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EXIT, VOICE, AND INCENTIVES: AN INSTITUTIONAL ANALYSIS OF URBAN PUBLIC SCHOOL DISTRICTS

by Rachel Reese



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Abstract

Albert Hirschman coined the terms "exit" and "voice" to describe the ways that citizens can effect change in government institutions. In the realm of public education, families can either voice their opinion to local public schools and school boards or choose to exit to alternative school districts or private schools. This paper examines the effects of gradual changes in urban public education over the last century—increases in spending and school district consolidation—on the mechanisms of voice and exit. I argue that the growth of the public system has transformed the knowledge and incentives of individuals, thus altering the ways they utilize both voice and exit; and this has ultimately had significant welfare implications.

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1. Introduction

A family's choice of school for their children is oftentimes regarded as one of the most important decisions they can make. Educational quality and equity are similarly regarded as two of the most important policy areas for state, local, and, increasingly, the federal government. However, the relationship between the government provision of education and families' educational decisions is rarely discussed. This paper seeks to analyze the implications for family decision-making of changes in the public education sector over time. Importantly, I argue that rather than improving educational outcomes in the urban public school landscape, the increasing government role in education has had perverse effects, most notably by increasing racial and socioeconomic segregation and by undermining the power of families to effect change.

The economics of education, and economic theory in general, emphasizes the positive results of increases in school choice—namely, increased competition and educational quality. The existing literature tends to fall into two broad categories. The first highlights policies that have the potential to improve school choice. Milton Friedman (1962) is famous for popularizing the idea of school vouchers, and school choice advocates have been increasingly successful in translating this idea into practice (Enlow and Ealy 2006). In 1990, Wisconsin enacted the Milwaukee voucher program; this was followed by Cleveland in 1996 and Florida in 1999 (Hess 2010). The majority of this literature either discusses school choice theory abstractly, as Friedman did, or analyzes the effects of changes in policy. For example, Greg Forster (2013) finds that 11 out of 12 gold standard (random assignment) studies of school choice programs had statistically significant positive effects. Thomas Nechyba (2000) demonstrates that the introduction of competitive pressures can improve equity.

The second body of literature consists of numerous historical accounts of the development of the public education system in the United States since its inception, including the gradual expansion of the public sector, increases in expenditures, and growth in the size of school districts. Unfortunately, few authors discuss the impact of these gradually evolving institutions on the knowledge and incentives necessary for positive educational outcomes. Notable exceptions are John Chubb and Terry Moe (1990, 141), who suggest that our current systems of control "encourage the bureaucratization and centralization of school control and discourage the emergence of coherent, strongly led, academically ambitious, professionally grounded, teamlike organizations." In other words, the institutions themselves are the root of the problems of public education, and policy reforms that do not address the fundamental institutions are unlikely to be successful. It seems authors within this literature either analyze the effects of a proposed or enacted policy change given the current system, or plainly depict historical trends; missing from this literature is discussion of how these ever-changing institutions affect the "rules of the game" in which individuals act, which fundamentally alter the choices that these individuals make.

The purpose of this paper is to fill this gap in the literature by integrating existing empirical work on the urban public education system into a dynamic institutional framework in order to shed light on urban trends of the last century. The thesis put forward is that certain gradual shifts in policy—namely, increases in expenditure and consolidation of school districts, encouraged by special interest groups—have altered the choices that individuals face. The resulting changes in their decision-making have had system-wide welfare implications for all individuals, and dramatically changed the educational landscape. This paper contributes to the literature on and advocacy for school choice by highlighting the often-ignored mechanisms

through which choice is slowly undermined in the traditional public system. Focusing solely on policies that explicitly introduce degrees of school choice, such as vouchers, leaves an important component of the school choice debate unexplored. It is important to recognize that the public system is not static and that the gradually evolving system has affected the "rules of the game" in which individuals act, thereby fundamentally changing school choice.

Albert Hirschman, in his book *Exit, Voice, and Loyalty* (1970), used the ideas of "voice" and "exit" to describe the ways in which individuals can seek to effect change when they are dissatisfied with a product. Hirschman viewed voice and exit as substitutes for one another—that is, individuals choose either to exit a system and pursue an alternative or to voice their opinions and hope to provoke internal change.

Friedman said of school vouchers, "parents could express their views directly, by withdrawing their children from one school and sending them to another. . . . In general, they can now take this step only by changing their place of residence. For the rest, they can express their views only through cumbrous political channels" (1962, 91).

Hirschman disagreed with Friedman's faith in the effectiveness of exit, and favored the use of voice to change the system: "Friedman considers withdrawal or exit as the 'direct' way of expressing one's unfavorable views of an organization. A person less well trained in economics might naively suggest that the direct way of expressing one's views is to express them!" (Hirschman 1970, 17). Through voice, parents can raise their concerns in an attempt to spur direct change. More recently, Chubb and Moe (1990) distinguish between the key mechanisms of alternative systems: voice is the only available method in the traditional public school system, while exit is more widely available under a voucher scheme.

All of these authors examine the differences between two systems: pure public systems versus attempts to introduce features of private systems (e.g., the use of vouchers). Like Hirschman in *Exit, Voice, and Loyalty*, most authors view the use of these mechanisms as a tradeoff. If exit increases, voice declines, or vice versa. This view overlooks what Hirschman himself later admitted in a 1978 article—"Exit, Voice, and the State"—that it is possible that both mechanisms move together. For instance, an increased ability to exit might improve the power of voice to change a system.

This paper seeks to analyze the gradual institutional changes of the last century through the lenses of voice and exit and the subsequent welfare implications. I maintain that special interests have urged the growth in the public system, which transformed the knowledge and incentives of individuals and thus altered the ways that individuals utilize voice and exit.

The theory proposed here looks beyond the policy initiatives such as vouchers that *explicitly* increase choice and competition (or regulations and legislation that conversely restrict school choice), and instead examines the gradual changes and growth in the traditional public system that have *implicitly* limited individuals' choice by decreasing their ability to use voice and exit. Throughout the analysis, I emphasize how incentives shape individual residential decisions and mobility patterns. Changing government policy has altered the fundamental incentive structure in urban public education and has had unintended, welfare-reducing consequences—for both low-income and high-income families. The changes in the institutional setting have rippled throughout the system and fostered the perverse outcomes that are oftentimes attributed to other causes.

The paper is structured as follows: section 2 broadly illustrates the dynamic theory and elucidates the interconnectedness of underlying variables. In section 3, I describe the traditional

public interest theory of public education and offer the alternative, public choice theory, which more closely describes the current education system. Section 4 outlines the causes and consequences of the consolidation of school districts over the last century. Section 5 similarly depicts the massive increase in educational spending over several decades and the subsequent unintended effects. Section 6 lays out policy implications. Section 7 concludes.

