

POLITICAL ECONOMY

IN THE CAROLINAS

NORTH CAROLINA DISTRICT SCHOOLS ARE THRIVING FISCALLY ALONGSIDE CHARTER-SCHOOL GROWTH

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Despite recent studies that purport to show charter schools cost district schools fiscally, this study demonstrates such studies reflect biased modeling. Drawing data from the comprehensive annual financial reports of certain districts, this study finds that the district schools are increasing their revenues, even when adjusting for inflation. Furthermore, the study finds that the proportion of districts' funding from the state matches their share of student enrollment. Charter schools are not harming their public school counterparts and are in fact being denied their equal share of funding, as the legal record has established.

KEYWORDS:

Charter Schools, District Schools, Public Education

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I. INTRODUCTION

North Carolina charter schools are increasing enrollment as more parents choose that educational alternative for their children (Civitas 2018). The robust nature of charter schools has prompted some researchers to try to account for the effect they are having on the state. This paper adds to that corpus of research. Most of the charter critics try to demonstrate that the mere existence of a charter in a district has caused per-pupil expenditures to decrease (Strauss 2017). The media has picked up the argument

unquestioningly, contributing to an illogical induction that somehow charters and districts are opposed to one another. However, in fact, both are public schools. That so many parents are leaving district schools raises the question “What is wrong with the traditional district school such that so many would make such a drastic change in their children’s education?” The increasing enrollments in charters have, in part, spurred the attack on charters that they take away money from district schools. Such research is specious.¹ This paper finds that district schools are thriving financially. There is no evidence charter schools are causing fiscal harm to the public school system.

The North Carolina Charter School Act was passed in 1996 to present a public school alternative to operate independently of district schools² While have more freedom in curriculum development, they have to raise funds privately for capital projects. The creation of this education alternative was the result of the deliberative political process. The people’s representatives instituted an alternative track of education free of tuition, meaning parents could choose to enroll their children at no additional cost to them. The school systems are therefore not imposed, but widely supported by the voters. The state constitution is clear that plenary authority over education belongs to the General Assembly. The voters may, through the political process, do what they will regarding education as long as it does not violate the state constitution. While charter antagonists proclaim that charters are taking away money from the district schools, they seem not to realize that charters are a part of the public education system

that is public. In other words, both district and charter schools are part of the public education system, even if they represent different educational choices. To prefer one public educational entity over another deserves deliberation. In significant ways, charters are a return to the traditional school model that existed before the district model became a political monopoly. The state of North Carolina consists of one hundred counties. Some researchers have conducted studies to determine the effect charters have had on their district-school counterparts. Though the studies are too numerous to delineate here, we will focus on one. Suffice it to say, the models in these studies are fraught with weakness.

In order to intelligently grasp the difficulty, if not impossibility, of modeling the effects of charters on district finances, we should have an idea of how funding is calculated at the state level. According to Report Number 2016-11, North Carolina does not determine school funding merely by head count. In fact, the state “uses a resource allocation model as the basis for distributing state funds, wherein thirty seven different allotments represent individual components of the education delivery model” (NCGA 2016, 1).³ What this means is that the state distributes state funds to districts based on allotment categories. Each local education agency (LEA) receives funds in certain dollar amounts based on a particular allotment formula. Funding is not completely derived from a specific average daily membership (ADM) of pupils. Furthermore, not every student is identical in that some have greater needs than others. Some districts receive relatively more funds in categories that have little to do with

1. The use of social science to “prove” any phenomenon is often abused. Social science may be used to cloak one’s political opinions—that is, the core of social science starts from a person’s conclusions. Therefore, anyone may craft a model or formula to suit their biases.

2. N.C. Gen. Stat. § 115C-218.

3. The allotments include classroom teachers, children with disabilities, limited English proficiency, size of county/district, low wealth, disadvantaged students, and central-office administration.

mere ADM calculations.⁴ This has the effect of skewing the distribution of resources. In other words, there is a general political consensus that any problems in funding are the result not of the schools in the public school systems, but the arcane way the state funds secondary education.

The 2016-11 Report further notes that the allotment system is “opaque” and “overly complex,” making it “difficult to comprehend” and resulting in “limited transparency.” The funding of the district schools’ LEAs is so complex that it takes “multiple steps to calculate,” thus making it “challenging to discern why any given LEA receives a particular amount of funding” (NCGA 2016, 3). The funding mechanism is complex for a reason. According to the report, funding is meant to be this way in order to provide “flexibility” so that monies may be “redirected” to where they are needed (NCGA 2016, 4). District-school funds may be moved to fund other line items under specific circumstances. The limited transparency has also allowed districts to illegally hide money meant for charters (Herron 2015).⁵

