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Routing

Dismal Science *The Shortcomings of U.S. School Choice Research and* *How to Address Them*

by John Merrifield

Executive Summary

Pressing questions about the merits of market accountability in K-12 education have spawned a large scholarly literature. Unfortunately, much of that literature is of limited relevance, and some of it is misleading. The studies most widely cited in the United States used intense scrutiny of a few small-scale, restriction-laden U.S. programs—and a handful of larger but still restriction-laden foreign school choice expansions—to assert general conclusions about the effects of “choice,” “competition,” and “markets.” The most intensely studied programs lack most or all of the key ele-

ments of market systems, including profit, price change, market entry, and product differentiation—factors that are normally central to any discussion of market effects. In essence, researchers have drawn conclusions about apples by studying lemons.

To address the need for credible evidence on the effects of genuine education markets, economists should look to simulation models, indirect evidence such as outcomes in similar industries, and school systems abroad that enjoy varying degrees of market accountability.

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Introduction

The free market is the primary form of organization and accountability for most of the economy, and increased reliance on markets was the common denominator of successful 20th century economic reforms.¹ These facts, coupled with widespread dissatisfaction over the quality of existing educational services, have raised interest in market-inspired education reforms that fall under the catch-all term “school choice.”

But despite considerable effort to discover the effects of “school choice,” much that could qualify as evidence has not been directly studied, and much relevant information is not widely known. The limited educational choices available in the United States have been heavily researched, telling us how certain test scores respond when some families make use of current alternatives to their assigned public school.² But such constrained choices provide little evidence about how true education markets might transform the status quo. Indeed, Harvard economist Caroline Hoxby (whose work has focused on U.S. schooling) believes that “[market-based] reforms would propel American schools into wholly unknown territory.”³ A RAND study determined that “none of the important empirical questions has been answered definitively. Even the strongest [U.S.] evidence is based on programs that have been operating for only a short period of time with a small number of participants.”⁴

The novelty and minuteness of existing U.S. school choice programs are not the only factors that limit their value in assessing the merits of free-market education. Several key aspects of market accountability are virtually absent from those programs: price change, easy market entry, and the profit motive, among others. Prices determined by supply and demand are a key attribute of markets, but they are almost unheard of in K-12 education—even under most school choice programs.⁵ Furthermore, existing private schools’ tuition rates are greatly distorted by the taxpayer-funded competition from “free” public schools.⁶

The difficulty of charging tuition when the government offers “free” schooling is the main barrier to market entry faced by private schools in most of the world. That difficulty not only impairs the effectiveness of private schools, it affects the kinds of private schools that can exist.⁷ The presence of “free” government schools artificially favors certain kinds of private schools, such as those that

- have large endowments;
- have access to church subsidies;
- can offer inexpensive services that public schools cannot, such as devotional religious instruction; and
- can offer high-value subject or pedagogic specializations that appeal to only a small share of the population.

Indeed, that artificially skewed and narrowed menu of school types describes most of the existing U.S. private education sector.

But while U.S. school choice research has focused on very limited existing reforms and the small and highly skewed niche of American private schools, scholars have often used their findings to make sweeping claims about competition and market accountability in education.⁸ Much of the alleged direct evidence of, for example, the effects of “large-scale voucher programs,” or market accountability through full-fledged competition, is thus wrong, misleading, or irrelevant.⁹ Misconceptions are more stubborn foes than ignorance, so undoing the effects of this imagined evidence is a considerable challenge, and it is the key aim of this review.¹⁰ I also describe the sorts of studies that can be undertaken (and in some cases, already have been undertaken) to truly determine the merits of market education.

What Is “School Choice”?

Before diving into an analysis of the “school choice” research, the term itself merits clarification. Except when choice occurs through residential relocation, “school choice” means a policy that improves access to alternatives to the

assigned public school. Improved access, which typically results from a drop in the relative “price” of some alternative, may be universal or limited to target groups, such as low-income families or children in public schools formally designated as failing.¹¹ Therefore, “school choice evidence” is mostly what we know about the effects of changing the relative prices of actual and potential schooling options. Note that subsidies like vouchers and tax credits can lower prices from families’ perspective while raising them from the school operators’ perspective. By reducing disposable income, school taxes increase the relative price of private schooling. Interpretations of school choice effects need to take account consistently of how much policy reforms change the relative prices to families and educators, and what fraction of educators and schoolchildren had access to the price changes. If a price decrease significantly increases interest in alternatives to the assigned public school, an entrepreneurial response may yield a much-changed menu of schooling options.

Since the array of policy options for expanding school choice is poorly understood, the next section briefly describes the policy options that lower the cost, or enhance the benefits, of leaving the assigned neighborhood public school.¹² The third section discusses false evidence and false assumptions used to interpret evidence, while the fourth outlines sources of valid evidence.

Varieties of School Choice

Most U.S. children have an assigned public school based on their home address.¹³ Private school tuition can severely strain family budgets, so residence choice is the most used school choice strategy (#1). The costs of this strategy may include relocation expenses and trade-offs involving location issues such as worksite and amenities. For school districts to maintain the appearance of fairness, every major district program must be available in every attendance area. Therefore, choice through residential relocation mostly yields

choice among “comprehensively uniform” schooling options.¹⁴ Because school districts cannot assign children to specialized schools, choice by residential relocation cannot prompt school systems to focus schools on specific subject themes, or specific types of students, or specific teaching styles.