2. Dynamic Theory of Education Institutions

Hirschman (1992, 78) discerns that the mechanism of exit is "often predicated on the availability of choice, competition, and well-functioning markets." Similarly, the use of voice is only a viable option in democratic institutional environments, in which the opinion of individuals theoretically has power to induce change. Thus, it is clear from the theory proposed by Hirschman that these mechanisms are subject to change based on the underlying institutional framework. If the "rules of the game" are altered, so too is the ability to use both voice and exit. However, a more complete examination of these issues requires understanding not only the underlying institutional changes that influence individuals' *ability* to exit, but also the changing incentives that alter individuals' *decisions* to exit—in other words, the factors that determine choice of school (in this case). While it is commonly accepted that certain aspects of the education system are gradually changing—more money is spent today than in 1900, for instance—these changes are seldom linked to their effects on individual choice sets (in particular, individuals' proclivity and ability to use either voice or exit). This paper attempts to fill this gap in the literature.

This paper argues that two major trends in the 20th century—increasing expenditure and school district consolidation—have fundamentally altered the institutions in which individuals

act. These changes have induced a ripple effect of unintended and oftentimes negative consequences for urban education. Charles Tiebout (1956) proposed the idea of competition between districts for residents via public good provision. In his theory, individuals make residential decisions based on the quality and type of public goods in a district. While some are skeptical that Tiebout competition is a powerful force for most public good provision (Caplan 1999), there is ample evidence that individuals value education tremendously—enough to choose residence in large part based on the perceived quality of the school district (Oates 1969; Black 1999). Tiebout competition is then effectively a means of using exit to change governance: the ability of individuals to leave one district for another encourages improvement in the education system.

Unfortunately, the threat of exit is not available to all; Hirschman (1978, 95) observes that "because of differences in income and wealth, the ability to vote with one's feet is unequally distributed in modern societies." A number of authors have shown that individuals with enough means have a larger degree of choice in the current system via their residential decisions (Fuller and Elmore 1996; Wolf 2005). Moreover, these individual decisions drive real estate prices in neighboring districts (Hayes and Taylor 1996; Clark and Herrin 2000; Hwang 2005). And Hirschman (1978) notes that "inequality in access to exit has had some appalling consequences, such as the 'ghettoization' and partial ruin of our big cities."

Of course, individuals, in addition to choosing their school based on residential location, also have the option to exit the system altogether and opt for private alternatives. Like the ability to choose good schools based on residence, paying into private schools is available only to those with enough means in our current system. Indeed, this is a major justification for public

schooling in the first place. Our understanding of urban education would be incomplete without an examination of how policy affects individual decision-making regarding this form of exit.

Finally, individuals who are either unable or unwilling to exit can voice their opinions and thereby seek to effect change. However, the decision to use voice is predicated on the relative power that a parent's voice has in the system. In other words, the more powerful that parental voice is, the more willing parents will be to use it. A thorough examination of urban public education needs to consider how policy affects the relative strength of voice and therefore the decision of parents to utilize this mechanism.

What shifts in urban public education affect the ability and decisions of individuals to use voice and exit? I maintain that increases in school spending and consolidation have prompted changes in individual incentives and behavior that have contributed to many of the perceived misfortunes of the urban education landscape.

Over the course of the 20th century, small, local school districts were massively consolidated in the name of efficiency, with a number of unintended welfare-reducing effects, which I detail in section 4. First, consolidation lowers the ability of individuals to "vote with their feet" because there are, by definition, fewer options; it therefore reduces competition among districts. Thus, if people become less satisfied with their school system, this avenue of exit is impeded, prompting demand for exit through private schools. Second, consolidation increases the population in any one district, reducing the effectiveness of the voice of any one individual. The incentive to voice opinion is thereby reduced.

Additionally, there has been a steady increase in spending on public schools. This increase in spending is funded through taxes on individuals, the large majority of which comes from local property taxes. Because schools are funded by taxation, an increase in public

provision reduces the after-tax income of families. It therefore becomes more difficult for individuals on the margin to exit the public system and choose private alternatives (West 1967). Furthermore, as spending is increased, private education is crowded out. Moreover, as this avenue of exit becomes cut off, more individuals become likely to exit through residential decisions.

Both spending and consolidation have increased in the last century, at the same time that the percentage of students in private school has declined and income segregation between districts has magnified (Bischoff and Rearden 2013; Ewert 2013). I maintain that gradual institutional changes have encouraged self-segregation through Tiebout competition—that is, Tiebout sorting—which is frequently viewed as a negative trend of the last several decades.

The next section examines the persistence of these dynamics despite a multitude of negative welfare effects. Ultimately, the big winners from more spending and consolidation are the special interests that have promoted the policies since the 19th century. Consolidated districts improve the relative voice that special interests possess while reducing the incentive for individual families to exercise their voice; at the same time, spending increases provide benefits, such as higher teacher salaries and lower pupil-teacher ratios.

3. Public Interest vs. Public Choice

Arguments in favor of the public education system typically rest on the presumption that education is a public good. A public good exists when there is some sort of market failure in the private provision of a good; typically this failure arises from asymmetrical information or externalities. In the case of education, proponents argue that it provides benefits to the community that extend beyond the child in school and therefore has positive externalities. For

instance, some argue education is necessary to create an educated citizenry in a democracy; others maintain an educated workforce is crucial in a world of ever-improving technology; still others hold that more education leads to reductions in the crime rate (Poterba 1994). Economic theory says that when positive externalities exist, goods are underprovided on the market; the government may therefore have a role in subsidizing their provision (West 1990).

In addition to externality arguments, champions of the public system also utilize paternalist arguments (Poterba 1994). Because the responsibility of making educational decisions falls on parents, not students, government should ensure parents invest in the "proper" amount of education for their children. And even if parents are perfectly altruistic regarding their children's education, they may not have access to capital markets, which would help them acquire the right amount of education. In this case, government subsidies would ameliorate the burden of financing education for the poor.

The premise that education is a public good leads to the conventional image of public education as "something created by an elite group—motivated either by philanthropy or self-interest—and imposed on the masses" (Franciosi 2004, 101). Prior to the introduction and proliferation of public schools in the 19th century and the introduction of compulsory education laws later, the story goes, education for the masses must have been either deficient or nonexistent. Free public schools in the 19th century, by this account, fostered education for the mostly poor masses, and compulsory education later boosted attendance by children whose parents were hesitant to enroll their children in school. In this public interest theory, education is introduced by well-intentioned bureaucrats and promoted by benevolent teachers and other activists.

However, these depictions stand in stark contrast to reality. E. G. West (1967) notes that adult literacy—both in the United States and in Great Britain—was largely universal by 1900. James Mill, on observing schools for the masses in England, observed "the rapid progress which the love of education is making among the lower orders. . . . [T]here is hardly a village that has not something of a school" (quoted in West 1965, 170). As far back as 1835, Henry Brougham noted the prevalence of privately funded schools: "we have such a number of schools and such means of education *furnished by the parents themselves from their own earnings*" (quoted in West 1965, 173, emphasis added). Long before the introduction of "free" schools for everyone, parents, even poor ones, were purchasing schooling for their children.