According to the North Carolina Department of Public Instruction (NCDPI), school funding is a complex and difficult process to discern (NCDPI 2017, 1).⁶ Though every school in every LEA reports an ADM, as we noted above, funding by the state to for the district is not based merely on head count, as we noted above. To attempt to decipher a dollar amount based on per pupil

spending is, at best, an estimate and not a reflection of fact, something NCDPI cautions.⁷ Allotments of funds are somewhat flexible in that a school may “move funds between categories to meet their educational needs.” State funding to charter schools, however, is based on ADM for the most part, making comparisons between the two types of public school systems rather difficult. There are a few funding exceptions to the law: children with disabilities and those with limited English proficiency receive funds above the mere ADM requirements. To compare per-pupil funding of a charter school with that of a district school is misleading at best because of these distinct funding sources and methods. Charter-school funding is “based on the local current expense appropriation in the county in which the student resides” (NCDPI 2017, 32). According to the North Carolina General Statutes, each charter school shall receive an allotment “amount equal to the average per pupil allocation for ADM from the local school administrative unit allotments in which the charter school is located for each child attending the charter school” [§115C-218.105(a)(1)]. However, it should be noted that a charter school is supposed to receive its funding, based on its ADM, from the district school of the student’s residence. In other words, as a matter of accounting, the LEA (the district-school board) located in a county sends funds to the charter school.

The statute states at §115C-218.105(c):

4. As a matter of comparison, it is one of the only measurements we may use to compare districts to one another. It should be understood that ADM calculations may include a whole host of monies based on specific allotments for the disabled, learning proficient, low-wealth county, small county, etc. Those monies allotted can skew the ADM numbers generated because the formula to determine such may give some counties more money than others. See NCGA (2016, 11–12).

5. Arika Herron, “N.C. Senate Bill would Send More Money to Charter Schools,” *Winston-Salem Journal*, April 28, 2015, http://www.journalnow.com/news/local/n-c-senate-bill-would-send-more-money-to-charter/article_c1c2af08-ee1c-11e4-905b-5b0a42f342a4.html. As this paper will demonstrate, district schools in the past have hidden their revenues from charter schools in order to deny them their legal reimbursements as mandated by statute. State court cases leave this fact beyond doubt.

6. North Carolina Department of Public Instruction, Highlights of the North Carolina Public School Budget, February 2017, 1. <http://www.ncpublicschools.org/docs/fbs/resources/data/highlights/2017highlights.pdf> All quotes and data in this section, unless otherwise noted, are drawn from this document.

7. *Ibid.*, 13. The Department of Public Instruction is clear that it funds by allotment. See in particular the facts-and-figures publications here: <http://www.dpi.state.nc.us/fbs/resources/data/#facts-figures>

If a student attends a charter school, the local school administrative unit in which the child resides shall transfer to the charter school an amount equal to the per pupil share of the local current expense fund of the local school administrative unit for the fiscal year. The per pupil share of the local current expense fund shall be transferred to the charter school within 30 days of the receipt of monies into the local current expense fund.

Since the money from the LEA is to be paid by the LEA where a student resides, a student may cross county and district lines to attend a charter school, making it very difficult to determine the monetary effect on a district is most difficult since the funds could come from outside the county (hence from a completely different LEA) outside the county lines.

The generalization of a school's county by county fiscal health is, as a matter of social science, impossible since the funding of schools county by county relies on differing circumstances, funding mechanisms, and political choices. Because the fact that there is no set standard of funding—the funding of schools relies on differing circumstances, funding mechanisms, and political choices across counties—necessarily precludes the generalization of social science modeling of counties' fiscal health. Each district's funding depends on a whole host of factors. The only way to come to some understanding of what is happening in the districts is to analyze the districts individually.

II. BACKGROUNDER: STUDY CLAIMS CHARTERS CAUSE FISCAL HARM

A recent study claiming that charter schools cause fiscal harm to district schools received

uncritical media attention: “Charter schools in North Carolina are taking money away from traditional public schools and reducing what services those school districts can provide to their students, according to a new research paper co-authored by a Duke University professor” (Hui 2018a). The authors concluded that charters cost each district between \$200 and \$700 per student; that is, the mere existence of charter schools directs resources away from district schools.⁸

In “The Fiscal Externalities of Charter Schools: Evidence from North Carolina,” Helen F. Ladd and John Singleton claim that “charter schools generate negative fiscal externalities on public school districts to the degree that districts are unable to reduce spending in line with revenue losses they experience as a result of charter schools without reducing services to the remaining public school students” (Ladd and Singleton 2017). The authors find that since the removal of the statewide cap of one hundred charters in 2011, charter schools have fiscally harmed education in all six districts they chose: Buncombe, Cabarrus, Durham, Iredell, Orange, and Union. The authors utilize data from the district financial audits, but only a portion of the data the audits. The authors build a bias into their formula by making assumptions about “several factors” that prohibit districts from maintaining fiscal flexibility. For example, they assume districts suffer fiscally from having various overhead costs that cannot be adjusted: facility operations and maintenance, administration, support staff (Ladd and Singleton 2017, 1, 3). Central-office administrations and facilities are fixed components. The authors contend that these components are fixed because they “incur costs administrative services and personnel regardless of the number of students that a district serves” (Ladd