Supplementing residence choice are eleven ways (#2–#12) to enhance choice, which means selectively or universally reducing the relative prices of the schooling options, sometimes by the creation of new schools. These school choice options are as follows:

(#2) Chartered, nondistrict public schools, which are authorized by law in 40 states.¹⁵ Most charter laws let entities other than existing school districts authorize publicly funded, less-regulated alternatives to assigned public schools.¹⁶ As unzoned alternatives, charter owners can pursue topical or pedagogical specialization, but their inability to turn away mission-incompatible children can undermine such efforts. Every charter law creates two price controls.¹⁷ Charter schools may not charge tuition, which leaves it to the political process to set the amount paid to charter operators. A ban on parental copayments prevents charters from offering services that cost more than the state’s per-child payment (creating a price “ceiling”), while the guaranteed state funding gives operators no incentive to charge less for services that cost less than the per-child payment (creating a price “floor”).

(#3) Choice among district public schools. All but five states (Alabama, Maryland, Nevada, North Carolina, and Virginia) pay at least statutory lip service to “public school choice.”¹⁸ In the states that don’t undermine it with restrictions or allow districts to opt out, open enrollment among district public schools creates at least temporarily (until the best schools fill) some alternatives to the assigned school, and in the 40 states with charter laws, it supplements the choice between assigned and chartered.

(#4) Targeted tuition vouchers selectively improve access to private schools. The targeting criteria include financial need (Arizona, Cleveland, Milwaukee), attendance at a public school deemed “failing” (“FloridaA”), and

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the disability or special needs status of a student (Utah, “FloridaB”).¹⁹

(#5) Nonrefundable, personal use tuition tax credits. Targeting of a different sort affects a non-refundable credit’s utility to families. Nonrefundability restricts the maximum size of the credit to the specific personal tax liabilities against which the credit can be applied (income tax, sales tax, property tax, and so forth). The combined magnitude of the eligible tax burden, and hence the credit’s value, determines the extent to which the cost barrier to private schooling is lowered and thus the likely extent of migration from the public to the private sector.

(#6) Nonrefundable, low-income scholarship donation tax credit. This approach broadens the potential tax liability base of the credit to the vast majority of households that do not have school age children, as well as to businesses.²⁰ It also has the significant political and social virtue of shifting the schooling benefits of the credit from higher to lower income households. But only when coupled with personal-use tax credits as described above can donation credits change the school choice calculus of middle- and upper-income households, and thus capture much of the potential to prompt entrepreneurially driven change in the menu of schooling options.²¹

(#7) Refundable tuition tax credits. Families get a check when a refundable credit tops a targeted tax liability, typically just income tax. The credit’s cash value does not depend directly on the family’s tax liability, or indirectly on the taxpayer’s income. As in the case of the option-demand, universal voucher described below, it is strictly a matter of legislative choice whether private- and public-school users receive equal subsidies, or whether the tax credit is a large fraction of the tuition charged by the typical alternatives to the assigned public school.

(#8) “Pure” universal tuition vouchers. “Pure” means that parental choice of school allocates all of the public funds earmarked for approved schooling. Public and private schools get the same per-child subsidy. Although a child’s subsidy would not depend on the school’s owner, it could depend on age or academic status.

(#9) Option-demand universal tuition vouchers. “Option-demand” plans offer vouchers to everyone who opts for a non-public school.²² With an option-demand program, public school funding and voucher value are separate policy issues. Consequently, per pupil funding for public schools can differ from the value of a voucher. All of the formally proposed option-demand programs offered vouchers worth less than the public schools’ per pupil funding. For example, California’s failed Propositions 174 and 38 (1993 and 2000, respectively) offered option-demand universal vouchers worth half of the public schools’ per pupil funding level.²³

(#10) Formal separation of school and state. This would mean eliminating special rules for schools, selling off existing government education assets, and dropping education subsidies funded by taxes.

(#11) Informal, compromised school-state separation. Informal separation occurs when free government-run schools are available but, to a great extent, available in name only, because the schools are thoroughly dysfunctional—or actually unavailable, as in remote rural areas. Compromised, informal separation is found in developing countries to a substantial extent, and it is arguably emerging in developed countries, for example, in some of major U.S. cities with a history of chronically ineffective and reform-resistant public schools.²⁴

(#12) Deregulation that allows greater differences in schools. In countries such as Chile, Sweden, and the Netherlands, where many families can readily choose non-state, “independent” schools, extensive regulations greatly reduce the potential for differences among the school choices, which constitutes another major school choice barrier.

Imagined Evidence

Owing to a widespread misunderstanding of competitive markets, many researchers have overlooked the absence of several key elements of market accountability in existing school choice programs. Economist Charles

Manski notes that “consideration of [unrestricted] *choice*, to date, has been anything but serious. The policy debate has been long on advocacy and short on [relevant empirical] analysis.”²⁵ Jeffrey Henig observes that

The source of major conflicts and confusions today [in interpreting school choice research] derives from the absence of clear guidance about how to move from findings specific to one manifestation of choice to more general conclusions. Most of what we have learned about school choice is based on evidence drawn from two sectors—religious institutions and public education—in which the key actors and decision criteria are distinctly not market driven.²⁶

Every current school choice program, and school system, lacks some of the key elements listed below. They are especially scarce in the widely cited U.S. programs. These typically missing market elements include the following:

- Low formal (regulatory) barriers to the entry of new schools and to product [schooling] differentiation (e.g., school control of admissions and curriculum, and consumer sovereignty; family willingness to pay as the key determinant of school financial viability)²⁷
- Stability (a high degree of confidence in constant or growing total demand)
- Market-determined, flexible prices (e.g., permitting parental copayments under voucher programs)
- Nondiscrimination in funding (e.g., public funding per child, if any, does not vary significantly on the basis of school sector or for-profit versus nonprofit status) to ensure the level playing field essential to an entrepreneurial response
- Some direct payment by the consumer, in the form of tuition fees, as opposed to third-party payments only²⁸

Much misleading generalization rests on facts stretched beyond their narrow relevance,

for example, asserting that experience with public school choice provides insights into market accountability: “Advocates and opponents frequently overstate what is known about the consequences of school choice.”²⁹ Much overstatement is implicit. For example, Table 1 in Teske and Schneider is an overview of “studies of choice types and outcomes.”³⁰ The Teske and Schneider overview table does not differentiate between narrowly targeted vouchers and unrestricted universal programs, and it does not include “supply-side response” in the table’s list of potentially key school choice outcomes. The student performance column merely lists studies that examine whether choosers gained by moving to another part of the present system, something we would expect just from confidence in rational behavior. The dense list of studies in the “Vouchers” column could leave the impression that all of the important aspects of vouchers have received considerable academic scrutiny. In fact, the opposite is true. Instead, only a few narrowly relevant issues have received much attention.

Many of the wrong, misleading, or irrelevant statements about the effects of “competition” stem from failure to define the term or acknowledge the key elements listed above, and from insufficient use of necessary qualifiers such as “muted” and “fringe.” As Terry Moe noted, “it usually makes little sense to ask whether vouchers or charter schools, in some generic sense, have particular effects,” but it happens a lot.³¹ Clifford Cobb noted that the mismatch between restrictions on parental choice and rhetoric about competition creates considerable confusion.³² For example, two analysts have asserted that “the nature of some of these [tiny, privately funded voucher] programs allow for studies of essentially Friedman-like [universal, same subsidy level for all, plus ability to co-pay] voucher arrangements.”³³ As George Orwell said, “the slovenliness of our language makes it easier for us to have foolish thoughts.”³⁴

Experience with 1950s/1960s Fear-Based Choice

Some of the concern about stratification and increased segregation stems from the

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1950s/1960s “fear-based choice” that was provided mostly to the privileged as a “backlash” against the 1954 *Brown* Supreme Court desegregation order.³⁵ Often unsaid is that the desire to stratify was of utmost importance to the policy designers. Many of the tuition grant programs enacted to resist the *Brown* decision formally excluded blacks, and the vast majority of the eligible schools did not admit black children. Only Louisiana allowed a pursuit of profit that might have prompted entrepreneurial pressure to see the entire population as potential customers. The courts struck down all of the 1950s/1960s school choice programs without ruling on the voucher mechanism that, when applied in a nondiscriminatory manner, was found constitutional by the Supreme Court’s 2002 *Zelman* decision.

Claims that uncontrolled opportunities to opt out of assigned schools without relocating would undermine integration efforts persist in the face of both empirical and modeling evidence to the contrary, and those who make the claims seldom address the growing de facto segregation of the assigned public school system.³⁶ Hill pointed out that, “fears of [increased] resegregation and restratification depend on certain assumptions: very few good schools, that school quality varies on one dimension from high to low, and the real choosers will be the good schools, which will have their pick of students.”³⁷ Implicit in the arguments that resegregation will accelerate are entry barriers that prevent an expansion of the supply of the better schools. Those assumptions are often valid for the current system, or the current system amended with narrowly targeted, restriction-laden school choice. The historical evidence discussed above, and the indirect evidence discussed later, indicates that those assumptions will not apply to a mature, market accountability-based system.

Competition Tried in Absentia

In developed countries, competition and parental choice have only been implemented piecemeal, or on a small scale. The school systems of these nations are restriction-laden or extend choice to a narrowly targeted popula-

tion, or both. The opportunity for genuine rivalry between schools has thus been minimal, but virtually all studies of these systems assert that competition is on trial. For example, Fiske and Ladd claim that mere public school choice created a “market” in New Zealand.³⁸ Other stunning examples of mistakenly assumed competition and market forces include programs that cap market entry and set prices (charter laws, and most current voucher programs); policies that strongly favor some school providers; and regulations that give private schools very little leeway to differentiate themselves from the public schools or from each other. The much-publicized dispute between Hoxby and Rothstein was about a type of “competition” that had nothing to do with markets, but with supposed rivalry among political jurisdictions for tax base and economic development.³⁹

Half-hearted, partial market liberalization can yield misleading results. For example, the ineffectiveness and perverse side effects of presumed market reforms slandered capitalism in South America, with dire consequences only now becoming evident in places like Venezuela and Bolivia.⁴⁰ Likewise, the mostly positive, but unspectacular, effects of “school choice” discussed earlier may slander the genuine market-based reforms that qualify as the “tentative procedures” capable of yielding the transformation needed by a K-12 system in crisis. Though the evidence that receives virtually all of the U.S. attention has little bearing on the likely effects of competitive K-12 education markets, the argument that “competition” cannot produce sufficient school-system improvement is already appearing in putatively authoritative journals and is being made by prominent spokespersons in the newsletters of influential think tanks.⁴¹ Eight years of experience with the limited public school choice created by the United Kingdom’s 1988 Education Reform Act was the basis of Stephen Gorard’s non sequitur that “the prognosis for the improvement effect of markets on schools is not good.”⁴²

Martin Carnoy and Helen Ladd have said that the Chilean universal option-demand

voucher program was an example of a “large, unrestricted voucher program,” even though Ladd noted the government’s tight control of virtually all aspects of schooling.⁴³ Gauri had already documented Chile’s central micromanagement, including price control.⁴⁴ Earlier, Carnoy overlooked the intensity of central control. He concluded that Chile had “fully subsidized, deregulated private schools competing head-on for pupils with de-regulated municipality-run public schools.”⁴⁵ Carnoy and Ladd concluded that since the assumed (but in fact largely absent) market forces had failed to produce the promised results, increased central control was in order.