The argument that poor parents might be either unable to provide education or are just downright uncaring seems more or less unjustified given this history. James Tooley (2009) provides modern-day examples of the same phenomenon in *The Beautiful Tree*, where he documents private, for-profit provision of education for the world's poor in India, Nigeria, Ghana, and other developing countries:

In poor areas of developing countries, however, private education forms the majority of provision. In these areas, parents have genuine choices of a number of competing private schools within easy reach and are sensitive to the price mechanism. . . . [I]n these genuine markets, educational entrepreneurs respond to parental needs and requirements. (Tooley 2009, 257).

Given that near-universal private education existed prior to the introduction of "free" schools by the government, what then explains the formation of these schools? James Tobin and W. Allen Wallis (1976) suggest that government provision of goods begins not when there is a gap in provision and people demand aid, but when enough people are already purchasing it privately that the introduction of government provision appears to alleviate private purchases.

David Boaz summarizes the argument: "the political opportunity to make gains by offering a

new government service seems to come when enough people are paying for the service that many voters would prefer to have the expense taken off their hands" (Boaz 2015, 334). Wallis concludes, "The government began to provide 'free' schooling only after schooling had become nearly universal" (Wallis 1976, 249).

Similarly, compulsory attendance laws are credited with the rise in enrollment toward the end of the 19th century; however, Robert Franciosi (2004, 112) suggests that this spike in enrollment was "ignited by technological change that both eliminated the unskilled jobs held by adolescent workers and increased the skill required for other positions." The industrial revolution altered the opportunity costs and perceived benefits of attending school: as a result of technological innovation, the returns to schooling were greater, and the job prospects for low-skilled children who did not attend school were reduced. Compulsory attendance laws were not necessary to motivate children to enroll in school once the relative benefits were apparent.

History demonstrates the public system was not enacted purely to counter large market failures. A more likely explanation is that special interest groups utilized the arguments of public education activists and promoted policies that aligned with their self-interests. Bruce Yandle (1983, 14) coined the phrase "bootleggers and Baptists" to describe these unlikely alliances. He suggests, "the most successful ventures of this sort occur where there is an overarching public concern to be addressed . . . whose 'solution' allows resources to be distributed from the public purse to particular groups or from one group to another." Public education fits this pattern well because education is deemed almost universally to be so crucial to national progress and for escaping poverty that its advocates easily adopt the public interest rhetoric.

Gordon Tullock (1967) argues that special interests organize and devote substantial resources to promote policies that benefit their group in a zero- or negative-sum game. In this

case, the special interests are able to capitalize on this dynamic and exert their influence over public policy in the name of the good of children; however, Tullock (1967) illustrates how their lobbying efforts divert valuable resources from productive activities to benefit themselves. As Tobin and Wallis (1968, 46) note, "not until 1867 was schooling made free, and not until 1874 was it made compulsory. Both of these steps were taken at the instigation of teachers, not parents." Because "competition was openly disliked by the administrators" on the grounds that it was "untidy, embarrassing, and disruptive of their 'system," educators successfully lobbied for a system that minimized competition and parental authority (West 1967, 122).

In the 20th century, advocates for a greater government role in education were able to capitalize on perceived crises to seize greater regulatory control, again to the benefit of special interests in the name of helping students. Charlotte Twight (1996) documents how the paranoia surrounding the launch of *Sputnik* by the Soviets in 1957 garnered enough support to pass the National Defense and Education Act in 1958, the first major federal education bill. Similarly, the Elementary and Secondary Education Act of 1965 was passed because advocates employed "War on Poverty" rhetoric in the heyday of the civil rights movement. Franciosi (2004, 162) notes, "*Sputnik* brought the first break in the legislative logjam at the federal level with the passage of the National Defense Education Act in 1958. Resistance was swept away seven years later, when the Elementary and Secondary Education Act (ESEA) was made law."

This is not to suggest that teachers, school officials, and other bureaucrats are not *also* interested in the well-being and education of children. It does, however, indicate that the policies most likely to be adopted are those beneficial to educators *whether or not* they also benefit children. Consider that in the early 20th century, progressive reform efforts sought to "depoliticize education by planning school board elections in off years and giving unelected

administrative professionals control over school operations. Instead of removing politics from education, these changes fostered a particularly insulated form of politics in urban education, dominated by education bureaucrats and a limited set of interest groups" (Reckhow 2013, 2). Well-intentioned activists who sought improvements in education for the masses therefore inadvertently fostered a system in which special interests—namely teachers' associations—were able to wield enormous influence over policy.

Moreover, activists often claim that "because poor districts lack the funds necessary to educate their students adequately, the existing funding system exacerbates the already significant competitive disadvantage these children face" (Shelly 2011, 4). The call for more equal funding schemes therefore generates support for both increases in expenditure in poorer areas and the consolidation of multiple districts to even the playing field. These examples illustrate the alliance of benevolent actors and special interest groups to promote, and ultimately enact, public policies that intuitively and outwardly seem to aid poor families, but in actuality benefit special interests—by lowering the number of students per class, affording teachers increased pay, and growing the district bureaucracy.

In this manner, the initiation of government activity in the sphere of public education (as in any other sector) produced substantial incentives for special interest groups to pressure government officials to enact seemingly benevolent policies for their benefit. This has generated a vicious cycle of expanding authority and influence:

The method of expansion generally followed the same pattern for each additional legislative action: mobilization of an afflicted group, a congressional champion, hearings and publicity, another addition to federal education law, and the establishment of an executive branch agency to ensure a lobbying base for the interest group regardless of the occupant of the White House. (Franciosi 2004, 162)

From the time when the first public schools were created up to the present day, the power and influence of teachers' associations have steadily swelled. Their ability to influence regulation—a phenomenon known as regulatory capture—is a direct result of the government's role in the provision of educational services. This increasing capacity to influence government policy is evident in the massive increase in regulations over time. Robert C. Johnston and Jessica L. Sandham (1999, 4) quote a lobbyist for the American Association of School Administrators: "in 1960, no state had more than one book of education laws, and now they are volumes long because states are regulating everything." Increasingly in the latter half of the 20th century and into the 21st century, "as the federal government has increased its financial contribution, it has increased its education regulations" (Shelly 2011, 8). Martha Derthick (2001) also shows that state and federal governments are more willing to regulate all aspects of education, including curriculum, labor, and construction. The growing sphere of influence is most exemplified in the creation of the Department of Education in 1979. Reckhow explains that "the formation of a cabinet-level department was seen largely as payback to the National Education Association for working on Carter's election" (2013, 16). Indeed, Michelle Rhee (2008) was right when she noted of Washington, DC, school policy that it was "driven more by politics and adult concerns than by the needs of children." Likewise, Toma (1983) asserts that state education regulations reduce consumer choice, which translates into reduced competition and leads to an increased potential for surplus extraction that resembles monopoly power.

