Comment on Caroline M. Hoxby: School choice and school competition: Evidence from the United States

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Caroline Hoxby has presented one interpretation of the US evidence about school choice and school competition. Her interpretation is based largely on her own ambitious and impressive research program on the competitive effects of voucher and charter schools in the US. She concludes that public schools respond to competition by becoming more productive, that students' achievement rises when they attend schools of choice and that, to date, students attending private schools with vouchers or who switch to charter schools are neither more advantaged nor higher achieving than other students and, hence, that cream-skimming is not a problem (Hoxby, 2003, summary and p. 61).

I am far less confident than Hoxby about these conclusions. My own research on school choice in New Zealand and on charter schools in the United States has made me deeply skeptical about the benefits for students from market competition in education. Although I favor expanding choice for disadvantaged students through the public school system and providing a limited number of charter schools, my reasons have more to do with equity and empowerment than with the alleged benefits of market competition. My basic skepticism about the benefits of competition makes me want to see evidence from a variety of sources and to have results replicated by several studies before drawing any definitive conclusions. In addition my critical stance reflects a different interpretation of the evidence that Hoxby presents related to the effect of voucher programs on the achievement of students who use them to switch to private schools.

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1. Skepticism about the benefits of an educational market

My skepticism about the benefits of an educational market place reflects three observations about the schooling sector: Primary and secondary education is compulsory, parental choices of school are heavily influenced by the composition of students at the school, and prices are not an appropriate mechanism for allocating scarce slots in popular schools.

1.1. Compulsory education

The fact that primary and secondary education is compulsory is important because it means that school administrators must provide a school for everyone, a concept that does not square well with the operation of a competitive market. Competition works in the private sector in part by the expansion or replication of successful firms and, importantly, the shutting down of unsuccessful firms. The problem in education is that failing schools cannot be shut down unless alternatives are available. If failing schools are not shut down, the students remaining in them could well be worse off than in the absence of competition. The apparently obvious solution of having students move from failing schools to "successful" schools often does not work. For reasons that I discuss below, successful schools have few incentives to expand, especially when expansion entails admitting more costly-to-educate students.

The alternative solution of setting up new schools may work in some cases. However the US experience with charter schools makes clear that establishing new schools is a costly endeavor, both in terms of monetary costs, and in terms of losses in student achievement. Evidence cited below suggests that students who switch to charter schools end up making smaller achievement gains than they would have had they remained in the traditional public schools, at least during the first few years of a school's operation. Thus, an education system that relies heavily on the shutting down of failing schools and the entry of new schools is likely to impose significant social costs.

1.2. The relevance of student mix

The second reason for skepticism reflects the fact that parents care not only about the educational programs offered by a school, but also about the other students in the school. Two forces are at work here. First, evidence from studies around the world indicates that many parents exercising choice seek to move their children to schools in which the average socioeconomic characteristics level or nonminority share of the students is higher than it would be in their original or assigned school. This phenomenon has been documented in systems as diverse as New Zealand (Fiske and Ladd, 2000; Ladd and Fiske, 2001), Chile (McEwan and Carnoy, 2000), Scotland (Willms and Echols, 1993) and Chicago (Cullen, Jacob, and Levitt, 2000). Second, race or ethnicity often plays a major role in parental decisions. A recent study of Texas charter schools documents that in many cases students are seeking schools with a higher proportion of students of the same race. In that state, black students who entered charter schools increased the average percentage of black students in their school by 9.5 percent (Hanushek, Kain and Rivkin, 2002, p. 15).

The flight of students to schools with higher socio-economic status (SES) is consistent with many parental motivations, including the quest for better schools. Evidence shows that higher SES is associated with higher test scores and also with greater gains in test scores from one year to the next (Ladd and Walsh, 2002.) This positive correlation between the socioeconomic advantage and student achievement largely reflects what happens at home rather than at school. However, school-related factors may also help to explain the correlation. Importantly, students attending a school with more advantaged peers may benefit directly from positive peer or spillover effects from one student to another but the story here is much broader than narrow spillover effects of this type. In addition schools with more advantaged students can more easily maintain educational processes such as assigning homework; they are more able to attract high quality teachers; and they typically have access to more resources in the form of both budgetary resources and those provided by parents in the form of contributions and volunteer activities (Fiske and Ladd, 2000).

This observation that the "customer mix" matters to parents has enormous implications for all educational systems, including systems financed by vouchers. First, when choice is unrestricted, a hierarchy of schools emerges. Such outcomes emerge from the theoretical models of Epple and Romano (1998) and are also observed in practice.

Second, when the characteristics of the school's student body are an important determinant of the school's quality, no simple programs or educational strategy can make a school with a large proportion of disadvantaged or low-performing students look effective. In many instances, the best strategy for such schools is to try to raise the quality of their student intakes, a strategy that cannot work in the aggregate.