8. The authors endeavor to fix as many costs as they can in order to contend that district schools are burdened by the entry of charters. This leads to a faulty understanding of the political aspects of education. See also Bifulco and Reback (2014).

and Singleton 2017, 12).⁹

The authors' model counts only fiscal negatives without any offsets. No matter what number one enters into their model, it will generate a negative fiscal impact. At the same time, the authors exclude funds withheld by districts to charters, and then hold fixed enormous costs they intuit a district cannot change. This is not objective social science. While there may be constraints district schools face, they are no different from those facing any other government entity. The model does not account for poor decision-making in capital projects, nor do the authors consider the counties' taxing authority or state reimbursements, not to mention grants or other restricted funds. So much information is left out of their model that the motive is clear: they want to cast a negative light on the type of public education they do not prefer. They make the following arguments:

- Charter schools divert money and resources from district schools.
- District schools cannot react to changing realities in order to cut spending.
- Charter schools receive per-pupil funding at the same rate as district schools.
- Negative fiscal impacts derive from districts' ability to reduce expenditures as a result of revenue losses.

Homeschool and private school calculations and increasing student enrollments are excluded from the model.

Many school districts are increasing, not

decreasing their construction efforts. Union and Iredell Counties are engaged in millions of dollars' worth of renovations or repairs. Buncombe, in addition to repairs, is building a pool and adding to existing construction. Durham is building new schools costing around \$90 million. Cabarrus's new construction carries a \$23 million price tag.¹⁰ If the districts are being harmed by charters, then why are they engaging in all these added capital projects they allegedly cannot afford? If the districts are hurting financially, most are not adjusting their fiscal behavior and are increasing their debt and overhead costs.

The assumption of cost without considering the capital decisions made by districts means that no matter what numbers are entered into the model, it will find a negative externality. Further, students who enter a charter from a home or private school represent no "cost" in this model. This omission makes no sense since any student who does not choose to go to a district school could be considered a "cost," to follow consistently their logic. Indeed, every potential student who opts out costs the district funds. In that calculation, districts are not incurring a fixed cost, because they receive revenues for children they do not teach and who additionally do not burden the infrastructure created with their capital outlays. Students who leave a district for a homeschool or a private school who then attend charters are also unaccounted for. In order for their empirical model to be consistent, any student that would otherwise enroll in a district school should

9. This is just one of several examples where the authors seem to not understand economics. For example, a district could, if it wanted, decentralize control. There could also be other efficiencies or personnel changes a district could make. We are not the first to note their faulty perspective: "All of these problems suggest that the U.S. approach of carefully constructed and evaluated small-scale experiments may be much better for learning about whether or not educational reforms 'succeed' than major system-wide changes as embodied in *Tomorrow's Schools*. In a sense, Fiske and Ladd were a decade late in arriving to evaluate the reforms, and perhaps more would have been gained if they (*perhaps accompanied by some specialist in the economics of education*) had entered at the ground floor" (emphasis added). See Woodfield and Gunby (2003, 881). It is demonstrative of a cognitive bias that Ladd in particular has never written about the need for district-school improvements.

10. See the 2017 CAFR for the county noted: Durham, pp. v and 43; Cabarrus, pp. 8 and 11; Union, p. 32; Buncombe, pp. 4 and 40. Orange engages in new construction as noted in its 2015-16 CAFR with a price tag of \$2.1 million. If a school district is losing students, then it is not impermissible for the board to sell off its buildings to decrease its maintenance costs as well as increase its general-fund revenues. These options are rarely considered by researchers.

be considered a fiscal cost. Another problem of the model consists in the authors' assumption that they know what decisions parents would make in the absence of a charter. It is quite possible that some would opt for educational alternatives other than the district choice.

It is not true that district schools are the only authentic public interest while citizens who choose to educate their children outside those schools are hostile to that interest. However, it is the citizens' decisions, made through the deliberative body of the representative state government, that have exposed the problems that remain and are enabled by the districts and their supporters. If charters are a part of the public school system, it would be more reasonable to assert that it is the district schools taking away funds from their public school counterparts since charter students receive less per-pupil funding than district schools. It is to that topic we turn next, along with a consideration of how underfunded charters are in the state. A school district's full fiscal authority emanates from the totality of its access to funds. The state of North Carolina understands the importance of measuring fiscal resources in its totality because a majority (70 percent) of public education funding comes from the state, not localities (NCGA 2016, 4).

