHOOLS 14 (Bob Jones Univ. Press, 2d ed.1999).

47. *Id.* at 132, 143, 146.

48. *Id.* at 136-37.

49. *Id.* at 116.

50. *Id.* at 139.

Public education also satisfies the second requirement for being a public good. In addition to the benefits of public schooling being non-rivalrous, the benefits are non-excludable. Regardless of whether parents send their children to public school, the child and parents benefit from the existence of public schools; families who instead homeschool or send their children to private school nonetheless enjoy the benefits of public school. They benefit from all of the other well-educated people in the workforce. They benefit from all of the resources that public-school parents devote both to improving their schools and to helping the public-school students obtain sound educations. They benefit from the tolerance and empathy that publicly-schooled students exhibit toward others, and from publicly-schooled students' experience with diverse and vulnerable groups.

In addition, everyone benefits from the open minds that publicly-schooled students enjoy. Everyone benefits from the tolerant approach that public schools provide, where the students share a common grounding in a diversity of views—rather than having been exposed only to the views of their parents. Everyone benefits from public schools because they allow the marketplace of ideas to function freely. The marketplace of ideas can function well, and promotes the best ideas, only when participants in the marketplace can select ideas freely and wisely. The marketplace fails if participants have indoctrinated their children to be biased or intolerant.

Furthermore, public schools permit our political system to function successfully. Because public-school children and their parents are exposed to diverse views and people, they tend to recognize that their views may not be the only views that reasonable people can hold. Accordingly, they will be more willing to reach compromise and political consensus.

In contrast, children who are raised in ideological isolation will tend to have hardened, intolerant views. Such views produce angry political debates in which compromise is difficult.

Because those who do not attend public school nonetheless enjoy many of its benefits, an incentive exists for parents and their children to free-ride on the efforts of those who do attend public schools. That is what homeschoolers do: they abandon the public schools and homeschool instead. Although such parents still must pay their taxes to support their public schools, they avoid the other costs and efforts that public-school parents otherwise devote to their schools, such as

51. *Id.* at 143.

additional financial support and investing their time and talents in the public school.

Indeed, as I discuss below, studies show that the reason that public schools decline when middle-class families leave is not because public funding declines. Instead, it is because the middle-class families no longer support the school through monitoring the school, helping to manage it, and fighting for the school in the political process. If middle-class families leave, then the school declines, even if public funding is maintained.⁵²

The classic harms of free-riding in public goods thus occur. Because people can free-ride, an inefficiently small amount of support is provided to public education in two ways. First, government funding of the public schools is too small. Second, because parents are permitted to abandon the public schools, but still are allowed to receive many of the benefits, they devote inefficiently small amounts of their own time and money to the public schools. The market failure causes public schools to be worse than they should be and to provide fewer benefits than they optimally would.

As with national defense and other public goods, government intervention into public education is necessary to ensure that everyone contributes adequately and does not free-ride. Requiring everyone to pay taxes for public schools is insufficient. Tax money is only one small part of the resources that families at public schools provide to their schools.

Instead, to correct the market failure, homeschooling should be prohibited. This will cause more families to make the efficient level of investment in the public schools in terms of money, time, and effort. The government requires everyone to support national defense. It should also require those who would otherwise homeschool to support public education through both tax payments and participation.

Surprisingly, Milton Friedman agreed with much of this analysis. Although his 1955 essay, *The Role of Government in Education*,⁵³ is often cited by proponents of homeschooling and school choice, it also includes much to support homeschooling's prohibition. In an overlooked part of the essay, he agrees that public education is a public good, although he calls the same characteristic the "neighborhood effect." He writes:

A stable and democratic society is impossible without widespread acceptance of some common set of values and without a minimum

52. See RYAN, *supra* note 5, at 124, 279. See also *infra* note 87 and accompanying text.

53. *The Role of Government in Education*, *supra* note 18.

degree of literacy and knowledge on the part of most citizens. Education contributes to both. In consequence, the gain from the education of a child accrues not only to the child or to his parents but to other members of the society; the education of my child contributes to other people's welfare by promoting a stable and democratic society. Yet it is not feasible to identify the particular individuals (or families) benefited or the money value of the benefit and so to charge for the services rendered. There is therefore a significant "neighborhood effect."⁵⁴

Although Friedman ultimately proposes vouchers and choice,⁵⁵ he nonetheless recognizes that strong arguments support not just prohibiting certain forms of private education such as homeschooling, but imposing mandatory public education—or, as he calls it, "nationalizing education":

One argument from the "neighborhood effect" for nationalizing education is that it might otherwise be impossible to provide the common core of values deemed requisite for social stability. The imposition of minimum standards on privately conducted schools, as suggested above, might not be enough to achieve this result. The issue can be illustrated concretely in terms of schools run by religious groups. Schools run by different religious groups will, it can be argued, instill sets of values that are inconsistent with one another and with those instilled in other schools; in this way they convert education into a divisive rather than a unifying force. Carried to its extreme, this argument would call not only for governmentally administered schools, but also for compulsory attendance at such schools.⁵⁶

Although Friedman later concludes that educational choice is supported by economic efficiency and parents' interest in freedom to choose their children's education,⁵⁷ his argument in favor of compulsory public education is powerful. Indeed, his two arguments for choice are wrong. Choice is not efficient, and the focus should be on children's rights, not just parents' rights. This leaves unscathed only his argument for compulsory public education.