In this way, as Yandle (1983, 12) keenly observes, "government regulation is a sword that cuts in both directions." And despite the popular rhetoric that regulations help to ensure quality education, the reality is that these regulations primarily benefit special interests at the expense of families. Two major trends of the last century—increased expenditure and

consolidation of school districts, examined in more detail in the following sections—are particularly dangerous. Not only have they consistently failed to improve educational outcomes, but these policies have also primarily benefitted special interests while hiding the welfare costs on all families. These gradually changing policies have dynamic institutional effects that alter the incentives that families face and therefore the choices they make, with drastic implications for urban mobility, inequality, segregation, and the welfare of all households.

4. Consolidated Districts

4.1 Public Interest vs. Public Choice

The advent of the public school was, at least rhetorically, meant to counter inequities in education financing between neighboring localities. West (1967) notes that the original advocates did not intend to foster a full-blown public system; they merely wanted to "fill in the gaps." The same intention has led to the proliferation of arguments in favor of school district consolidation. The public interest version holds that consolidation of school districts effectively evens out spending inequities between districts by merging together disparate groups of taxpayers into one unified area. This makes it possible to levy higher taxes on wealthier households to fund the education of the poorer households. The public interest version of events is exemplified in Juliet Gainsborough's discussion of the desire of suburban residents to retain local control: "to suburban dwellers, the appeal of returning federal power to states and localities is that it allows communities with relatively healthy tax bases and relatively few needy residents to keep taxes low and services high" (2001, 120). In this way, she believes, smaller districts allow wealthy households to self-segregate and leave poorer households and districts with less funding for public goods, especially education. This narrative blames the plight of decaying

urban neighborhoods on the exodus of the wealthy and the (predominantly) white over the past several decades.

Indeed, suburbanization has increased, as has urban inequality, but the thesis presented here holds that these outcomes are at least partially the perverse result of gradual changes in public education that have affected the incentives and choices of individuals. Households with enough means have always had the financial ability to segregate themselves; however, only in recent decades has this phenomenon become more pronounced. I argue that increasing consolidation has played an important role by altering the "rules of the game" under which individuals act, contributing to welfare losses and other negative outcomes.

In addition to equity concerns, arguments in favor of greater consolidation typically utilize economic arguments for efficiency. Because schools have such enormous fixed costs of production, as their size and the overall size of the district increases, theory predicts, the average cost of educating each student declines. Even critics of the public education system believe larger districts are more efficient (*The Cartel*). These efficiency arguments were part of a broader trend toward consolidation of local governments throughout the United States. Elinor Ostrom (1972) chronicled this trend and noted differences between the assumptions of the common metropolitan-reform literature and those of the political economy narrative. Reform advocates claimed "reducing the number of public agencies within a metropolitan area will be associated with more output per capita, more efficient provision of services, more equal distribution of costs to beneficiaries, more responsibility of local officials, and more participation by citizens" (Aligica and Boettke 2009, 16). Those studying political economy, however, suggested that "increasing the size of urban governmental units will be associated with decreased responsibility of local officials and decreased participation by citizens" (ibid., 17).

The arguments in favor of consolidation have helped to bring about an enormous wave of mergers of districts and schools throughout the 20th century. Franciosi writes that "in 1937, there were 119,000 school districts and nearly 250,000 schools in the U.S. By 2000, there were approximately 15,000 districts and 90,000 schools" (Franciosi 2004, 182). Over time, the education system has been completely bureaucratized, and the number of students per school as well as students per district has risen.

Contrary to popular narratives, the effect of larger school districts on both efficiency and equity is questionable. Gordon Tullock (1965) famously pointed to the waste and inefficiency inherent in bureaucracy. Indeed, it is the nature of large, public systems to be inefficient. Julian Betts (1996) suggests that the size of the school or district could negatively affect the productivity of administration. Contrary to advocates who insist on large economies of scale, some authors have noted the apparent diseconomies of scale in public education caused by increasing administrative burdens: "Although financial economies of scale argue for large districts, aspects of bigness adversely affect both fiscal efficiency and student achievement.

Large organizations become difficult for managers at the top to supervise" (Franciosi 2004, 142). Craig Howley and his coauthors (2011) assert that larger districts also need more midlevel administrators, which offsets proposed cost savings.

Another unintended consequence of consolidation is the principal—agent problem, in which individuals face incentives to pursue activities that conflict with the overall mission of the enterprise. The overall goal of education is to teach children; however, teachers and other administrators may face incentives to pursue other objectives. This is magnified when teachers are not directly accountable to parents but instead become part of a larger bureaucracy as the size of the district grows. (Additionally, public choice theory suggests this is unlikely to be resolved

by regulations or other attempts to realign teacher incentives. Indeed, business-like incentives cannot be adapted to government because of the monopoly nature of government itself.) When districts and schools were locally controlled, "parents hired their children's teachers directly. The insertion of a layer of administration between teacher professionals and their clients was due in part to the needs of organizing schools on a large scale. However, the result is teachers who are shielded from direct accountability to their clients" (Franciosi 2004, 84). Thus, as consolidation has increased the relative share of administrative costs, teachers have become more distanced from and less accountable to the parents they theoretically serve. This inefficiency makes teachers' jobs easier and more secure, and it translates into higher per pupil expenditure.

Caroline Hoxby (2000) finds that regions with more competition (measured as regions with more school districts, i.e., less consolidation) have lower per pupil costs. Moreover, Eric Hanushek and Steven Rivkin (2003) find that competition raises teacher quality and improves overall education. They also find that competition improves school quality via its effect on teacher personnel practices. Indeed, relative to the estimated effect of class size on teachers, these results indicate that the effect of competition on performance is four to five times as large.

In addition to inefficiency, larger districts, evidence suggests, are also not equitable. The philosophy behind equalization schemes predicts that poor parents and districts would spend more on education if they could; on the other hand, the ideas behind Tiebout sorting assume that a variety of households have different preferences on public expenditure. Jonathan Guryan (2001) finds evidence that poorer districts vote for reductions in spending in light of equalization schemes, lending support for the Tiebout hypothesis. This implies that consolidation achieves more equity—in spending, at least—at the expense of forcing households with diverse preferences into a single district with one bundle of public goods.

4.2 Voice and Exit

Franciosi (2004, 134) suggests that "decentralized control promotes the two fundamental methods . . . of influencing an organization: voice and exit. Small, decentralized organizations make control through voice easier." Thus, as consolidation has progressed, it has effectively diminished both voice and exit for families. This change in options available to families fundamentally alters the "rules of the game" under which they operate, reducing the welfare of all families. Rather than alleviating the problems that consolidation advocates claim it will, consolidation actually has the effect of adding to the ills of urban public education institutions.