Jeffrey Perloff’s *Microeconomics* text notes that “When most people talk about competitive firms they mean firms that are rivals for the same customers.”⁴⁶ By this interpretation, any market that has more than one firm is competitive. However, to an economist, only some of these multi-firm markets are competitive.” The actual competitiveness of the settings studied to gauge “market competition” effects is a largely neglected, crucial issue. With public school choice, the school choices are not even separate firms. Even in the least restrictive of the widely cited school choice programs, the state-run sector easily satisfies the monopoly definition used for antitrust lawsuits. Certainly, the state-run system is the dominant producer, with significant entry barriers assuring that it is likely to remain so. And in the dominant-producer/competitive-fringe market of K-12 education, the dominant producer is not even a firm, that is, not directly customer-dependent.

Virtually all noneconomists attribute market forces and “competition” to every setting where an assigned school has a comparably priced alternative, regardless of the often extensive market-stifling restrictions that exist. The most recent examples are Mitchell Pearlstein’s review of voucher studies and Sol Stern’s lament that market forces have shown themselves inadequate to the assumed imperative of public school improvement.⁴⁷ John Witte’s *The Market Approach to Education* is about the initial Milwaukee voucher program—a program “de-

signed to fail”—that included price control, set a small voucher size, initially limited participation to 1 percent of Milwaukee public school enrollment, and allowed only the then-rare secular private schools to enroll voucher users.⁴⁸ Likewise, the Paul Peterson introduction to the compilation of *Education Next* articles, entitled *Choice and Competition in American Education*, does not mention that the journal’s authors describe only programs lacking the key conditions of genuine market competition.⁴⁹ Presumably, this means that *Education Next*, the top nontechnical outlet of education reform research, hasn’t seen an acceptable manuscript discussing the differences between the levels of rivalry present in American education and what generally constitutes market competition.

Economists have also asserted the presence of market forces that are in fact largely absent. For example, the introduction to *Market Approaches to Education*, written by the book’s editor, Elchanan Cohn, says that its collected essays will consider only public school choice and narrowly targeted subsidies—approaches that lack every key ingredient of a truly competitive market.⁵⁰ Despite the existing system’s major entry barriers, and the fact that private and public schools are not close substitutes, Thomas Dee’s “Competition and the Quality of Public Schools” attributes positive effects on public school graduation rates to “competition” from increased private sector market share.⁵¹ Since there is little incentive to actively compete, and little evidence of actual rivalrous behavior, Dee’s findings could be the result of other predictable effects of a larger private-school market share.⁵² For example, with more private schools, parents are better able to match their child’s unique characteristics to the available schooling options. Removal of children that would do better elsewhere leaves behind more homogenous, easier to teach public school classrooms.

Many economists have ignored or reinforced distorted views of the various school choice policies. Discussions of product differentiation, price change, and entry-exit aspects of market accountability are rare. The Belfield and Levin literature review and their lengthy

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discussion of the effects of competition between schools does not mention price change, profits, entry barriers, or regulation—all critical components of the “market competition”⁵³ they claimed to assess. Woodfield and Gunby and Fiske and Ladd trumpet the presence of “marketization” and “market competition” in New Zealand, and then document the absence of nearly all of the key features of a truly competitive market.⁵⁴ Some rivalry may exist among New Zealand’s public schools, but the system does not remotely resemble a competitive market. The tightly regulated New Zealand system lacks profits, entry/exit, and market-based price change. Yet influential commentators, including former U.S. Labor Secretary Robert Reich, have cited the New Zealand experience as evidence of what could be expected from a market-driven system.⁵⁵

Present U.S. school choice programs create some potential for producer rivalry, but school leaders have little authority or incentive to engage even in that, much less to exhibit aggressive competitive behavior. There are high entry barriers, and the combination of copayment limits, participation caps, and means testing arguably rules out price change, and all but rules out significant profit. Still, Dolton asserts that “America has important lessons for any country considering market-led choice reforms.”⁵⁶ The actual key lesson is that market forces are largely absent but that even small doses of increased freedom to choose from a largely static menu of schooling options can still produce measurable, though modest and perhaps short-lived, improvements.

Misleading Test Score Wars

Despite some dissent, higher test scores for choosers are widely seen as the needed evidence that choice “works.”⁵⁷ Various scholars thus argue over what the test results show, and the resulting “storm over vouchers” often appears on the front pages of the *Wall Street Journal* and the *New York Times*.⁵⁸ The market metaphor is on trial despite the virtual absence of market accountability. Test scores are inappropriately seen as “political dynamite.”⁵⁹ Hoxby gave

three reasons why it is “wrong-headed” to insist that choosers achieve higher test scores to see choice as a worthwhile reform: “(1) Productivity with equal resources is the key question and the choice schools typically have fewer resources; (2) Schools left behind may improve, invalidating comparisons; (3) Comparison criteria may be incomplete—data may not reflect factors of importance to parents.”⁶⁰