54. *Id.*

55. He suggests that any private schools should be subject to strong government regulation: "The role of the government would be limited to assuring that the schools met certain minimum standards such as the inclusion of a minimum common content in their programs, much as it now inspects restaurants to assure that they maintain minimum sanitary standards." *Id.*

56. *Id.*

57. *Id.*

B. Public Education Enjoys Network Externalities

Unlike in a normal market, competition in the market for education may be inefficient because the market for education enjoys large network externalities. Because of network externalities, it is most efficient for the government to prohibit abandonment of the public schools through homeschooling.

A market for a service enjoys network externalities when the benefits to each purchaser of the service increase as the number of other people who purchase the service increases.⁵⁸ For example, in the market for word-processing software, the more people who use one company's software, the greater the benefits to each person who uses it. If many people use the software, then each person can be sure that the documents created will be compatible with other people's software.

In contrast, a market where people use many different software packages would be inefficient because people would not be able to share documents easily. Accordingly, one company's word-processing software has come to dominate: Microsoft Word. This is efficient. Although Microsoft Word may not be perfect software, it is efficient to have a single standard software that is used by most people.

Language is another example. Although English may not be the perfect language, it is efficient that most people in the United States use it. The more people who use it, the greater the benefit to each person who uses it.

Public education likewise enjoys network externalities. Each student benefits more from a public education the greater the number of other students who are enrolled in public education because, the more publicly-schooled students, the greater the diversity in the schools. In addition, greater diversity benefits all students. A public school in which students are from a wide range of ethnic and demographic backgrounds benefits students the most. Exposure to students unlike themselves fosters tolerance and empathy for other's views and situations. Wealthy white students who attend school with poor minorities are less likely to think of the minorities as greedy freeloaders. Minorities who attend school with wealthy white students are less likely to think of them as thoughtless racists. Evangelical Christian students who attend school with gay students and democrats are less likely to demonize them.⁵⁹

In contrast, a school system that is abandoned by a racial or demographic group will be worse for the remaining students. And it will

58. CARL SHAPIRO & HAL R. VARIAN, INFORMATION RULES (1999).

59. See RYAN, *supra* note 5, at 274.

be worse for the students who abandon it. Regardless of its funding levels, a school system that is primarily poor and African-American will be worse for its students than one that is demographically rich. So too will be a school system that is primarily wealthy and white. All demographic groups benefit from diversity. All students become more tolerant, understand the world better, and become more effective participants in our political system.

Because network externalities exist in the market for education, it is efficient for the government to prohibit homeschooling in order to limit abandonment of the public schools. The benefits of public education to each child are higher the more children are enrolled—just as Microsoft Word and the English language are more useful to each person the more people who use them.

C. Homeschooling is Harmful Because of Adverse Selection

Because of “adverse selection,”⁶⁰ certain markets will fail unless purchase of the product or service is as close to mandatory as possible. Specifically, adverse selection exists in a market in which the best participants have an incentive not to purchase the product or service. For example, suppose that it is impossible for a health insurer to determine which purchasers will become sick the most frequently and so will consume the greatest amount of healthcare. If the insurer sets insurance rates to cover the average person’s expected expenses, the healthiest people will not purchase coverage because they expect to use few services. The high cost of the insurance will not be worth it to them. If healthy people do not purchase the insurance, then the insurer will have to increase the premiums that it charges; the average per-person expenses that the insurer will expect to have to cover will increase. Once the premiums increase, then the healthiest remaining participants will also abandon coverage. This process will continue until the only remaining people who are insured are the sickest ones. Unavoidable market forces will cause the best risks to abandon purchasing the product.

If it is impossible to charge the sick people more, the only way to avoid this process is to force everyone to purchase the insurance. This is what the government does with Medicare and Medicaid. To make sure that the insurance is available, all taxpayers must pay for it. Nobody is permitted to opt out. Many private employers do the same thing; they

60. VARIAN, *supra* note 40, at 293.

effectively require all of their employees to purchase health insurance.

The market for education also suffers from similar dangers of adverse selection. Because people can opt out, the most sophisticated people with the greatest resources are the first to abandon the public schools. The rich in money send their kids to private schools.

Similarly, another group that homeschools their children is those who are rich in time. To be able to homeschool, a family must include two spouses, one of whom earns enough to be able to support the family while the other spouse homeschools the children. For parents with low- to mid-level salaries, homeschooling is difficult because both parents must work to make ends meet.

Likewise, it is impossible for a single parent, without a spouse or partner, to homeschool. A parent who must work to support her children cannot simultaneously homeschool the children.

Those who are wealthy in money or time are also likely to be those who will be most aware of alternatives other than the public schools. The same factors that permit someone to earn high wages, such as a good education, also tend to cause the person to be more aware of other educational opportunities for their children outside the public schools.

The end result is that highly-educated, middle- and upper-class people are those that have the means, ability, and knowledge to abandon public schools. With these groups abandoning public schools, the remaining public-school families are disproportionately single-parent, minority households, with parents with lower education levels, lower earnings, and lower wealth. That is, the inevitable forces of adverse selection cause the resilient to abandon the public schools, leaving only the vulnerable.

The families who abandon the public schools tend to be the families with the greatest resources for improving the schools. They are the families with the most wealth to contribute to improve their public school. They are the families with the luxury of one parent not having a market-based job so that the parent has the time to devote to improving their public school. They are the families with the greatest political connections for influencing the political process to direct additional resources to their school. They are the families with the greatest energy for pressuring school administrators to improve the school.