Merging districts into larger bureaucracies has a dual effect on voice. First, it diminishes each parent's relative influence and increases the relative influence of any association of teachers. Second, it reduces the incentive of individuals to voice their opinion, which further magnifies the relative effectiveness of special interests' voice. For example, Hoxby (1996c) finds that the impact of unionization is largest in regions with fewer school districts; in larger areas, the relative ability of parents to organize against teachers' organizations is diminished, effectively increasing the power of these interests. Frederick Wirt and Michael Kirst (1997) assert that individuals become less engaged with local school affairs as they lose the ability to decide important issues, including school finances and policies. As Bryan Shelly (2011, 126) notes, "faced with a situation in which making a meaningful difference seems impossible, the public has responded accordingly." This demonstrates that special interests are strengthened directly by the increasing size of a district but also indirectly by the subsequent decrease in individual participation.

With localized school districts, and teachers hired directly by parents, in contrast, the effectiveness of voice is tremendous. This is partially fueled by the threat of exit: with many

local options for each family, and the easy ability to change schools, teachers and other officials have more incentive to accede to parental opinions. As districts grow in size, however, both the threat of exit and the power of voice are severely diminished. Because the efficacy of voice is hampered, Hirschman would predict an upsurge in exit. John Orbell and Toru Uno (1972) study the relative propensity of differing races to use either voice or exit in urban settings. Hirschman (1980) quotes their findings: "Blacks are more likely to voice in response to problems than are whites of similar status who live in similar urban areas'. The reason for this greater propensity to voice on the part of blacks is of course their lower mobility because of de facto segregation" (448–49).

That socioeconomic differences closely align with racial disparity suggests that whites generally have greater access to exit. Blacks, on the other hand, resort to voice because they are unable to exit dissatisfactory schools and districts. The link between public school and residence therefore engenders a system of de facto segregation along socioeconomic lines when voice becomes ineffective as a means of change. The fact that those with greater financial means resort to exit, rather than voice, speaks to how the power of parents to effect change through voice has been seriously undermined as a result of consolidation. Given that parents once had tremendous power to voice and are now resorting to exit when they are able, it appears that consolidation has only prompted the segregation it supposedly sought to counter. This suggests that much of the racial segregation that exists in cities might be due to the inclination of wealthier parents to exit because consolidation has eroded the power of parental voice in urban school systems. (This is only one of many factors that might affect residential decisions, but it is an important one.)

A decrease in voice encourages individuals with enough means to exit the system.

However, with fewer options to choose from, consolidation still negatively impacts Tiebout

competition. Of course, individuals can exit not just via residential choice but also through enrolling in private schools. Jorge Martinez-Vazquez and Bruce Seaman (1985) find that private school attendance is lower in areas with more public options. This suggests that competitive districts, and Tiebout sorting, allow higher-income parents to opt for districts that meet their educational needs. In areas with fewer districts, and thus less ability to exercise voice, exiting one district becomes more difficult, as does finding a district that adheres to the parents' personal preference. This incentivizes some parents to opt for private schools. The fact that such families, who were previously satisfied with a smaller district that exhibited greater parental control, choose private schools and the accompanying additional expenditures, implies diminished welfare. That these parents previously chose public schools when private schools were available also indicates that choosing private schools as a result of consolidation is a next-best option. Of course, this option is predicated on parental ability to choose private alternatives, which is itself affected by public spending, as shown below in section 5.

4.3 Educational Outcomes

These reductions in both voice and exit have powerful, system-wide effects: by altering the "rules of the game," consolidation incentivizes households to modify their choices. Importantly, even households that do not change their behavior are impacted by the choices of others. As noted above, the "bigness" of a district has adverse effects on student achievement. Betts (1996) contends that with less competition, the quality of schooling is likely to be lower. Moreover, Gary Anderson, William Shughart, and Robert Tollison (1991) show that test scores are lower in states with larger bureaucracies. Chubb and Moe (1990) find that excessive central office control over curriculum, instruction, and hiring/firing decisions had an adverse effect similar to an ill-

disciplined student body. A number of studies have found positive relationships between the number of districts in metropolitan areas and student achievement (Blair and Staley 1995; Borland and Howsen 1992; Zanzig 1997). Hoxby (2000) examines the effect on lifetime earnings and finds a higher degree of concentration among districts is associated with significantly lower earnings. Hanushek and Rivkin (2003) compare average school quality differences in metropolitan areas to the amount of school competition in each area and finds the degree of competition is positively correlated to public school performance. Thus, the impact on student achievement of consolidation appears rather bleak—school quality actually improves as the number of district choices increases.

All of the evidence presented here suggests that any benefits from consolidation are undermined by its significant detriments. It affects not only the academic achievement of poor children "trapped" in underperforming districts but also lowers the utility of wealthier families who were seemingly previously satisfied with their public school options.

Coinciding with the consolidation of school districts over the last century is a colossal growth in overall educational expenditures and spending per pupil—also in the name of improving academic outcomes. This combination has been mutually reinforcing, and has unfortunately had large unintended consequences as individuals alter their decision-making to adapt to the new institutional structures over time.

5. Increased Spending

5.1 Public Interest vs. Public Choice

The altruistic rationale for increasing government spending on public schools is straightforward: more spending means more resources devoted to student achievement, which translates into

greater overall educational attainment. It is also easy to discern why this policy is politically popular: it is relatively easy to implement, and increased spending is viewed as a remedy for bad academic outcomes. This type of argument has produced massive growth in the public sector throughout the 20th century. Education spending, adjusted for inflation, has risen 1,700 percent since WWII, or about 5.8 percent per year (Franciosi 2004). "From the school years 1971–72 to 1976–77, the total professional staff in US public schools went up 8 percent. The money cost of education increased by 68 percent (or 21 percent allowing for inflation)" (West 1965, 257). This growth vastly dwarfs growth in the majority of other government programs over the same time.

Contrary to the public interest theory—that this spending benefits students—Franciosi (2004) shows the two main causes of the increase in spending over this period were increases in teacher salaries (44 percent) and a fall in the student—teacher ratio, both of which primarily benefit teachers. Moreover, "direct expenditure on salaries for instructional staff grew steadily" as "other expenditure in schools grew even more rapidly, so that the direct spending on instructional staff fell from two-thirds of the budget in 1940 to two-fifths in 1990" (Hanushek 1996, 45). The rapid increase in noninstructional staff is mainly the result of the larger bureaucracies detailed in the previous section. As expenditures soared, district bureaucracies swelled, adding layers of administrative costs and personnel that contribute nothing toward student achievement.