Many pundits and researchers claim that charters are funded as much as districts. Ladd and

Singleton make a similar counterfactual claim: "Each charter school in North Carolina receives funding directly from the state at the same average per pupil rate as the school district in which a student lives and also local revenue at the same per pupil rate as the regular public schools in the district" (Ladd and Singleton 2017, 4).¹¹ In fact, as this paper shows, that is not the case (Hinchcliffe 2016; Leslie 2015; Hui 2018b).¹² Because of the complicated funding system in the state, arriving at a definitive number is difficult. However, even the state of North Carolina contradicts the narrative that charters are receiving more than their fair share of public funds: "There is much to be said for inequity in charter school funding... [L]ow wealth funding does not follow the child to their school... [C]harter schools do not receive funding for facilities nor are they eligible to participate in lottery facility funding. Facilities cost must be paid from each school's operations budget, and this may consume a considerable share of the school's available funds" (NCDPI 2018, 31). Charters only receive about 6 percent of the total school-going population as measured by ADM.

Before we can make a reasonable case that the districts are well funded, we should note an important fact that no study to date has taken into account: charter schools have been denied their rightful share of full funding. This has been noted

11. The authors also mislead the public by asserting that "local revenue is used to supplement teacher salaries," on the same page. However, the state clearly notes that "LEAs do not receive dollars from the State to pay teachers, but instead receive positions against which they can charge the State.... The State pays the cost of each teacher charged against this allotment." In other words, any local funds that go to pay for teacher salaries are offset by the state. Further, not all LEAs supplement teacher salaries, and among even those that do, the support is "relatively small." Any cost to local revenue is mitigated as payment of teacher salaries may come from other allotments from the state. See NCGA (2016, 14, 18). The state notes that its analysis shows that counties receive the greatest share of state funds. If true (they only show a correlation), this suggests that any lack of funding in a county is not exacerbated by the existence of a charter, but is the result of the faulty reimbursement/allotment program that they understand is caused by the "salary schedule." However, Ladd and Singleton never make note of this, nor test for it.

12. Kelly Hinchcliffe, "Study: NC School Funding Formula Lacks Transparency, Favors Wealthier Counties," WRAL, November 16, 2016, <http://www.wral.com/study-nc-school-funding-formula-lacks-transparency-favors-wealthier-counties/16243913/>; Laura Leslie, "Senate OKs Change to Charter School Funding," WRAL, September 28, 2015, <http://www.wral.com/n-c-senate-oks-change-to-charter-school-funding/14933535/>; Keung Hui, "New Report Praises NC Charter Schools, Marking a Shift from Previous Years," *News and Observer*, February 2, 2018, <http://www.newsobserver.com/news/local/education/article198017579.html>. Ladd and Singleton have to maintain charters are funded 100 percent to make their case that charters harm district funding. If they do not make that assumption, then their model falls apart.

explicitly in several North Carolina court cases and admitted for the record by certain districts.

III. THE FISCAL DISENFRANCHISEMENT OF CHARTERS: A BRIEF LEGAL HISTORY

According to the North Carolina general statutes, “If a student attends a charter school, the local school administrative unit in which the child resides shall transfer to the charter school an amount equal to the per pupil share of the local current expense fund of the local school administrative unit for the fiscal year” (NCDPI 2018, 31). This means that all operating money shall be counted in determining reimbursement to charter students from the district. While the district may break up monies into separate funds initially, all monies, no matter the source, are to be deposited into the local fund. In *Francine Delany New School for Children v. Asheville City Board of Education* (2002), the North Carolina Appeals Court decided the statute is clear. Any monies going into a district’s local fund must be shared. However, district schools did not abide by the court ruling. In 2008, Sugar Creek Charter School sued Charlotte-Mecklenburg Schools (CMS). The North Carolina Appeals Court decided, again, that the district schools must share all of their funds with charter schools. The CMS district board cordoned off certain funds for certain projects and refused to share those allocated monies with the charters. It was the practice of CMS to subtract some funds from the per-pupil expenditure, thus denying charter schools in the district statutorily required funding. CMS did not abide by the court’s ruling. This ought not surprise us since the school board of Mecklenburg makes it clear to this day that “charter schools are separate entities and are not a component unit of the local school system” (CMBE 2017, 36). The CMS system is faring well. Even after accounting for expenses, the system’s “net

position” increased \$6 million in 2016, and \$89.2 million in 2017 (CMBE 2017, 7).