A vicious cycle is created. A wave of resilient, wealthy, educated families abandons the local public school. Because of their absence, the school becomes worse. This causes the next layer of families to leave, causing the school to become worse still. The process continues until the only remaining families are the vulnerable families who lack the wealth

and know-how to leave. With only these families, the school's quality crumbles. The same characteristics that prevent these families from abandoning the public school also make them unable to prevent their school from declining. A school with many high-earning families will support their school with their financial resources and with their time. They will monitor the school to make sure both that the teaching is good and that resources continue to flow to the school. In contrast, a school with families with low-earning single parents will be unable to prevent the school's decline.

Contrary to the arguments of conservative economists, allowing homeschooling to compete with public schools will not improve the public schools. Instead, because of adverse selection, the competition will inevitably cause the public schools to decline. Competition is harmful in a market that exhibits strong adverse selection.

Other scholars writing in elite, peer-reviewed journals have noted that economic theory indicates that school-choice will harm public schools. The mechanism is that, as I have noted, choice would be expected to cause the departure from public schools both of the best students and of the parents with the greatest resources for helping their schools.⁶¹

Indeed, economic models in top journals suggest that the rational reaction of school administrators to the departure of the top students and families may not be to try harder to compete against alternate choices. Instead, it may be in the administrator's interest to allow the school to deteriorate and to be content with providing a mediocre education to the remaining students. Once the top students and families have departed, it is too expensive and too much trouble for the administrator to attempt to compete with the alternate choices.⁶²

Adverse selection helps to explain what has happened to many of the public schools in our large cities. Competition from private schools, rich suburbs, and homeschooling has siphoned off the wealthy, white, highly-educated, professional, two-parent families. Left in the public schools are low-wage, single-parent, minority families with parents with little education. These are the families that can provide little support for their schools in time or money. The public schools inevitably decline.

The same solution that eliminates the harms of adverse selection in

61. Dennis Epple & Richard E. Romano, *Competition Between Private and Public School Vouchers, and Peer-Group Effects*, 88 Am. Econ. Rev. 33 (1998). See also Thomas Nechyba, *Mobility Targeting and Private School Vouchers*, 90 AM. ECON. REV. 130, 131 (2000).

62. Robert McMillan, *Competition, Incentives, and Public School Productivity*, 89 J. OF PUB. ECON. 1133 (2005).

other markets is necessary here. To eliminate the harms of this market failure, the number of people abandoning the public schools should be reduced. Because homeschooling is, for the child, the most harmful and isolating form of abandonment, it is a good candidate to be prohibited. If the most resilient, able families must remain with the public schools, then they will devote their time and money to fixing the public schools, rather than fleeing them.

D. Competition Creates a Harmful Prisoner's Dilemma

Economists recognize that a standard example of market failure is where a market exhibits what economists call a "Prisoner's Dilemma."⁶³ In such a market, it would benefit society if everyone chose a certain outcome. However, in such a market, if people are not compelled to choose this outcome, they will have an incentive to defect to a different outcome. Because all people have this incentive, if market forces are permitted free sway, the society will move to this inferior equilibrium. In such a market, the only way to prevent movement to this worse equilibrium is if either everybody can agree to stay in the better equilibrium or the government forces people to stay in the better equilibrium.⁶⁴

The market for education is such a prisoner's dilemma. There would be great benefits if everyone remained in the public schools. The public schools would be vibrant, well-financed, diverse institutions. The presence of all kinds of families, including the wealthy, elite, and well-educated, would ensure that the schools had the necessary financial support, as well as the oversight that holds school administrators accountable. In addition, the racial and socio-economic diversity would benefit all students.

Some public schools are, indeed, like this. However, in other school districts, there is an incentive for individual wealthy and well-educated families to defect from the public schools. This is especially true if some outside, exogenous force has caused the public schools to decline in quality. Examples of such outside forces would be white flight because of desegregation or a recession that causes cuts in public schools' budgets.

Once the public schools have declined moderately in quality, the most wealthy and well-educated families abandon the public schools for private schools or the wealthy suburbs. The public schools decline

63. DAVID M. KREPS, A COURSE IN MICROECONOMIC THEORY 503-04 (1990).

64. See KENNETH Binmore, Game Theory and the Social Contract 72 (1994).

further, which in turn induces additional families to leave. The sad cycle continues until the public schools have been decimated.

Such results are a Prisoner's Dilemma because everyone would have been better off if the government had required all families to remain in the public schools. The public schools would have retained the critical mass of a broad range of families, including the middle-class families, that are necessary for a public school to thrive. There is a general consensus that this critical mass is approximately 50% or more middle-class students.⁶⁵ If the fraction of middle-class students in a school declines below this threshold, then the school spirals downward as the remaining middle-class families abandon the school.

The nature of public education as a Prisoner's Dilemma is why parents in public schools plead with their peer families not to abandon the public schools. The public schools can thrive only if a critical mass of families remains with them. If a substantial number defect, such as to homeschooling, then the public schools fail, and even more families have an incentive to defect.

This market failure creates a strong reason for government intervention to require broad attendance at public schools. Such a requirement would enforce the favorable equilibrium in which the public schools thrive and cultivate the many virtues of diversity.

Imagine how public schools would improve if home-school families instead devoted their energy and resources to public schools. The result would move toward that of Finland, which enforces mandatory public education. The education that students receive there is among the best in the world.⁶⁶

Indeed, Warren Buffet, the famously successful investor and businessman has noted that the public schools would improve quickly if everyone, including the rich, were required to enroll. "What if I said to you that the solution to the problems in our education system would be to make private schools illegal and assign every child to a [state] school by random lottery?"⁶⁷

65. See RYAN, *supra* note 5, at 157.

66. PASI SAHLBERG, FINISH LESSONS: WHAT CAN THE WORLD LEARN FROM EDUCATIONAL CHANGE IN FINLAND? (2010).

67. Mehdi Hassan, *Warren Buffett Is Right: It's Time to Ban Private Schools*, HUFFINGTON POST (June 9, 2012), http://www.huffingtonpost.co.uk/mehdi-hasan/warren-buffett-is-right-ban-private-schools_b_1857287.html.