Hoxby disapproves of the test score comparisons because they are likely to be difficult and unfair. But a more important objection to the comparisons is the near-total irrelevance of differences between the public and private sectors of a school system widely seen as disastrously ineffective. In a nation officially “at risk” because of poor academic achievement, the key issue is which kinds of choice-based reforms, if any, can maximize continuous improvement as measured by more than simply test scores. Test score evidence that choosers usually find a better choice from the existing menu of schools does not tell us if choice can prompt desirable changes in the menu. Strong charter laws and narrowly targeted vouchers prompt public school improvement, but a larger market accountability-based transformation of the private sector might instead prompt a gradual elimination of public schools.⁶¹ And such a transformation may produce the better school system. Experience says that a gradual but ultimately significant loss of market-share of government-controlled schooling is the most likely outcome of market accountability. Clayton Christensen and Michael Overdorf’s study of organizational response to disruptive change found that dominant firms typically fail to improve enough to avoid eventual replacement by newcomers.⁶²

Intellectual Prisoners of the Status Quo

Differences between the current system’s private and public schools are still widely seen as telling evidence of what expanded choice and the assumed resulting greater use of private schools would mean.⁶³ According to Dan Goldhaber, “the superiority of private schools’ ability to educate students is the cen-

tral claim of those advocating choice, and a central tenet in the claim that expansion of public-private choice would improve the overall quality of schools in the US.⁶⁴ The typical current U.S. private school is not an appropriate standard of excellence, either in its current condition or based on past rates of improvement. “Nation at Risk” test scores at a lower cost are not proper objectives of reform.⁶⁵

The typical implicit assumption is that greater use of private schools would improve the K-12 results to the same extent that private schools now yield better scores, which by official measures is slight.⁶⁶ But differences between existing schools are not necessarily good indicators of the benefits of increased choice. Elimination of entry barriers would significantly change the private share of K-12, and the critical issue is not whether private schools are now more effective than government-run schools, or even whether they can be under more market-friendly circumstances.⁶⁷ It may turn out that public versus private ownership is just another specialization issue that helps determine which school is best for which child. The critical issue is which kind of accountability yields and sustains the best system, which could turn out to be a much different mix of private and public schools than the United States now has.

Certainly, for applications of school choice in bits and pieces to wring better results from the present system, the differences in facilities, funding, and governance procedures between current private and public schools are important. But it makes no sense to apply a static world view when only programs that aim to transform K-12 schooling truly qualify as “tentative procedures,” that is, as procedures capable of effecting systemwide transformation and testing the merits of real market reform.⁶⁸ The static view—being an intellectual prisoner of the status quo—implicitly assumes away the critical transformation objective. For example, it takes a static view of the private sector and assumes that private schools overwhelmed with applications will exercise school choice, not parents.⁶⁹ Certain-

ly, that could be the immediate effect of a genuine market system. But it would be temporary. In a genuine market system, shortages of space at the most popular schools would eliminate themselves by initially pushing up prices and hence encouraging their expansion and imitation, which would at least partially reverse the initial price increase.

A key claim made by proponents of large-scale voucher programs is the potential for significant change in the private share of the system, both as an end in itself and as a potential catalyst for public sector improvement. But much discussion of that claim rests on the implicitly assumed permanence of public sector comprehensive uniformity and the current composition of the private sector (virtually 100 percent non-profit; mostly church-run).⁷⁰ For example, Patrick McEwan makes much ado about a detailed comparison of the current U.S. public and private schooling sectors, including church dominance of private schooling.⁷¹ But then he concludes that the need to change both sectors causes the data to have little value for evaluations of large-scale programs. In another bizarre application of static thinking, differences in the student bodies and “service mix” of current private and public schools are the basis of a claim that private schools are not more efficient than public schools. For example, according to Levin, current private schools would spend as much as public schools if they had the same students and service mix, that is, if private schools had a broad mix of students and a comprehensive array of services on every campus.⁷² But it is inefficient to provide every noteworthy academic program in virtually every assigned school and to randomly match students and educators, that is, to connect them in a classroom without regard to the unique attributes of both. It makes no sense to argue that private schools would be no more efficient than public schools if they behaved as inefficiently as neighborhood public schools. Even in a system with little market pressure to be efficient (current public and private schools are mostly not close substitutes), private schools are typically more efficient (comparable effectiveness

The issue is not whether *current* private schools are more effective than public schools, because market reforms would transform the private sector.

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at a lower per pupil cost) precisely *because* they configure themselves differently and benefit from non-random connections between students and educators.

Ignoring Price Control

Especially shocking are economists' (price theorists') failures to highlight and sharply criticize price control by the present U.S. K-12 system, virtually all of the world's other K-12 systems, and the vast majority of proposed and existing school choice programs. They could cite massive tomes, or a flagship journal article by a Nobel laureate—as well as 4,000 years worth of bad experience with price control, including the near failure of the American Revolution—on the *indispensability* of market-determined prices as sources of vital information and powerful incentives.⁷³ But they have not done so. Clive Belfield and Henry Levin do not mention the price control present in most school choice programs.⁷⁴ Fiske and Ladd ignore the price control in New Zealand's alleged experiment in "full parental choice and competition."⁷⁵ Masato Aoki and Susan Feiner's "general guide to the economics of the market approach" cited the well-known Chubb and Moe plan as a prototypical market approach.⁷⁶ They did not challenge the Chubb and Moe assertion that a market system can (and should) include price control.⁷⁷