Third, successful schools will be reluctant to expand if doing so requires lowering the average socioeconomic or ability level of their students. In New Zealand's experience with full parental choice and self- governing schools, successful schools in urban areas had no desire to expand their enrollment. To the contrary, they did everything they could to maintain the mix of students that made them attractive to parents and students in the first place (Fiske and Ladd, 2000).¹

Finally, schools with large concentrations of disadvantaged students have difficulty competing for students (Ladd and Fiske, 2001). This observation does not, by itself, rule out vouchers or more choice as a policy tool. For policymakers concerned about equity, however, it raises some warning flags. It also casts serious doubt on the proposition that competition will improve the schools serving students who attend schools at the bottom of the distribution.

1.3. Absence of pricing mechanisms

For a number of reasons most people would agree that prices should not be used to allocate spaces within schools that are publicly funded. Yet prices are a logical component of a full market based system. Private schools, for example, currently use prices in the form of tuition to allocate scarce spaces. An alternative to the use of prices is to empower schools to choose which students to accept. Such an approach was justified as part of New Zealand's program of choice within the public schools, for example, on the grounds that it was a logical extension of the concept of self-governing schools competing for students in an educational market place. As a result, over time parental choices among schools were increasingly constrained by the choices that schools made about which students they deemed most desirable

¹ In her footnote 1, Hoxby (2003) states, with reference to Fiske and Ladd (2000), that "there were fiscal disincentives (emphasis in the original) for successful schools to expand" in New Zealand. This statement is incorrect unless she is referring to the fact that the successful schools had no incentive to accept disadvantaged students given that the reputations of such schools were largely determined by the elite group of students they served. Later in that same footnote, Hoxby again mischaracterizes the New Zealand situation by saying that it has recently moved further in the direction of school choice.

(Fiske and Ladd, 2000). Given that some students are more costly-to-educate than others or impose more costs on other students, the tendency is for the less desirable students to be denied access to the more popular schools and to end up concentrated in the schools at the bottom of the distribution.

In recognition of this problem, US charter schools, which are publicly funded, are not allowed to charge tuition and, when they are oversubscribed, are required to allocate spaces based on a lottery, with the intent being to assure all students an equal probability of access. As Hoxby points out, those provisions could also be included in a voucher program. My point here is that the public interest in education that justifies making elementary and secondary education compulsory in the first place is not compatible with a full market based system of allocating spaces in oversubscribed schools.

With this general skepticism about the market model for education as background, let me turn more specifically to Hoxby's analysis. It is important to note that most of Hoxby's evidence comes not from unrestricted or universal choice programs, but rather from restricted choice programs, such as small voucher programs for which only low income families are eligible or charter schools which are accessible by lottery to all comers and which are not allowed to charge additional tuition. As Hoxby continually and correctly emphasizes, the design of the program matters. I address the issues in the reverse order in which she presented them.

2. Evidence on "cream-skimming"

Whether or not schools of choice will attract the easier-to-educate students clearly depends on the design of the program. If a voucher program is restricted to families with low income, or if charter schools are disproportionately located in minority areas, then low-income and minority parents are likely to participate in choice programs in disproportionate numbers. Further it is logical that those families who are more dissatisfied with the traditional public system are the ones who are more likely to leave their assigned public school in favor of choice schools. Given the nature of the charter school laws in many US states, one should not be too surprised that charter schools serve a population that is disproportionately black, Hispanic or poor relative to the district in which the charter school is located or relative to nearby schools, or that the students who chose the charter

school option had been less successful in the public schools, as shown in Hoxby (2003, Table 9).

Even here, though, a more nuanced story is appropriate than the one presented by Hoxby. My own analysis of charter schools in North Carolina, for example, generates patterns similar to the ones described by Hoxby's Table 9, but with the additional observation that the parents of students in charter schools typically are more highly educated than the parents of other students, a finding that is consistent with some cream skimming (Bifulco and Ladd, 2003). Further, in that state many of the charter schools serve a clientele that is virtually all African American, suggesting that some form of sorting is occurring, albeit not in the form that initial proponents feared.

Most important for foreign observers, however, is the danger of extrapolating patterns from small means-tested voucher programs or from small charter school programs, to larger choice programs or to programs with fewer restrictions. So while Hoxby's description of the basic patterns to date may well be valid, they tell us little about the extent of sorting or of cream-skimming that is likely to arise with a larger or less restrictive choice program.