V. THAT HOMESCHOOLING IS HARMFUL IS ALSO SHOWN BY EMPIRICAL EVIDENCE

We have seen that economics theory predicts that, for four reasons, homeschooling and other forms of so-called educational “choice” will harm public education. It certainly makes intuitive sense that any program that encourages families to abandon the public schools would harm the public schools. Empirical evidence demonstrates that this is so. Programs that enable families to abandon public schools indeed harm the schools. The empirical evidence of choice’s harms is demonstrated by both the impacts of the large experiment with choice in the 1950s-1970s and by the results from smaller studies.

A. *The Big Experiment*

The most profound evidence of the harms of competition in public education is the way that various forms of choice led to the large-scale ruin of urban public schools. The period of desegregation following *Brown v. Board of Education*⁶⁸ presented a large national-scale experiment about the effects of educational choice on the public schools. The results of the Big Experiment are clear. It is not an exaggeration that the decline of urban public schools has been caused by choice and privatization.

Before *Brown*, many white urban public schools were excellent, among the best in the country. For example, in the 1950s, all-white TJ High School in Richmond was the best college-preparatory school on the East Coast.⁶⁹ After *Brown*, because the urban public schools would now contain some African-American students, white parents and politicians in Southern States instituted what they called “Massive Resistance” to desegregation.⁷⁰ Specifically, they used various mechanisms of choice to abandon the urban public schools.

Indeed, the first response to desegregation in many southern states, including Arkansas and Virginia, was to close any school that faced desegregation. These states instead provided vouchers to white students from the closed schools so that they could choose to attend all-white private schools.⁷¹ That is, in response to *Brown*, the states used choice to destroy urban public schools intentionally and completely: they closed

68. *Brown v. Bd. of Educ.*, 347 U.S. 483 (1954).

69. See RYAN, *supra* note 5, at 26.

70. See RYAN, *supra* note 5, at 22.

71. *Id.* at 26.

them, using choice programs.⁷²

After the courts prohibited the school closings,⁷³ the southern states used three other forms of choice to abandon and ruin the schools that African Americans attended. First, they used vouchers: some states provided a voucher to any white student who was in an integrated public school, so that the student could choose to attend a private all-white school.⁷⁴

Second, they used private schools: to expand the private-school choices for white students who desired to abandon urban public schools, many all-white, private schools were formed. White parents called them “Segregation Academies” or “Freedom Schools.”⁷⁵ During these years, and after courts ordered the busing of black students to white schools, and vice versa, many white children switched to private schools—more than 700,000 white students.⁷⁶ In Mississippi, between 1966 and 1973, private school enrollment almost tripled.⁷⁷

Third, still others exercised geographical choice: hundreds of thousands of white families abandoned integrated public schools in the cities and moved to all-white schools in the suburbs.⁷⁸ Intentionally or not, the state and federal governments aided this choice by building highways that made it easier for white parents to live in the suburbs near white schools, while commuting to work in the city.⁷⁹

The final result of middle-class whites exercising choice after *Brown* was to ruin the urban public schools.⁸⁰ The 30% of U.S. public schools that serve the urban poor are in difficulty because of choice. For example, white families have chosen to abandon formerly all-white TJ High School in Richmond, and the school has declined from being among the best in the nation to being among the troubled 30%.⁸¹

Even after racial tensions declined, the abandonment of the urban public schools has persisted. Private school enrollment has remained high—although there was a slight dip after the last recession.⁸² Middle-

72. *Id.*

73. *Harrison v. Day*, 106 S.E.2d 636, 646 (Va. 1959).

74. KEVIN M. KRUSE, *supra* note 23, at 132-33; RYAN, *supra* note 5, at 38.

75. See RYAN, *supra* note 5, at 94; Charles Clotfelter, *School Desegregation, 'Tipping,' and Private School Enrollment*, 11 J. HUM. RESOURCES 1, 29 (1976).

76. See Clotfelter, *supra* note 75, at 28.

77. See *id.* at 30, Table 1.

78. See KRUSE, *supra* note 23, at 169-71.

79. See RYAN, *supra* note 5, at 106.

80. See *id.* at 227.

81. See *id.* at 26.

82. National Center for Education Statistics, *Digest of Education Statistics, Table 205.20*, http://nces.ed.gov/programs/digest/d13/tables/dt13_205.20.asp. See also *Facts and Studies*,

class, white families have generally remained in the suburbs. This was a much larger experiment than any other U.S. experiment with choice. Other experiments have occurred in individual cities, such as Milwaukee⁸³ and Washington, D.C.⁸⁴ In contrast, the Big Experiment of choice's impacts covered the entire southern United States, and, after busing began, much of the rest of the country too.

Milton Friedman and other choice proponents would predict that all of this choice would have improved the public schools. Under their theory, the increased competition that had been created by the vouchers, private schools, and suburban schools should have induced the urban public schools to try harder and improve. The increased choice and competition should have disciplined the urban public schools and induced them to perform better.

The results of the Big Experiment were just the opposite. Contrary to Milton Friedman's predictions, the exercise of these choices did not magically lead to the improvement of the abandoned schools. The abandonment and resulting market discipline did not cause them to operate more efficiently and compete more effectively.