Like Aoki and Feiner, Donald Frey mentions price control, but does not critique it or explain how market-determined price change could prompt product diversification and innovation, regulate entry and exit into K-12 education and its subfields, force cost-cutting, or other dynamic effects that economists frequently acknowledge as inherent, critical elements of competitive markets.⁷⁸ The same thing is true of Derek Neal's discussion, "How Vouchers Could Change the Market for Education," and Ladd's "critical view" of vouchers.⁷⁹ Julian Betts et al. have a general discussion of the price system, but they do not connect it to the K-12 situation, either to critique existing price control, to explain that prohibiting voucher copayment with private funds (which is included in most school choice plans) creates price control, or to dis-

cuss potential effects of price decontrol.⁸⁰ They note that while private copayment "is not common practice under current voucher programs, voucher schools could, in theory, charge tuition and require parents to top off [copay] the voucher amount."⁸¹ They assert equity benefits for the copayment bans without explaining how restrictions on school spending by higher-income families ostensibly helps lower-income families. Betts et al. also fail to note or discuss the arguments that copayment bans harm virtually everyone, for example, by reducing contemporary competitive pressures and the incentive to develop innovations that often start off too expensive for anyone but the wealthy to afford.⁸² By precluding an initial high price for innovative schooling practices copayment bans can keep innovations from getting off the drawing board.

Price control is part of every charter law, but economist Scott Milliman said that Arizona's charter school law had "initiated a free market in public education."⁸³ Likewise, Helen Ladd has said that charter schools are "a market-based reform strategy," and Joseph Viteriti has said that "real competition" results from strong charter laws even though, in addition to instituting price control, strong charter laws mean that popularity with families, financial viability, and lawful behavior is not enough for schools to remain open.⁸⁴ The government bureaus empowered to grant charters can close popular schools for failure to meet bureau standards.

The Texas and Arkansas reform recommendations of the Koret Task Force (which included education economists) ignores price control as a limitation of charter law approaches to reform.⁸⁵ Koret supported a Texas legislative proposal for means-tested vouchers that allows copayment and thus avoids price control, but the task force did not explain the importance of that provision or how means-testing would reduce market entry and distort market determination of tuition (price) levels. The "Constraints on Supply" section of a significant RAND study makes no mention of price control.⁸⁶

Wrong Success Criteria

The alleged acid test of assumed, but usually absent, market forces is the public school response.⁸⁷ Dee opens by noting that “the fundamental premise for educational policies that advocate school choice is that increased competition can improve the quality of public schools.”⁸⁸ Likewise, according to Hess, “the most commonly advanced argument for school choice is that the market will force public school systems to improve.”⁸⁹ McEwan cites the public school response as a key effectiveness measure for “large-scale voucher programs.”⁹⁰ And for many prominent reform advocates, the Hoxby finding of modest academic gains from alleged competitive pressures and nonsubstantive public school responses is evidence that we cannot rely on market forces to significantly improve schooling.⁹¹

If the reasoning behind the focus on public school response were sound, major gains in retailing, computers, and telecommunications would not have been possible without better performance by Sears, IBM, and the original AT&T. Luckily that kind of reasoning was false for those industries, as well as false generally. Those industries made great progress even while their once-dominant firms lagged. Indeed, Christensen and Overdorf note that most industries make great leaps forward, despite lackluster performance from former industry leaders.⁹² This and other strong indirect evidence suggests that school system improvement will require that public schools go the way of Ma Bell, IBM, and Sears, claiming a much smaller market share than is the case under the current school system.⁹³ Established market leaders are only rarely up to the challenge of disruptive change. New competition typically replaces them. And public school operators face longer odds than industry leaders. The authorities that run public school systems can’t respond as decisively as business CEOs, and a shift from political control of K-12 to market accountability is arguably much more disruptive than the technological innovation pressures examined by Christensen and Overdorf.⁹⁴ The public school response to choice-based reform is of great long-term significance only

for reform proposals that assure public schools a large market share.

Promising Routes to Critical Evidence

Among the current U.S. programs, none has the potential to generate serious market accountability insights without major reforms. For example, the Milwaukee program would have to allow universal access to vouchers and allow virtually unrestricted copayment. Since none of the U.S. school systems with long-standing choice programs contains the essential elements of market accountability, we are decades away from a comprehensive empirical analysis of a market accountability-based equilibrium in this country.

That is not to say that reformers should abandon efforts to create genuine experiments in market accountability-driven K-12 education. Better to have direct domestic evidence in decades than never to have it at all. In the interim, however, it seems sensible to use other, more indirect, sources of evidence that are available today, and that, when taken together, could prove compelling. Here I refer to such forms of evidence as simulation models, analogies to other industries, and comparisons to school systems in other countries and school systems that no longer exist. I discuss these forms of evidence below.

Simulation Models

Improvements in simulation models, including sensitivity analysis with parameters that can’t be estimated from present data, are of the utmost importance.⁹⁵ That is probably the only way to explore the importance of key program features and assumptions about the nature of student, educator, and entrepreneurial behavior, and the implications of the apparent significant diversity in how children learn.

As Dolton correctly noted: “This [simulation modeling] is an extremely valuable—but difficult exercise.”⁹⁶ It is a valuable substitute for unavailable empirical evidence, but quite

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difficult because data from the current system are a dubious source of parameter estimates, and because the inevitable, initial simplifying assumptions can produce misleading results. For example, the current leading efforts assume one-dimensional student ability and school quality and assume that quality depends only on average student ability and school spending.⁹⁷ In other words, they assume that schooling practices are uniform and that children—far from being good at some things and average or bad at others—are smart, average, or slow across the range of different kinds of abilities. Hill points out that school stratification by income and ability should result from those conditions, mobility, and school choice.⁹⁸ Assuming more plausible subject- or pedagogy-specialized schools and multidimensional ability could produce different results.⁹⁹ Charles Manski recognized the potential for specialization, but omitted it from his simulation model because “the greater realism of a differentiated product model carries with it greater complexity in characterizing and finding equilibria.”¹⁰⁰ But multiple equilibria would be a key insight into the likely nature of a market accountability-based K-12 system.