In *Sugar Creek Charter School v. Charlotte Mecklenburg Board of Education* (2009), the court reiterated its prior decision. CMS once again attempted to deny charters monies from various sources of their total revenues. An exasperated court noted again that no matter the source of the revenue, charter schools have a legal right to the funds, and the funds cannot be legally withheld. The court has been consistent on this issue. In a series of opinions, *Thomas Jefferson Classical Academy Charter School v. Rutherford County Board of Education* (2011) and *Thomas Jefferson Classical Academy v. Cleveland County Board of Education* (2014), the court decided that charters are entitled to the entirety of local funds, yet they may not have access to restricted funds if those funds abide strictly by the statutory language. In other words, charters may not receive district funds if the money is truly restricted. A district cannot simply decide it does not want to share funds because it desires to do so. This was affirmed by the North Carolina Supreme Court in *Thomas Jefferson Classical Academy v. Cleveland County Board of Education* (2016), in which the board of education modified funding—decreasing the charter share—as a result of legislative action. The state high court decided that a county may restrict funds if a donor designates funds for a specific purpose, not a general purpose. The court came to this conclusion as a result of the changes in the law in 2010.

The North Carolina General Assembly sought to amend the law in an attempt to vacate prior rulings in order to deny charter schools access to local revenues. This legislation moved funds into something known as Fund 8. In what is colloquially known as the Hackney Amendment, named after the Democrat Speaker of the North Carolina House of Representatives, the legislation stated that “the appropriation or use of fund balance or interest income by a local school administrative unit

shall not be construed as a local current expense appropriation.”¹³ The legislation also sought to give some relief to those districts that denied charters (such as Sugar Creek, Thomas Jefferson, and Delany) their legal access to public money and was defeated in a court of law.

In addition, an amendment to the statutes in 2003 prohibited charter students from receiving supplemental taxes from outside the district. The Nesbitt Amendment, named after Senator Martin Nesbitt (D-Buncombe), required the disbursement of funds to a charter only if the charter resided in the same tax district as the student.¹⁴ This had the effect of limiting student funds if a student attended a charter outside the school district. Because of these legislative maneuvers, charter schools received less money from the local revenues of the districts.¹⁵ Charter schools do not have access to capital funds, further decreasing their access to total revenues.

The lesson learned from the time between the origination of the charter law and the ensuing legal challenges is that the district schools denied charters their legal right to full funding as prescribed by law. The original law directed school districts to pay charter schools the per-pupil share of their local current expense (known as Fund 2). Because of lobbying efforts, many districts withheld monies in something known as Fund 8.¹⁶ Instead of abiding by the law, the district schools encouraged

the state to change the law rather than pass on funds legally owed to charter schools. They would rather make sure that charters were funded unequally. Among those funds in Fund 8 denied to charters are the following:

- Reimbursements for such items as Gear Up or Dropout Prevention Grants
- Indirect costs: money for payroll, accounting, and the like
- Sales-tax revenues from the ad valorem tax
- Gifts/grants restricted by use: money held for a specific purpose and restricted to a fund outside the general fund. Districts have applied the term “restricted” in an extralegal way to deny charters funds.
- Federal appropriations made to a specific LEA
- Pre-kindergarten programs
- Fund balance: Districts do not share funds that are held over from year to year. This amounts to millions of dollars in many districts.
- Interest earned: schools do not share the interest earned on their accounts

The history of many districts in the state shows that they already deny charters funding. If there is going to be an explanatory social science study on the effect of charters, one would expect these facts to be included.

13. S897 was a massive appropriations bill passed at the close of the 2010 short session. The bill, known as The Current Operation and Capital Improvement Act of 2010, became N.C. Sess. L 2010-31.

14. S965, “An Act To Amend The North Carolina Constitution To Provide That The General Assembly May Place The Clear Proceeds Of Civil Penalties, Civil Forfeitures, And Civil Fines Collected By A State Agency In A State Fund To Be Used Exclusively For Maintaining Free Public Schools,” became N.C. Sess. L 2003-43.

15. Analysis done by Womble, Bond, Dickinson, LLP.

16. Public schools have engaged in some questionable acts of lobbying over the years. See Burrows (2011, 8). , “Principal Recruited Parents to Lobby Against Charter School Bill,” *Carolina Journal*, April, 2011, 8. The public schools have many lobbyists registered in the state. There are no less than twelve organizations represented on the list of lobbyists for the state. See the North Carolina Boards of Elections & Ethics Enforcement lobby list here: https://lobby.ncsbe.gov/online_services/lobbying/directory. The North Carolina Principals and Assistant Principals Association’s lobbying efforts are posted online and are predominately skewed to more funding: <http://www.ncpapa.com/advocacy-1.html>.