Instead, choice ruined the schools. The 30% of U.S. public schools that serve the urban poor are in difficulty because of choice.⁸⁵ The schools and their students are choice's victims. That choice harms public schools is not surprising to anyone with common sense. Despite intricate economic arguments to the contrary, it should seem obvious that mechanisms that induce families to abandon public schools will harm the schools.

Indeed, it appears that southern states recognized and exploited the harm that choice would cause urban public schools. The white families who abandoned the schools, and the politicians who supported them, knew that this harm would happen and may even have intended it. This approach was consistent with the South's Jim-Crow policies of the previous century by which southern states had intentionally oppressed their former slaves. After the South lost the Civil War and was forced to give up its slaves, angry southerners used varied means to intimidate and harm their former property. For example, they used vigilante justice, the

COUNCIL FOR PRIVATE AMERICAN EDUCATION, <http://www.capenet.org/facts.html> (last visited Mar. 1, 2016).

83. Jay P. Greene, Paul E. Peterson, & Jiangtao Du, *School choice in Milwaukee: A Randomized Experiment*, in *LEARNING FROM SCHOOL CHOICE* 329-44 (Paul E. Peterson & Bryan C. Hassel, eds. 1998).

84. Lisa Barrow, *School Choice Through Relocation: Evidence from the Washington, D.C. Area*, 86 *J. Pub. Econ* 155, 155-88 (2002).

85. See RYAN, *supra* note 5, at 227.

Klan, and lynchings. Likewise, they used the criminal justice system to arrest and imprison African Americans on false charges, and the prisons then leased them out as workers to their former masters, effectively reimposing slavery.⁸⁶

They also used education policy, with many states and cities attempting to suppress African Americans by providing them with as minimal an education as possible. Just as they had under slavery, many whites felt that blacks should be kept as servile as possible and that an important means to achieve this was to deny blacks an education. Professor Ryan describes:

[A]n era in the early twentieth century, in Virginia and elsewhere, when many whites argued against educating blacks at all. Paul Barringer, the chair of faculty at the University of Virginia, argued in 1900 against schools for blacks because they tended “to make some Negroes idle and vicious” and “others able to compete with whites.” The Richmond Times-Dispatch editorialized that black education was “a needless expense that made hotbeds of arrogance and aggression out of black schools” and pointed out that “many families distinctly prefer nurses and cooks who cannot read and write.”⁸⁷

Before *Brown*, southern states suppressed African-American education by providing inadequate funding and by isolating African-American students in single-race schools that lacked the middle-class, white families with the resources and political power to demand improvement. Despite *Plessy v. Ferguson*,⁸⁸ southern states spent two to ten times more per capita on white students than on African-American students. Schools for African Americans had much lower budgets and teacher salaries, had only worn books discarded from white schools, and were assigned run-down school buildings.⁸⁹ Black schools were separate but nowhere near equal.

After *Brown*, the southern states could no longer suppress African Americans' educations by underfunding them. Because schools were

86. DOUGLAS BLACKMON, *SLAVERY BY ANOTHER NAME: THE REENSLAVEMENT OF BLACK AMERICANS FROM THE CIVIL WAR TO WORLD WAR II* (2008).

87. JAMES D. ANDERSON, *EDUCATION OF BLACKS IN THE SOUTH: 1860-1935* 451 (1988). See RYAN, *supra* note 5, at 26.

88. 163 U.S. 537 (1896).

89. See MICHAEL J. KLARMAN, *FROM JIM CROW TO CIVIL RIGHTS: THE SUPREME COURT AND THE STRUGGLE FOR RACIAL EQUALITY* 43-47 (2004); RICHARD KLUGER, *SIMPLE JUSTICE: THE HISTORY OF BROWN V. BOARD OF EDUCATION AND BLACK AMERICAN'S STRUGGLE FOR EQUALITY* 134-35 (1976); J. HARVIE WILKINSON, III, *FROM BROWN TO BAKKE: THE SUPREME COURT AND SCHOOL INTEGRATION: 1954-1978* 19 (1979); GUNNER MYRDAL, *AN AMERICAN DILEMMA* 339 (1944); see also RYAN, *supra* note 5, at 27, 311.

now required to be integrated, reduced funding would also harm white students. Indeed, this was the rationale of the civil rights lawyers who led the litigation that led to *Brown*: southern whites could no longer underfund schools for blacks if their children had to attend them too.

That way, white-dominated legislatures and school officials could not benefit white students without also benefiting black ones, or harm black students without also harming whites. Desegregation, from this perspective, was not so much an end in itself as a means to an end. It was a tying strategy, essentially, where black students would tie their fates to white students because, as the saying went, green follows white.⁹⁰

With underfunding no longer available as a standalone strategy for suppressing African Americans' educational opportunities, southern states replaced the strategy with educational choice. The choice strategy was just as effective, or even more effective. The use of vouchers, private schools, and geographical choice destroyed the urban public schools that served African Americans. The urban public schools were doomed as middle-class, white families used choice to abandon them.

B. Other Studies

Many studies of smaller choice programs confirm that choice harms public schools.⁹¹ A recent book reviewed experiments with charter schools in several communities. It noted, "[A] fourth argument is that competition from charter schools improves outcomes in regular public schools because educators in regular public schools are motivated to be more effective in order to avoid losing students to charter schools."⁹² After reviewing the literature, the author concluded, "[W]e find no evidence to support the claim of a positive competition effect of charter schools"⁹³

Other studies reach similar conclusions. For example, Professor Ladd of Duke examined the impacts of the use of vouchers both in modest programs in Milwaukee, Dayton, Washington, New York City

90. . Michael A. Middleton, *Brown v. Board: Revisited*, 20 S. ILL. U. L.J. 19, 29 (1995); Robert L. Carter, *Reexamining Brown Twenty-five Years Later: Looking Backward into the Future*, HARV. C.R.-C.L. L. REV. 615, 617 (1979); RYAN, *supra* note 5, at 28.