Modeling efforts typically do not quickly incorporate every desirable nuance. Probably they cannot. Early, crude models often identify key modifications. For school choice issues, the gradual, collaborative model-building process is barely underway. The production functions of inefficient, comprehensively uniform schools, and the effects of residential mobility are a dubious source of reliable estimates of model parameters for studying market-based policies.¹⁰¹ Therefore, analysts should conduct sensitivity analyses of their findings by also generating simulation results with hypothetical parameters created to reflect factors like low entry barriers and market-driven price change. Establishing the policy relevance of such findings will be at least as challenging.

Indirect Evidence

Indirect evidence is plentiful; for example, there are competitive industries that have much in common with schooling. Or, to argue

that the current system’s problems are largely inherent in non-market systems, we can study industries and economic systems that lack the profit motive and a price system (USSR, Cuba, North Korea). The well-established superiority of market over government provision of goods and services may turn out to be the most powerful evidence. The biggest challenge is to get policymakers to take that evidence seriously.

Discovery and analysis of specific industries with production functions like schooling is a potential source of more specific insights into the likely workings of market accountability-based K-12 education. Other industries involving schooling, especially for children, promise the best and most credible indirect evidence. For example, market forces supply tutoring services to children. I’m not aware of attempts to develop lessons for K-12 reform from U.S. tutoring markets, but Coulson’s study of the Japanese market demonstrates that schooling is not a special case in which capitalism disappoints, while delivering the goods efficiently elsewhere. Market-driven tutoring is quite popular with Japanese families and is widely regarded as highly effective. That evidence deserves further study and a wider audience. Again, efforts to establish its relevance to school system reform debates are at least as important as the effort to extract additional information.

Vocational education serves mostly adults, but programs that provide significant subsidies for job training expenses may create opportunities to tease out some insights on the nature of private schooling subsidized by vouchers or tax credits. Higher education also involves adults and is fraught with hazards as a source of lessons for market accountability. Many private universities enjoy a buffer from competitive pressures in the form of a large endowment, and the much larger subsidies of state universities create many of the same problems found in the current U.S. K-12 system. However, higher education studies may be a good source of insights about critical political dynamics, especially the evolution of state-run universities into semiprivate schools that is apparently underway in some states.¹⁰²

Myron Lieberman's *The Educational Morass* compares school system practices to heavily subsidized, restriction-laden, but still much more market-oriented health care in order to argue that more widespread use of market forces would drastically change teacher training, research practices, and the use of research.¹⁰³ Again, the effort to establish the findings' relevance to potential choice-based reform is at least as important as making the comparisons. The general findings of Christensen and Overdorf about industry change are good examples of evidence that Christensen worked to credibly connect to the K-12 reform debate.¹⁰⁴

Too much is made of the new, restriction-laden, foreign school choice programs (Chile, New Zealand, and Sweden), while too little is made of the differences between longstanding school systems with widely different levels of market accountability. Though no current system possesses a high level of market accountability, contemporary foreign schooling policies, as a group, provide a good, natural, long-term experiment in the determinants of differences in equilibrium outcomes.¹⁰⁵ A "natural experiment" involves studying the outcomes of particular systems across varying cultural and economic settings, looking for consistent patterns. When a given system is consistently associated with positive outcomes regardless of socioeconomic context, researchers can have some degree of confidence that the given effects are in fact due to the system itself and not to extrinsic factors, since those factors will have varied from one setting to another. Among the world's nations there are varying levels of subsidies for "independent" schools and varying levels of regulatory control. Thus, reviewing this body of experiences as a whole constitutes a relevant and potentially highly informative natural experiment.

The initial assessments of that evidence make a strong case for school choice and market accountability generally.¹⁰⁶ Programs with higher levels of market accountability are consistently more efficient than more restrictive programs. Specifically, international examples spanning thousands of years—including true

market situations existing as recently as the 1800s—universally show that greater direct financial responsibility for parents, less regulation of schooling practices, effective competition, and increased opportunity to profit from popular schooling practices improve school system effectiveness and efficiency. A comparison of state systems in the United States supports the same conclusion. Differences in the education market activity levels of U.S. states, low as they all are under just slightly different versions of the current system, still register directly as determinants of increased academic effectiveness and efficiency.¹⁰⁷ It's certainly not a matter of finding a system to copy. It's a matter of identifying the likely critical elements of highly effective school systems by taking advantage of the natural experiments described above. The elements thus adduced can then be fine-tuned to place-specific contemporary political and economic circumstances, as necessary.

To establish the policy-relevance of the historical examples of schooling driven by producer and consumer choice that pre-date the 20th century, scholars must address differences in culture and differences between current economic and political conditions and those prevailing then.¹⁰⁸ And since data suitable for scientific empirical analysis are likely unavailable from historic archives (at least prior to the 19th century), scholars will have to rely on carefully constructed comparisons akin to the natural experiment created by international differences in contemporary school systems.