The addition of these administrative layers fueled the lobbying capabilities of educators, which, in turn, promoted yet more increases in spending. This collective bargaining had a number of beneficial effects for teachers. For example, Randall Eberts (1984) finds collective bargaining is associated with lower pupil—teacher ratios, which create less stressful working environments and increase demand for more teachers.

5.2 Voice and Exit

Increases in spending, like the consolidation of districts, also fundamentally alter the incentives and decisions of individuals, and thus have repercussions for the system as a whole. Increasing spending has a dramatic effect on the ability of individuals to pursue exit and the role that exit plays as a mechanism in shaping educational outcomes. An increase in spending to fund the public school system is not a "free lunch"; instead, it is funded primarily through taxation.

Therefore, each increase in revenue reduces individuals' after-tax income. This reduces the marginal family's ability to exit the public school system by paying private school tuition.

Indeed, this dynamic was plainly known to activists in the 19th century: it was the goal of Horace Mann, the 19th-century educational reformer, to undermine the private system: "Another of Mann's objectives was to drive out private schools. . . . Mann used arguments against private schools that are still heard to this day" (Franciosi 2004, 146). By increasing taxes, "the effective ability (apart from willingness) of those who normally made subscriptions to private schools was also restricted" (West 1965, 191).

Although, for example, Santosh Mehrota and Enrique Delamonica (2005) contend that there is no crowding-out effect of the increase in public spending on private schooling, evidence regarding demand for school vouchers seems to contradict this claim. For instance, Nora Kern and Wentana Gebru (2014) report that the number of students on charter school waiting lists across the country now exceeds one million. Hoxby (1996a) estimates that a \$1,000 voucher would cause the fraction of children attending private schools nationwide to increase from 10 to 14 percent. Dennis Epple and Richard Romano (1998) estimate that 100 percent private school attendance would occur with more generous voucher schemes. If demand for private schools increases with greater ability to pay, then there must exist a crowding-out effect, because taxes

reduce the ability to pay. Moreover, the idea that private schools are not crowded out with the growth of the public system defies both reality and history.

Prior to the introduction of "free" public schools, as noted above, private schools were ubiquitous and expanding. West (1965) reports that between 1832 and 1847, the number of students in private schools increased from 43,000 to 75,000; the number of students attending fee-charging Common Schools also rose from 512,000 to 776,000. However, the elimination of the rate bill system—by which parents paid fees based on attendance—undermined private education by altering the opportunity costs associated with private education. Whereas rate bills encouraged families to be cost conscious, West (1965, 320) explains, "In a free school system, it is usually out of the question for the majority of parents to consider transferring their children to private schools and so 'paying twice.'" The introduction of a state tax in New York in 1851 for Common Schools immediately reduced the significance of the rate bills; the previous growth in private schools came to a halt and may even have experienced an absolute decline (West 1965).

Some advocates of the public system maintain that even if private school crowd-out exists, it is not a bad thing, because more parents are forced to remain in the public school option and use voice rather than exit as a means of improving the system. However, aside from restricting parental choice, there are numerous additional welfare effects of crowding out private schools. Private schools operate much more efficiently than the public system—as noted above, the increased bureaucracy is wasteful and inefficient. Further, James Coleman, Sally Kilgore, and Thomas Hoffer (1982) conclude that private schools are more effective in educating students than public schools are. They have higher graduation rates, college attendance rates, and other, related indicators, even in cases where their test scores are not vastly higher (Altonji et al. 2002; Figlio and Stone 1999; Goldhaber 1996; Neal 1998). Moreover, these gains are most significant

for minorities in urban areas. Danny Cohen-Zada and Moshe Justman (2003) estimate the efficiency advantage of private schools at 30 percent. Jon Sonstelie (1982) similarly finds that the private sector supplies education of a similar quality for 37 percent of the price.

Public school expenditures eclipse private school expenditures. Andrew Coulson (1999) reports that nationwide, the average private school expenditures per pupil in 1993/94 were estimated at \$3,116, considerably less than the \$6,653 spent, on average, on public school pupils for the same period. Moreover, Franciosi points out that "since private schools have an apparent advantage in productivity, and because parents do not have to pay additional tuition to send children to public schools, while private schools charge tuition, the present system has the perverse incentive of inducing parents to choose the more costly alternative. This can lead to a substantial waste of society's resources" (2004, 94).

Many opponents of private schools argue that these outcomes are biased by "prep" schools that cater only to elite, high-income families. However, even urban religious schools that charge lower tuitions perform better. Some authors suggest that Catholic schools outperform public schools, and this is most dramatic in urban settings (Grogger and Neal 2000; Neal 1998). Catholic schools may also induce better performance by the surrounding public schools: Hoxby (1994) finds that public schools near larger concentrations of Catholic schools perform better than those that face less competition.

In effect, crowding out private education and forcing more students into the public sector significantly reduces the efficiency of the system. Moreover, as discussed above, closing one avenue of exit spurs demand for other means of exiting. As private school options are closed off, households might seek to exit the public system through residential choice. Nechyba (2003) finds a significant degree of residential segregation between districts; most importantly, however, he

finds significantly *more* segregation in areas with fewer private schools. Thomas Downes and Shane Greenstein (1996) also show that private schools tend to form in response to finance changes and particularly crop up in areas with low-performing public schools in poorer districts. These pieces of evidence support the theory that households with sufficient means exit the system through either residential choice or private schools. Thomas Downes and David Schoeman (1998) also find a link between private school enrollment and the *Serrano v. Priest* California Supreme Court decision (which spurred a massive equalization scheme): they estimate that 44 percent of the subsequent increase in private school enrollment was a result of the equalization efforts. Because equalization alters the mechanism of exit by residential choice, it seems more families were choosing to exit through private schools. Hoxby (1998) similarly finds that the more anti-spending a state's plan is, the higher the private school enrollment.

The choices of individuals to pursue exit through residential choice have aggregate effects on housing prices as well, which further restrict poorer households from using that method of exit. Nechyba (2003, 164) notes, "To the extent that a voucher causes someone who previously chose public schools to switch to private schools, the same price incentive to settle in the poor rather than the rich district applies. At the same time, however, interdistrict housing price differences narrow as more households choose private schools in poor districts." This illustrates the case for the introduction of vouchers, but the reverse holds when private schools, instead of being encouraged, are crowded out.

Owens (2014, 24) finds that since 1970, high-income parents have become less likely to live in neighborhoods with lower-income families. She finds that "the proportion of students in the metro area enrolled in private school negatively and significantly predicts between-district economic segregation only for public school families." She argues that the availability of private

schools might remove families who are more likely to segregate themselves; however, she makes no link to how rising expenditures have fostered a decline in private options. Sean Corcoran and William Evans (2010, abstract) do find a link between school spending and inequality. However, while they hold that "12 to 22 percent of the increase in local school spending is attributable to rising inequality," I maintain that more public expenditure actually fosters the inequality that we see between districts by limiting the ability of parents to pursue private alternatives (Corcoran and Evans 2010, abstract).