91. Among many others, see, e.g., EDWARD B. FISKE AND HELEN F. LADD, WHEN SCHOOLS COMPETE: A CAUTIONARY TALE (2000); Julie Berry Cullen, Brian A. Jacob, & Steven D. Levitt, *The Impact of School Choice on Student Outcomes: An Analysis of the Chicago Public Schools*, 89 J. OF PUB. ECON. 729 (2005).

92. Martin Carnoy et al., *The Charter School Dustup* (2005).

93. *Id.*

and in large programs in New Zealand and Chile. She concluded, "Claims that performance at these schools would eventually rise because of competition within a voucher system, or that these schools would be replaced by better ones, is not borne out by research."⁹⁴

Likewise, in a lengthy chapter in his recent book, Dean Ryan reviews studies of the impact of school choice plans. He concludes that "such programs will, on the whole, do little to boost academic achievement, have only a negligible impact on existing levels of school segregation, and promote relatively little productive competition among schools."⁹⁵

In contrast to all of these other studies, the one writer who purports to show that competition improves outcomes for nearby public schools is economist Caroline Hoxby, a hero of supporters of vouchers, charter schools, and other choice measures. She concedes that "[e]xamples are myriad" of papers that show that choice programs harm public schools or do not help them.⁹⁶ However, in two papers, she argues the opposite. In one paper, she attempts to show that public schools with much geographic competition from public schools in nearby counties do better than schools with little such competition.⁹⁷ Although clever, her empirical approach is ad-hoc, overly complicated, and conveniently but suspiciously achieves her desired result. It is also the focus of much controversy. Another scholar obtained Hoxby's data for the paper and attempted to replicate her results, but was unable to.⁹⁸ A large dispute continues to surround the paper, and it is possible that the paper's results are misleadingly invalid.⁹⁹ Without the intricate assumptions that she makes, the results disappear.

In the second paper, Hoxby finds a positive effect on public schools

94. Helen F. Ladd, *School Vouchers and Student Achievement: What We Know So Far*, DUKE UNIVERSITY, CENTER FOR CHILD AND FAMILY POLICY (2003), eric.ed.gov/fulltext/ED498832.pdf. See also Helen F. Ladd, *Comment on Caroline M. Hoxby: School choice and school competition: Evidence from the United States*, 10 SWED. ECON. POL. REV. 67 (2003). Cf. Thomas Nechyba, *Mobility Targeting and Private School Vouchers*, 90 AM. ECON. REV. 130 (2000).

95. See RYAN, *supra* note 5, at 215.

96. Caroline Hoxby, *School choice and school competition: Evidence from the United States*, 10 SWED. ECON. POL. REV. 9 (2003) [hereinafter *School Choice I*].

97. Hoxby, *supra* note 33, at 1209. Many of the results are reported again in her chapter in a book that she edited in support of educational choice, *School Choice and School Productivity: Could School Choice Be a Tide that Lifts All Boats?*, in *THE ECONOMICS OF SCHOOL CHOICE* 287 (Caroline Hoxby, ed., 2003) [hereinafter *School Choice II*].

98. Jesse Rothstein, *Does Competition Among Public Schools Benefit Students and Taxpayers? A Comment on Hoxby (2000)*, 97 AM. ECON. REV. 2026 (2007).

99. See Jesse Rothstein, *Rejoinder to Hoxby*, <http://gsppi.berkeley.edu/faculty/jrothstein>.

of vouchers in Milwaukee, and of charter schools in Michigan and Arizona.¹⁰⁰ The paper has the flavor of Hoxby's earlier paper on the purported benefits for public schools of geographic competition. It achieves the desired result only through use of a complicated model and many assumptions. The model and assumptions seem cherry-picked to achieve the paper's result. As with the previous paper, the assumptions are so specific and complicated that suspicions are aroused that, if they were changed, the results would again disappear.

Specifically, Hoxby did not use all of the available data. Instead, she limits her study to only three of many experiments with vouchers and charters from the United States and around the world. She concedes that she chose these programs—in Milwaukee, Michigan, and Arizona—because they maximize the possibility that she will find a positive effect of promoting abandonment.¹⁰¹ Studies on the impact of the choice programs outside Hoxby's paper uniformly show that choice harms the existing public schools, rather than helps them. Moreover, even within these programs, Hoxby examined only individual schools and grade levels that would maximize the chance of finding a positive effect.¹⁰²

Other scholars have pointed out two main flaws in the paper. First, critics have noted that the supposed improvement may instead have been, at least in part, a statistical artifact of the sample that she selected, having nothing to do with any improvements at the schools. For example, studies of the Milwaukee voucher program found that the test scores of applicants for vouchers were below the average for the public schools from which they were applying. When these below-average students left, the average test scores for the remaining students instantly increased. This creates the false impression that the school improved its performance. Instead, average tests scores may have increased merely because students with low scores left.¹⁰³

Second, it has been pointed out that in each of the states that Hoxby studied, choice was only one of several education programs that were implemented at the same time. The improvements that Hoxby says are caused by choice may instead be caused by the other programs.¹⁰⁴

100. Hoxby reports the identical results in *School Choice II*, *supra* note 97.

101. *School Choice II*, *supra* note 97, at 315.

102. *Id.*, at 317, 325, 333.