3. Impact of choice on students' achievement in choice schools

Hoxby marshals evidence from the publicly funded means-tested voucher programs in Milwaukee and Cleveland and the privately funded programs in New York City, Dayton, Ohio, and Washington, D.C. to claim that the US experience with vouchers has generated consistently positive effects from switching to a private school for African American students who receive vouchers. She fails to highlight, however, that the best of these studies—namely those based on the three privately funded programs whose evaluations are based on experiments with random assignment—generate no statistically significant average differences between the achievement of voucher and non-voucher students. (Howell and Peterson, 2002, Table 6-1.) That fact is not apparent from her table because she does not include an average effect for all students (Hoxby, 2003, Table 7). Had that information been included it would have shown that means tested voucher programs of the type implemented in New York City, Dayton and Washington, D.C. apparently do not raise the achievement of the typical student who participates in them.

Moreover, even the positive effects for the subgroup of African Americans do not withstand scrutiny. The Milwaukee and Cleveland results are not based on true experiments and are subject to criticism. More telling, the apparently large achievement gains of 9.0 national percentile points for African Americans participating in the second year of the voucher program in Washington, D.C. (Hoxby, 2003, Table 7) drop to zero in the third year, a fact that Hoxby does not mention. Thus, had Hoxby reported the third year results for that city (which have been available in published form since April, 2002 in Howell and Peterson, 2002, p. 146) the picture would have been very different. Although the results for the New York program show somewhat more consistent positive effects for African Americans over the three years of the program, even those results are not consistent across grades. In addition, as Hoxby notes, the New York results have been challenged by Alan Krueger and Pei Zhu (2003) who reanalyzed the data and provided evidence that the positive achievement gains for African Americans do not stand up to reasonable variations in the sample and the definition of a "black" student. Although Hoxby discounts the Krueger and Zhu study, many researchers, including this one, find their critique sufficiently compelling to induce one to question the conclusion that voucher programs provide positive benefits to African Americans in New York City.

Finally, recent evidence from both Texas and North Carolina, which is based on careful statistical models specifically designed to counter any selection effects that would bias the results, indicates that students in charter schools experience smaller gains in achievement than they would have had they remained in the traditional public schools (Hanushek, Kain and Rivkin, 2003; Bifulco and Ladd, 2003), at least for the first few years in which those schools are operating. Thus, the case that choice, whether in the form of vouchers for private schools or in the form of charter schools, generates higher achievement is far less compelling than suggested by Hoxby. While some students may well do better in such schools than they would have had they remained in traditional public schools, the US evidence provides no support for a positive achievement effect for the typical student who moves to such a school.

4. Impact of competitive pressure on the traditional public schools

Based on a series of her own research projects, Hoxby claims that the competitive pressure from voucher programs and charter schools exerts strong and positive impacts on the productivity of traditional public schools. In particular, she presents evidence that the threat to public schools in Milwaukee of losing students to voucher schools and the threat to public schools in Arizona and Michigan of losing students to nearby charter schools significantly raised the productivity of the traditional public schools in that city and those states. If she is correct, these results are potentially very important for education policy makers.

Without further corroboration from other researchers, however, it is premature to accept Hoxby's results as definitive. While her research is extremely sophisticated in many ways, it is flawed in that the unit of analysis is the school rather than the individual student. To the extent it is the students with the below-average test scores or testscore gains who use vouchers or charters to opt out of their traditional public schools, those schools could well experience higher gains in test scores gains even had they experienced no productivity gains, a fact that Hoxby acknowledges for the Milwaukee study but not explicitly for the Arizona and Michigan studies. Second, it is hard to rule out alternative explanations for the patterns she observes, particularly in the case of the Milwaukee voucher program. Because that program is part of larger package of policy initiatives designed to affect educational outcomes in the schools serving disadvantaged students, it is inappropriate to attribute all the achievement gains to schools that have large proportions of students from low-income families, and hence eligible for vouchers, to the effects of the voucher program alone.

Furthermore, I am less willing than Hoxby to discard the many other US studies on the effects of competition. While none of these studies is perfect, together they help shed light on a complicated question. In their comprehensive review of the effects on public schools of competition from private schools, for example, Belfield and Levin (2001) report that well over half the 94 estimates in 14 studies were statistically insignificant and that any positive impacts were either substantively small or subject to question based on subsequent studies. A handful of estimates, including those by McMillan (1999), who incor-

porated the effects of parental involvement, suggest that competition from private schools may actually reduce achievement in the public schools. If Hoxby is correct that competition from charter schools and the voucher-financed threat from private schools has large and in her words "very impressive" effects on the productivity of the public schools, I find it somewhat odd that significant traces of those effects do not emerge from these other studies of competition.

Thus, in my view the jury is still out on the extent to which additional choice and competition in the form of charter schools and voucher program in the US has exerted a positive impact on the traditional public schools. It may well be that future research will prove Hoxby correct in her conclusion of large positive effects, but until that future research is available, I remain skeptical of such benefits. To be credible that future research must pay particular attention to the possibility that any apparent productivity benefits may reflect the effects of choice programs on how students sort themselves among schools.

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