Nechyba (2003) makes two arguments regarding private schools and inequality: (1) a substantial portion of the current level of income-based residential segregation can be attributed to the limits on competition inherent in the current public school system, and the fostering of additional private options has the potential to reduce this segregation; and (2) the impact of competition on school behavior predicts the degree to which increased competition from private schools may affect school quality.

Jay Greene (2000) finds that racial mixing is much more likely in private schools. Thus, many of the ills of the urban landscape attributed to the "white flight" occurring since the 1970s must be examined in the framework of individual incentives and choices.

Overall, shifts in spending have incentivized individuals who might otherwise remain in urban areas to exit the system by choosing alternative residential locations. The cumulative effect has left the public school revenues for the families who did not or were not able to change their decisions much more precarious. A Brookings Institute study concludes that this could become a vicious cycle because an urban district

may struggle to maintain mixed-income school environments that produce better outcomes for low-income kids. It may have too narrow a tax base from which to sustainably raise the revenue necessary for essential city services. And it may fail to produce housing and neighborhoods accessible to middle-class workers and families, so

that those who move up or down the income ladder ultimately have no choice but to move out. (Berube 2014)

So, as spending has risen and forced some families out of cities, the tax base has been transformed, which has had additional welfare implications for families who are stuck in the current system. Finally, even for parents who had previously exited the public system through private schools, and who continue to do so, increases in taxes still diminish utility, as private schools effectively become more expensive.

5.3 Educational Outcomes

Unfortunately, increased expenditures have not had the promised results. Hanushek (1997) examines 377 studies on the relationship between inputs and educational outputs and reaches a bleak conclusion. Of 163 estimates of the relationship between per pupil spending and achievement, 27 percent found a positive effect, 7 percent a negative one; and the remaining 66 percent showed no effect. Over the period 1971/72 to 1976/77, as spending increased by 21 percent, adjusted for inflation, "the number of students fell by 4 percent as did the number of schools. The educational testing scores of all kinds showed declining student performance" (West 1965, 258).

Given that increases in spending have coincided with worsening results, Hoxby (2002) estimates that the productivity of schools has declined somewhere between 35 and 42 percent over the last 30 years. Some have argued that the declining productivity might be due to diminishing returns in education (O'Neill 1990). However, this does not fit with international comparisons that show the United States lagging behind less developed countries that spend far less on their public systems. For example, the United States scored behind 27 countries—including Estonia, Vietnam, and the Czech Republic—on mathematics literacy among 15-year-

olds on the 2012 Program for International Student Assessment test. Along similar lines, Stephen Childs and Charol Shakeshaft (1986) maintain that "past a certain point, it may well be that the amount of money a school district spends is not so vital as how the money is spent," which appears to correspond with evidence on teacher success (Hanushek 1986).

To consider one extreme case, in 1977 students in the Kansas City school district filed a suit in federal court, alleging that the state caused racial segregation through its funding scheme. Missouri proceeded to transfer a large share of its budget to the single Kansas City school district—at one point the district garnered 44 percent of the state education budget. Despite the massive increase in spending, there was no noticeable improvement in academic achievement (Franciosi 2004, 168–69). Similarly, Jon Sonstelie, Eric Brunner, and Kenneth Ardon (2000) find evidence that the *Serrano* decision—the massive statewide equalization scheme passed in California in 1971—actually negatively affected student achievement.

As Gary Burtless (1996, 5) notes, "if better performance automatically followed higher spending, the deterioration in average achievement would not have occurred in the first place. Calculations by John Chubb and Eric Hanushek show that average US spending per student, controlling for the effect of inflation, rose more than 60 percent between 1966 and 1980, when most of the test score decline occurred." Some argue that without this increase, test scores would have declined even further because of "the decline in favorable home environment or social capital" (Hedges and Greenwald 1996, 75). However, given that most of the academic progress occurred for lower-income families more likely to live in unfavorable home environments, this theory is difficult to defend. Burtless (1996, 41) concludes, "Statistical evidence and recent historical experience suggest to me that school performance is unlikely to be improved solely by investing extra money in the nation's schools. Increased spending on school inputs without any

change in the current arrangements for managing schools offers little promise of improving either student performance or adult earnings."

Much as in the case of consolidation, increases in expenditure (and government budgets in particular) tend to increase the amount of bureaucracy and waste in the system. Anderson, Shughart, and Tollison (1991) found that bureaucracy had a negative effect on test scores and graduation rates; a 1 percent increase in the number of nonteaching staff per student lowered achievement test scores 11.5 to 13.8 percent. Given that unionized districts more effectively control district policy and therefore have greater levels of expenditure, it is not surprising that they also exhibit more waste. Indeed, for a given level of spending, unionized public schools perform worse than nonunionized public schools. One study finds that unionized schools produce the same growth in math achievement but at a 15 percent higher cost (Eberts and Stone 1984).

As mentioned above, most indicators suggest this spending primarily benefits teachers and other administrators. In light of arguments that benefits to teachers might incentivize them to perform at a higher level, other authors have tested the relationship between specific benefits accrued to teachers and student achievement: "Since 1960 spending per pupil has tripled, the student-teacher ratio has fallen more than a third, and teachers' salaries have risen by half. Increased spending on school inputs has not led to notable gains in school performance" (Burtless 1996, 5). Hanushek (1989) concludes that there is no evidence that teacher–pupil ratios, teacher education, teacher experience, teacher pay, or spending per pupil has a consistent or significant effect on improving school achievement.

6. Policy Implications

With the removal of the fee system and introduction of the modern-day concept of public education, economists of the 19th century "feared the growth of central authority and parental apathy or helplessness. The voice of the organized professional teacher and educationist would predominate, and that of the parent would be critically weakened" (West 1965, 219). That fear, it is now clear, was more than justified, because the growth of central authority and special interest politics gave rise to a behemoth public education system that has crippled parental access to voice and exit.

The solution to this conundrum is a government role that encourages, rather than stifles, parental ability to use both mechanisms. Fortunately, Williamson Evers (2015, 9) suggests this trend has already begun, as federal control over education policy has reached past its limits: "By trying to block exit and deny voice, the designers of Common Core and the policymakers who put it in place have caused blowback: A large parent-, teacher-, and community-based movement has arisen, as organized parents are—in what Hirschman called an 'intimate fusion of exit and voice'—pressing for repeal of Common Core." Evers (2015, 9) further argues "the desire for voice—the desire for political action—can become particularly intense when people are faced with the prospect of 'nowhere to exit to." In this framework, it seems that the school choice movement has gained traction because parents are finally fed up with their lack of options and are fighting back against special interests.