103. See Ladd, *supra* note 94, at 3-4. Hoxby denies that this reverse-cream-skimming explains her results. See Hoxby, *School Choice II*, *supra* note 97, at 338.

104. *School Choice II*, *supra* note 97, at 338.

C. *The Peer Effect and Choice's Harm to Public Schools*

The Big Experiment and smaller choice programs demonstrate that choice harms public schools. I now discuss a major reason why this is: the peer effect. The peer effect indicates that the quality of a child's education depends strongly on the ability and resources of the other students at the school. That is, the higher the proportion of middle-class-and-above students in a school, the better the education for all of the school's students. That is, the more middle-class students a school has, the better the middle-class students perform, and the better the students from poor families perform. Many empirical studies identify the peer effect.¹⁰⁵ Indeed, it is such a well-known effect that it is a basic assumption in important papers in leading peer-reviewed journals in the economic literature.¹⁰⁶

The peer effect does not depend on race; it is not the presence of white students rather than black students in a school that produces good outcomes. Instead, the effect depends on the students' socio-economic level: the higher a school's proportion of students from middle-class and wealthy families, regardless of race, the better the educational outcomes for all students.¹⁰⁷ In contrast, schools with high poverty levels are usually doomed to failure.

The tipping point is at approximately 50%. If a school's proportion of middle-class and wealthy students declines below approximately half, then often the remaining middle-class and wealthy students will leave. The school quickly spirals downward and fails.¹⁰⁸

105. See, e.g., Nina S. Mounts & Laurence Steinberg, *An Ecological Analysis of Peer Influence on Adolescent Grade Point Average and Drug Use*, 31 DEVELOPMENTAL PSYCHOLOGY 915, 919-20 (1995); DAVID J. ARMOR, FORCED JUSTICE: SCHOOL DESEGREGATION AND THE LAW 71 (1995); Robert L. Crain & Rita E. Mahard, *Desegregation and Black Achievement: A Review of the Research*, 42 LAW & CONTEMP. PROB. 17, 22; CHRISTOPHER JENCKS & MEREDITH PHILLIPS EDS., THE BLACK-WHITE TEST SCORE GAP 26 (1998); JONATHAN CRANE, EFFECTS OF NEIGHBORHOODS, 317; J. Douglas Willms, *Social Class Segregation and Its Relationship to Pupils' Examination Results in Scotland*, 51 AM. SOC. REV. 224, 226 (1986); Jonathan Crane, *The Epidemic Theory of Ghettoes and Neighborhood Effects on Dropping Out and Teenage Childbearing*, 96 AM. J. SOC. 1226, 1241, 1227, 1236, 1240 (1991); see also RYAN, *supra* note 5, at 167; JAMES S. COLEMAN, EQUALITY OF EDUCATIONAL OPPORTUNITY 22, 297, 304-05 (1966); E. D. HIRSCH, THE SCHOOLS WE NEED AND WHY WE DON'T HAVE THEM 45 (1996); Victor Battistich et al., *Schools as Communities, Poverty Levels of Student Populations, and Students' Attitudes, Motives, and Performance: A Multilevel Analysis*, 32 AM. ED. RES. J. 627, 628, 631, 649 (1995).

106. Epple & Romano, *supra* note 61, at 34.

107. JAMES S. COLEMAN, EQUALITY OF EDUCATIONAL OPPORTUNITY 304 (1966); RYAN, *supra* note 5, at 168.

108. Michael J. Puma et al., *Prospects: The Congressionally Mandated Study of Educational Growth and Opportunity. The Interim Report*, PLANNING AND EVALUATION SERVICE, U.S. DEPT. OF ED. 1, 44 (1993), <http://www.eric.ed.gov/ERICDocs/data/ericdocs2sql/>

Perhaps surprisingly, the peer effect is far more important than schools' funding. If middle-class and wealthy students abandon a school, then it is almost always doomed, even if money is poured into it.¹⁰⁹ Money does not replace middle-class and wealthy students.

The peer effect operates in two main ways: through the students and through the parents. First, smart, motivated students set an example of achievement that motivates other students. As a leading authority notes, "[O]ne of the most effective ways to improve children's cognitive skills is to put them in an environment with other children who want to acquire cognitive skills and whose families support such learning."¹¹⁰ That is, "children of low socioeconomic status appear to benefit significantly from exposure to more affluent and highly motivated peers."¹¹¹ For example, an academically-motivated peer group tends to prevent crises that can hinder academic development. Specifically, the greater the average ability and resources of a school's students, the lower the probability that any student at the school will become pregnant.¹¹²

Perhaps surprisingly, the presence of low-income students at a school does not harm the performance of middle-class and wealthy students. They do just as well academically as in a non-diverse school, and they also enjoy the benefit of being exposed to people from other backgrounds.¹¹³

Higher-income children, moreover, do not appear to suffer from socioeconomic integration. This sounds too good to be true, and many middle-class parents are unlikely to believe it, which helps explain the traditional opposition to racial and socioeconomic integration in white, middle-class suburban schools. But this is what the research shows.¹¹⁴

content_storage_01/0000019b/80/13/10/cc.pdf.; RICHARD D. KAHLENBERG, ALL TOGETHER NOW: CREATING MIDDLE-CLASS SCHOOLS THROUGH PUBLIC SCHOOL CHOICE 28-37 (2001); RYAN, *supra* note 5, at 157, 278, 299.

109. Gary Orfield & David Thronson, *Dismantling Desegregation: Uncertain Gains, Unexpected Costs*, 42 EMORY L.J. 759, 783 (1993); RYAN, *supra* note 5, at 167.