There seems to be virtually unlimited potential to develop evidence from compromised separation of school and state. Though potentially insightful on key questions such as the importance of price change, degree of product differentiation, stratification, and rate of change, the findings will understate the private sector response to uncompromised, low formal entry-barrier opportunities to create private schools. Understatement will result because a compromised separation of school and state forces schooling entrepreneurs to compete with government-run schools for

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A capital-intensive approach to private schooling may eventually become inexpensive and effective enough to draw a large number of low-income families.

resources such as school sites, teachers, and other school personnel. Potential classroom-clearing improvement in the free government-run alternatives to the fee-charging private schools casts a pall of uncertainty over private school investment decisions. And payment of school taxes reduces the ability to pay fees.

Therefore, a key issue to address in some of the initial studies is the degree to which the continued government presence compromises the outcomes. From the work of Tooley and Dixon, we know that entrepreneurs can compete effectively with the free government-provided schooling in developing countries, but we don't know the extent to which the government's use of schooling resources and its mere presence impacts the character of private schooling enterprises and their market share.¹⁰⁹ For example, it may be that the low labor costs of developing countries allow for cheap, labor-intensive production of schooling that is competitive with the terrible schooling available at no charge. With high labor intensity production, little is invested, so little is at risk in case government-provided free schooling were suddenly to respond to one of the many high-profile initiatives ostensibly aimed at that result.¹¹⁰ That risk to private school providers may cause more capital-intensive approaches to appear even more costly than they already are in capital-poor developing countries.

Despite reports of horrifically dangerous and academically dysfunctional schooling in major U.S. cities, the entrepreneurial response to low income family despair with public schooling has yet to match the response found in developing countries. Why? The answers could prove to be quite valuable. Certainly, relative price differences will be a significant part of the answer. Labor is not cheap in the United States, and urban public schools may not be as bad as their counterparts in developing countries. Developed countries enjoy relative capital abundance, so with increased development of software and the internet, a capital-intensive approach to private schooling may eventually become inexpensive and effective enough to draw a large number of low-income

U.S. families away from their assigned, "free" neighborhood public school.

Summary and Concluding Remarks

We lack direct answers to pressing questions about market accountability as a transformation catalyst, and imaginary evidence confuses the K-12 reform debate. The importance of the K-12 reform issue and the demand for empirical evidence has led to intense scrutiny of the small, restriction-laden U.S. choice programs and, increasingly, of more informative but still quite limited foreign programs.¹¹¹ Failure to recognize major differences between the key elements of market accountability and the conditions of existing school choice programs, and the inability to address key issues with direct empirical evidence, led to creative attempts to "tease out findings from existing arrangements."¹¹² And many of the findings were important. Limited programs, which are the most likely to yield some of the negative effects claimed by choice opponents, did not produce the extensive creaming, increased stratification, and budgetary consequences that have been the fodder of anti-school choice campaign commercials.¹¹³ But presentations of some findings have been misleading, especially regarding the potential for competition to be the much sought-after transformation catalyst. Certainly choice opponents were eager to trumpet the modest effects of the school choice "experiments." But the modest effects prompted some scholars and authoritative proponents to declare their misgivings about the utility of "competition" as a transformation catalyst.¹¹⁴ Alleged "proxies for competition" have severe limitations, yet economists are among the analysts that have generalized effects of weak rivalry into alleged evidence of market accountability.¹¹⁵ At the same time, economists have done little to correct or prevent poorly grounded pronouncements about the likely nature of a competitive education industry. The resulting persistence of the imagined evidence undermines a fair comparison of

market accountability and the multiple existing versions of political accountability.

The challenges are especially severe for the well-established, virtual indispensability of market-determined prices, something well-known within the economic profession but not beyond.¹¹⁶ Based on that general evidence, integration into the economywide price system is a likely imperative almost entirely unacknowledged in calls for K-12 reform. Price change clears markets, prompts product diversification and innovation, regulates entry and exit into industries and their subfields, forces cost cutting, and has other dynamic effects that economists frequently acknowledge. But economists have not forced those issues into K-12 reform debates by criticizing the current system's lack of a price system, documenting the effects of price control in K-12, or protesting its absence from most proposed school choice programs.

Direct U.S. evidence is not imminent, and there are repeated reminders of the urgency of K-12 reform, from the declarations of bipartisan commissions to the existence of armies of functionally illiterate high school graduates.¹¹⁷ The failure of frenzied, decades-long public school reform efforts, as well as evidence from other fields that dominant producers rarely transform themselves, compels us to broaden the body of evidence under consideration. New international and indirect evidence must be developed, and its credibility established, to permit a fair, near-term assessment of market accountability as a K-12 transformation agent.

Notes

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16. John Merrifield, "Charter School Legislation: Disaster, Detour, Irrelevant, or Reform Tool," *Journal of School Choice* 1, no. 1 (Spring 2006): 3–22.
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18. Komer and Neily.
19. *Utah* is the Utah Special Needs Voucher. *FloridaA* is the voucher for students attending failed schools, recently ruled unconstitutional by the Florida Supreme Court. *FloridaB* is the McKay Special Needs voucher.
20. According to the 2000 Census, File 4, 31.5 percent of households are not families (See <http://factfinder.census.gov/>), and less than half of all families have school-age children. In 2001, there were 71.98 million family households in 2001, and 34.4 million of them had children less than 18 years old; 19.6 million had children 6-17 years old, and none younger (http://www.bls.gov/news.release/History/famee_03292002.txt). Some of the 14.8 million with children under 6 years old certainly also had some children in school, but the data didn't allow for a precise count of the number of families with children 5–17, the traditional measure of 'school-age.' The figure is certainly well below 47.8 percent (34.4/71.98), but exactly how much below is unknown.
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