This type of political activism, however, is not restricted to cases where both exit and voice have been so completely eroded as to warrant protest. In cases where parents get a taste of voice or exit, their inclination to more actively use both is ignited. Thomas Stewart and Patrick Wolf (2014), in *The School Choice Journey: School Vouchers and the Empowerment of Urban*

Families, chronicle the story of the first federally funded school choice program, the DC Opportunity Scholarship Program. In a series of interviews and focus-group sessions with families awarded scholarships, the authors find that empowered parents become more politically active: "The OSP [Opportunity Scholarship Program] empowered parents to become more politically active citizens. This is an important example of parents moving from a client to an active disposition. . . . Give parents more authority over their most important responsibility—the education of their child—and they become more active and empowered citizens" (Stewart and Wolf 2015, 5). Importantly, when the program encountered significant political opposition, parents and students "testified before Congress and provided impassioned pleas to the media to save the program" (ibid., 6).

Both of these examples demonstrate the growing demand for policies that improve access to exit—particularly for low-income families—and the conditions that motivate the use of parental voice. Current political activism on behalf of parents is therefore beginning to generate a virtuous cycle of parental empowerment, and families are slowly shifting from disenfranchised clients to impassioned and active consumers (Stewart and Wolf 2015). These examples highlight the benefits of policies designed to improve exit and voice, while cautioning against paternalistic policies that restrict choice. The school choice movement is gaining ground: 13 new or expanded programs in 10 states passed in 2015 (Bedrick 2015).

However, the purpose of this paper is to highlight more subtle ways that exit and voice are eroded, and argue for increased focus on policies that undo much of the damage laid out here. Public policies that seek to empower parents directly are admirable, but without addressing the fundamental issues caused by both consolidation and extravagant spending, they will fail to obtain the maximum benefits. Thus, I distinguish between school choice policies that merely

introduce exit (vouchers and charter schools) and policies that have the potential to deconstruct the spending and consolidation issues raised here (scholarship tax credits and education savings accounts).

The school choice movement oftentimes focuses on the use of charter schools and school vouchers as ways to present parents with more educational options. While these policies have the intended effect and have already achieved significant benefits for some students (Forster 2013), they also pose a number of problems. First, both charter schools and school vouchers operate on fixed funding formulas that do not promote cost efficiency or innovation. They oftentimes offer one sum of money for all parents, for one purpose, to be used in one school year. Second, Coulson (2010) demonstrates that vouchers may induce greater regulation of private schools, potentially generating much of the inefficiency found in the current system.

School choice policies that both enable parents to become active consumers, as well as put pressure on the budget and bureaucracy issues presented in this paper, include scholarship tax credits and education savings accounts. Scholarship tax credits (STCs) incentivize private (individual or corporate) donations to scholarship-granting organizations by awarding tax credits. The organizations award scholarships—generally to low-income families—to attend an alternative school and purchase educational resources, including textbooks and tutoring. These scholarships give parents much greater flexibility than either charter schools or vouchers, and they place the responsibility of determining scholarship amounts in the hands of private organizations that are much more inclined to be financially conscious. Moreover, unlike with vouchers, Coulson (2010) finds no evidence that STCs induce greater regulatory burdens on private schools.

Education Savings Accounts (ESAs) establish restricted-use accounts for parents into which the state deposits a portion or all of the funds that would have been used on public education. ESAs, like STCs, give parents greater autonomy in choosing the combination of educational services that best suits their children. And because funds typically roll over from year to year, parents need not overspend in any given year; oftentimes they can use funds to save money for college, creating incentives for parents to use resources efficiently. Analyses of both STCs and ESAs have found enormous potential for public savings as well as greater parental satisfaction and increased student achievement. These two school choice policies go further than the so-called "first generation" of school choice proposals, and they have huge implications for the spending and consolidation issues raised here.

Access to flexible spending accounts or scholarships will dramatically undercut the prevalence of segregated school districts by allowing students to use funds at a range of institutions not restricted to their local school. If private options crop up in response to increased demand, residential sorting and the phenomenon of home prices being based on neighborhood public schools will likely diminish. Moreover, these programs induce greater price competition than earlier school choice programs, because parents are likely to be much more fiscally responsible once they are given command over educational expenses. Jason Bedrick (2015b) refers to the difference between the two types of policies as *school* choice versus *educational* choice: whereas educational choice incentivizes families to make the best use of scarce educational resources, school choice merely gives families greater access to exit.

Ultimately, the altruistic mentalities that gave rise to both consolidation and increased expenditure are fundamentally about a desire to provide high-quality education to all students by equalizing resources. While that is a noble end, the means, as demonstrated here, are

inappropriate and limit parental responsibility and choice. Hanushek (1997) concludes that the level of resources is not as important for outcomes as how those resources are utilized. In a similar vein, the well-meaning first generation of school choice advocates viewed equitable access to exit and voice as the means to achieve the best education system; however, the greatest impact will arise from school choice policies that also encourage the most effective use of resources.

Finally, the best and least restrictive use of government resources in the realm of education lies in the role of information. In order for parents to be the best consumers of education that they can be, they need the requisite information to choose the best schools and services for their children. While private actors have already cropped up to meet this growing demand for information, a more effective use of government resources would encourage the formation of this market by making public the vast information on school quality already in existence.

7. Conclusion

Albert Hirschman's groundbreaking analysis of the mechanisms of voice and exit serves as a useful lens through which to examine the growing problems of the public education system. Much of the public debate on education, whether implicitly or explicitly, accepts Hirschman's initial assumption that *either* voice or exit must be used. The conversation now centers on the policy choice between improving educational choice (i.e., parental use of exit) and further entrenching the public system (i.e., encouraging parents to voice opinions). However, this is somewhat of a false dichotomy, as even Hirschman later noted that the two mechanisms can be mutually reinforcing: "for the opening up of the exit perspective may serve to strengthen voice:

parents who have been passive because they were feeling powerless and fearing reprisal may feel empowered for the first time once they are given vouchers that can be used 'against' the schools currently attended by their children, and they will be readier than before to speak out with regard to desirable changes" (Hirschman 1986, 89).

The recognition that exit and voice can move together—and that a strict choice between the two is not necessary—can become a powerful impetus for the school choice movement.

School choice policies that strengthen exit mechanisms also have the power to encourage and improve parental voice, and therefore would help enrich the traditional public school system as well. The theory presented here suggests that advocates of traditional public school systems should actually favor a degree of exit in the system to foster the power of parental voice to effect change in public schools.

Moreover, this paper provides further arguments against cries to improve public school quality by injecting even greater amounts of money or by increasing centralization. The gradual growth in the public education system over the last century has had significant unintended consequences. It has transformed the knowledge and incentives of individuals and thereby altered the ways that individuals utilize voice and exit. And thus, it has had enormous welfare implications that should no longer be overlooked.

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