110. Susan E. Mayer, *How Much Does a High School's Racial and Socioeconomic Mix Affect Graduation and Teenage Fertility Rates?*, in THE URBAN UNDERCLASS 319, 321, 327, 334 (Paul E. Peterson ed. 1991). See also AMY S. WELLS & ROBERT L. CRAIN, STEPPING OVER THE COLOR LINE: AFRICAN-AMERICAN STUDENTS IN WHITE SUBURBAN SCHOOLS 340 (1997); RYAN, *supra* note 5, at 169.

111. See RYAN, *supra* note 5, at 169.

112. See Mayer, *supra* note 110, at 321, 327, 334; RYAN, *supra* note 5, at 168.

113. Richard J. Murmane, *Evidence, Analysis, and Unanswered Questions*, 51 HARV. ED. REV. 483, 486 (1981); MARK G. YUDOF ET AL., EDUCATIONAL POLICY AND THE LAW 597 (4th ed. 2002); RYAN, *supra* note 5, at 272.

114. See RYAN, *supra* note 5, at 169; see also ARMOR, *supra* note 105, at 71 (1995); Robert L. Crain & Rita E. Mahard, *Desegregation and Black Achievement: A Review of the Research*, 42 LAW

The second way that the peer effect operates is that schools with high proportions of middle-class and wealthy families tend to prosper because of the influence of the parents. Such parents have more ability to help out at the schools. For example, they are the volunteers in the PTA and for everything else in the school.¹¹⁵ This is not because low-income parents are lazy. Low-income parents often simply lack the time; they are often single parents, doing their best to earn a living. Middle-class and wealthy parents have the luxury of having the option of one parent not working, and so can volunteer.

Likewise, middle-class and wealthy parents have the resources to monitor the schools better. Involved parents help a school to thrive by monitoring the performance of both individual teachers and the school's administration.¹¹⁶ If the parents notice problems, they apply pressure for improvement.

Furthermore, middle-class and wealthy parents have greater political power. They can use this power to promote their school's interests, whether it is obtaining more funds for their schools, or hiring better teachers. As Professor Ryan notes, "[I]ntegration along lines of race and class can reshape the politics of educational opportunity by linking the fate of politically weak families with that of politically powerful ones."¹¹⁷ Indeed, we have already seen that this was the basis of much of the NAACP's litigation strategy leading up to *Brown*.¹¹⁸ A parent in the failing urban public schools in Richmond noted, "[T]he Richmond public schools, by and large, serve the segment of the community that has the least clout. The middle class moves to the suburbs, the upper class goes with private school, and there does not exist any powerful constituency advocating on behalf of the public school system."¹¹⁹

So it is essential to retain middle-class families. Unfortunately, educational choice, such as homeschooling, helps middle-class families to abandon public schools. Indeed, research shows that, if choice is available, middle-class and wealthy families will be the first to abandon

& CONTEMP. PROB. 17 (1978).

115. See RYAN, *supra* note 5, at 169.

116. KAHLBERG, *supra* note 108, at 61-67; James Ryan & Michael Heise, *The Political Economy of School Choice*, 40 YALE L.J. 2043, 2107, n. 337 (2002); RYAN, *supra* note 5, at 331.

117. See RYAN, *supra* note 5, at 15.

118. See *supra* note 90 and accompanying text; James S. Liebman, *Implementing Brown in the Nineties: Political Reconstruction, Liberal Recollection, and Litigatively Enforced Legislative Reform*, 76 VA. L. REV. 349, 396 (1990); RYAN, *supra* note 5, at 28.

119. RYAN, *supra* note 5, at 272.

public schools.¹²⁰ This is the phenomenon of “cream-skimming”: if choice becomes available, the families that are most necessary for a public school’s success will be the first to abandon the school.¹²¹

Choice often leads public schools into an educational death spiral. Research shows that, if choice exists such that students are permitted to abandon public schools, then the peer effect leads to the decline of urban public schools.¹²² The mechanism by which these two factors—choice and the peer effect—combine into this deadly mixture is as follows. The most-able students with the most resources leave the urban public schools because they have an incentive to seek better schools—schools that are better because they have higher proportions of more-able, better-resourced students like themselves. The absence of these students and their parents then harms the educational experience for the remaining students. In turn, the best of the remaining students with the most resources leave. In the end, the students who remain are those with the lowest ability and fewest resources.¹²³ The combination of choice and the peer effect crushes these schools; with only the students with the lowest ability and fewest resources, the urban public schools are destroyed.

VI. CONCLUSION

For more than two centuries, supporters of school choice programs, such as homeschooling, have attempted to invoke economic analysis. They have argued that school choice will cause public schools to improve because the public schools will no longer be monopolies; the new competition will discipline the public schools to improve. This argument is incorrect, as shown by both economic theory and empirical analysis. Economic theory indicates that, because of special characteristics of the market for education, competition will harm public schools, not help them. Likewise, that competition will tend to harm public schools is confirmed by empirical evidence. Indeed, earlier school-choice programs destroyed many urban public schools.

120. Betsy Levin, *Race and School Choice*, in *SCHOOL CHOICE AND SOCIAL CONTROVERSY*, 266-99 (Stephen Sugarman & Frank Kemerer eds. 1999); RYAN, *supra* note 5, at 217.

121. See Ladd, *Comment on Caroline Hoxby*, *supra* note 94, at 72 (2003); Epple & Romano, *supra* note 61, at 35.

122. See, e.g., Epple & Romano, *supra* note 61, at 34; Caroline Minter Hoxby, *Do Private Schools Provide Competition for Public Schools?* (Working Paper No. 4978, 1994).

123. See Epple & Romano, *supra* note 61.