IV. STUDY OF SELECT AND RANDOM COUNTIES

The most accurate way to discover the fiscal health of a district is to look at the audits, or comprehensive annual financial reports (CAFRs), and let the numbers speak for themselves. If district schools are harmed by charters, we would expect to see this reflected in their balance sheets or the CAFRs for each district without the need for contorting the audits via modeling. Ladd herself essentially admits this reality: “Estimating fiscal burdens is an art, not a science” (Ladd and Singleton 2018). The most reliable measure we have as honest researchers is the real numbers as reported by the districts themselves. Such a measure is not only more discernible, but less open to cognitive manipulation. For the taxpaying voter of the state, it has the added benefit of being more accurate and easier to digest than abstract models. There are fewer of the estimates or assumptions that fundamentally plague other studies. In this paper, the raw data do not confirm fiscal harm, because revenue increases, even when adjusting for inflation, exceed the rate of inflation. Payments to charter schools also are not decreasing the overall revenue stream that districts are receiving. Finally, when considering that the districts are also withholding funds from charters, the claim that charters cause fiscal harm falls flat.

Since North Carolina is a state of one hundred counties, in order to save time and be cost effective

it was necessary to limit the data for this analysis. In any research analysis in which one tries to generalize to a general population, a random sample is required. In no instance has any study on charter schools and districts been conducted with a random sample. The data have been chosen with intent. Anything outside a probability sample is biased. In this paper, the most reliable approach is a hybrid model: we chose the districts in the state with the most charters, and then randomly chose nine more counties as a type of control to counter potential author bias. The counties in the Ladd-Singleton study were Buncombe, Durham, Cabarrus, Iredell, Orange, and Union. The counties chosen randomly for this study were Ashe, Cumberland, Gaston, Guilford, Johnston, New Hanover, and Wake. CMS/Mecklenburg and Forsyth were added manually. This quasi-experimental approach is more generalizable than the modeling of other studies.

As an additive control on this study, we wondered whether charter-school entry has had a negative effect on district-school funding per ADM. To arrive at this number, we took the total ADM minus charters, then divided by the total to arrive at a percentage of the share of funding. We performed the same calculation for spending and compared the numbers. Table 1 suggests that as charters have gained enrollment (or ADM), the percentage of state funding to the district schools has remained constant.

Table 1

| | STATE % TOTAL ENROLLMENT | STATE % TOTAL SPENDING |
|---------------|-------------------------------------|-----------------------------------|
| FY2016-FY2017 | 94 | 94 |
| FY2015-FY2016 | 95 | 94.4 |

That is, state funding to the district schools has not decreased with their share of enrolled students. This is an important fact to consider for those who claim that the state needs to increase funding to district schools because charters have harmed them. What the data show is that state spending has continued in proportion to the share of students that the districts retain.

This research finds that no matter whether the county was chosen by the author or chosen randomly, the district schools generally are doing very well indeed. Whether a district has an influx of charter schools or lacks charters, the district revenues and balance sheets show that the county public schools are gaining fiscally. In fact, most counties are increasing, not decreasing, their overall revenues. Per-pupil expenditures are also increasing.

As table 2 shows, even when adjusting for inflation, the district schools' funding is growing at a rate surpassing inflation. It is difficult to conclude that the schools are suffering financially at the hands of charters, especially when we consider that these same schools are denying funds to charters that should be equally distributed to them according to law.

Finally, no research can explain anything about the state of education if homeschools and private schools are excluded. Therefore, this study added the number of homeschool and private school students to assess their impact. For all the alleged impact of charter schools, it is essentially ignored that homeschooling is accelerating in the state and in all the counties under study in this paper (table 3). Statewide, private schools are also

Table 2

DISTRICT REVENUES AND ADM 2013-2017

| | % REVENUE INCREASE | TOTAL REVENUES 2017 | REAL DOLLARS/ ADJ FOR INFLATION | % PUPIL INCREASE/ DECREASE |
|-------------|---------------------------|----------------------------|--|-----------------------------------|
| Ashe | 2.1 | 33,476,519* | 33,469,160* | 0.5 |
| Buncombe | 7.6 | 256,646,928 | 248,804,600 | -4 |
| Cabarrus | 25.7 | 331,097,240 | 257,799,900 | 6 |
| CMS/Meck | 13.87 | 1,557,960,000 | 1,407,597,400 | 4.7 |
| Cumberland | 3.56 | 457,405,000 | 462,707,300 | 3 |
| Durham | 2.2 | 379,233,829 | 385,928,900 | 2 |
| Forsyth | 2.2 | 520,455,532* | 524,053,597* | 3.1 |
| Gaston | 13.84 | 314,586,500 | 284,328,000 | 0.9 |
| Guilford | 8.17 | 803,531,633 | 774,093,600 | -0.7 |
| Iredell | 5.71 | 184,651,525 | 182,654,400 | -4 |
| Johnston | 17.01 | 275,840,487 | 289,367,500 | 3 |
| New Hanover | 22.65 | 306,839,332 | 248,992,300 | 0.03 |
| Orange | 19.75 | 2,340,961,644 | 1,970,838,500 | 0.7 |
| Union | 13.39 | 389,259,139 | 353,655,800 | 2.8 |
| Wake | 25.51 | 1,774,497,000 | 1,386,583,100 | 6.4 |

Source: Adj inflation numbers, Bureau of Labor Statistics CPI calculator. Countries that did not have 2017 data excluded. *2016 number, no data for 2017.

growing (97,721 students in 2015–16 to 100,585 in 2016–17). Homeschool numbers are more mixed. Cabarrus, New Hanover, Orange, and Union Counties are the only ones seeing a slight decline. The rest are expanding.¹⁷ The reason this is worthy of note is that it is not only charter schools that are taking away students from the district schools. It does not matter whether a student left a district school for a private school, a homeschool, or a charter school. The fact that a parent chooses not to send their child to a district school means it counts against the district ADM and therefore represents a loss of funding from the state and from federal grants.

This claim is not meant to suggest that districts should receive more funding for the loss in revenue as a result of the homeschools and private schools. It is meant to demonstrate that it is not just charters, but all forms of education opportunities parents are choosing outside the district system that result in districts' not having as many pupils as they otherwise would. Despite this loss, district schools are not hurting for revenues. Charters are therefore not to blame for any lost revenue in the district schools. The fact that charters, homeschools, and private schools are growing in the state suggests that the district schools have problems they have not resolved (or to put it more positively, other modes of education appeal more to parents than the district choice) and therefore parents are expressing their freedom to choose by educating their children in alternative ways. However, exactly what the parental justification may be for choosing education outside the district alternative is beyond the scope of this paper, which details the fiscal impact, if any, of charters.

Table 3 notes the distribution of students. The astute reader will notice that in many counties, charters are lagging behind either homeschool membership, private school membership, or both combined. This means that despite charter presence in a county, the growth of homeschools and private schools continues apace, and in many instances surpasses the total enrollment of charters. If fiscal impact was real, charters would not be causing it as much as other educational opportunities parents choose. The lack of impact from charters is evident when reviewing the balance sheets of the districts.

One thing should be noted before proceeding: While we compare total revenues and total expenditures to capture the amount of dollars in the district schools, the accounting for per-pupil expenditures is limited by the district to operational expenses. That is, no district calculates per-pupil spending based on total expenditures.¹⁸ In most cases, this method of calculation has the effect of decreasing the actual amount of money spent in a district per pupil, but the numbers are accepted regardless and reported in our tables because they reflect how well the district schools are doing financially. The exception is related to the value of random selection. Calculating per-pupil expenditures using operational expenses has the effect, in most cases, of hiding the actual amount of per-pupil spending. However, in years of total revenue downturn, that figure can be misleading. In Ashe and Buncombe, 2013–15, the districts saw decreases in total revenues. Likewise, for Buncombe between 2011 and 2014, total revenues decreased. Yet in both cases, there was an increase in per-pupil spending. How did that happen? Even though total

17. Taken from the *Home School Statistical Summary* and the *North Carolina Private School Statistics* for the year noted at the Department of Administration.

18. Those counted are usually limited to instructional, support services, ancillary services, and some nonprogrammed charges. Not all tables address all years. When possible, data were collected back to 2008 through 2017. However, not all audits are accessible to the public dating back that far. Furthermore, some counties have not made available their 2017 audits.

Table 3

NORTH CAROLINA COUNTY DATA: POPULATION, SCHOOL ENROLLMENT/ADM BY COUNTY

| | 2016 ESTIMATED | 2010 CENSUS | # OF CHARTERS (LEA) | DISTRICT | | DISTRICT | | CHARTER SCHOOL ADM 2017 | HOME SCHOOL 2015-16 | HOME SCHOOL 2016-17 | PRIVATE SCHOOL 2015-16 | PRIVATE SCHOOL 2016-17 |
|----------------|-------------------|----------------|---------------------------|--------------------|--------------------|-----------------------------------|--------------------|-------------------------------|---------------------------|---------------------------|------------------------------|------------------------------|
| | | | | SCHOOL ADM 2017 | SCHOOL ADM 2017 | SCHOOL ADM-CHARTER ADM 2017 | SCHOOL ADM 2017 | | | | | |
| North Carolina | 10,146,788 | 9,535,483 | 167 | 1,454,290 | 92,112 | 118,268 | 127,847 | 97,721 | 100,585 | | | |
| Ashe | 26,924 | 27,234 | 0 | 3,110 | 3,110 | 490 | 525 | | | | | |
| Buncombe | 256,088 | 238,318 | 4 | 24,687 | 22,447 | 4,121 | 4,330 | 3,461 | 3,534 | | | |
| Cabarrus | 201,590 | 178,011 | 4 | 31,941 | 28,757 | 2,963 | 3,178 | 2,127 | 2,083 | | | |
| Cumberland | 327,127 | 319,431 | 2 | 50,459 | 49,371 | 3,011 | 3,363 | 4,268 | 4,651 | | | |
| Durham | 306,212 | 267,587 | 13 | 34,013 | 27,523 | 1,983 | 2,122 | 4,585 | 4,837 | | | |
| Forsyth | 371,511 | 350,670 | 5 | 54,552 | 51,661 | 3,867 | 4,259 | 4,458 | 4,505 | | | |
| Gaston | 216,965 | 206,086 | 2 | 31,665 | 28,969 | 2,477 | 2,704 | 2,081 | 2,195 | | | |
| Guilford | 521,330 | 488,406 | 9 | 71,710 | 65,432 | 4,239 | 4,618 | 6,318 | 6,536 | | | |
| Iredell | 172,916 | 159,470 | 5 | 20,754 | 16,378 | 2,402 | 2,627 | 1,139 | 1,212 | | | |
| Johnston | 191,450 | 168,878 | 1 | 34,985 | 34,068 | 2,843 | 3,097 | 411 | 442 | | | |
| Mecklenburg | 1,054,835 | 919,628 | 27 | 148,951 | 137,620 | 8,773 | 9,396 | 18,524 | 18,506 | | | |
| New Hanover | 223,483 | 202,667 | 6 | 26,458 | 25,361 | 1,968 | 1,963 | 3,111 | 3,081 | | | |
| Orange | 141,796 | 133,801 | 2 | 7,551 | 6,923 | 1,011 | 1,116 | 1,201 | 1,181 | | | |
| Union | 226,606 | 201,292 | 3 | 42,278 | 39,938 | 4,229 | 4,725 | 2,085 | 2,027 | | | |
| Wake | 1,046,791 | 900,993 | 22 | 159,462 | 148,323 | 11,356 | 11,972 | 17,240 | 17,557 | | | |

Sources: The United State Census, Quick Facts, census.gov; Highlights of the North Carolina Public School Budget, February 2017; Home School Statistical Summary, Department of Administration, North Carolina Private School Statistics, Department of Administration.

revenues may decline, the district may, through an increase in local and state revenues (taxes), shore up its budgetary position. The per-pupil analysis of districts with a decrease in total revenues shows they are nevertheless doing very well in their operational budgetary position (see table 4).

For some counties, through the recessionary years of 2010–13 there is a decline in per-pupil ADM expenditures. This is merely a blip in the data due to the economic downturn during those years (Cox 2010; CNN 2008). The rebound far surpassed 2008 revenues. Revenues have increased greatly in the last two years. As pertains to per-pupil expenditures in this period, we find in districts such as Gaston that total revenues were undergoing a significant increase at the same time. Therefore, while there may be some counties that see an increase in per-pupil expenditures because of increasing operational revenues, the audits show that for others, while per-pupil expenses may decrease, the total revenues are increasing.

Comparing 2013 revenues with 2017, there are increases in every county:

- Ashe, +2.1%
- Buncombe, +7.6%
- Cabarrus, +25%
- Chatham, +8.6%
- Cumberland, +3.6%
- Durham, +2.2%
- Forsyth (to 2016), 2.2%
- CMS / Mecklenburg, 13.9%
- Gaston, +13.8%
- Guilford, +8.2%
- Iredell, +5.7%
- Johnston, +17.1%
- New Hanover, +22.6%
- Orange, +19.8%
- Union, +13.4%
- Wake, +25.5%

District schools are not suffering from a revenue drought.

This paper also considers three more categories from the CAFRs. According to auditors, “The two government-wide statements report the Board’s net position and how it has changed. Net position—the difference between the total of the Board’s assets and deferred outflows and the total liabilities and deferred inflows—is *one way* to measure the Board’s financial health or position” (WCBE 2017, 5; emphasis added) In other words, the net position is not the only way to measure fiscal health of a school district. The auditors go on to state that increases or decreases in the net position “are an indicator of whether its financial position is improving or deteriorating” (ibid.). Other considerations are property-tax base, revenues, per-pupil spending, unrestricted cash, school buildings as assets, and other physical property. The increase of debt may also be attributed to the volatile net pension liability. Some counties, such as Wake, have accelerated their property-tax evaluation from eight years to four in order to access public monies and increase funds more quickly. Charlotte-Mecklenburg Schools, for example, has increased its net position because of capital construction and building renovation and maintenance (CMBE 2017, 6).

As noted above, some researchers have proclaimed that charter schools have had a negative fiscal impact on district schools, which have experienced revenue loss. They cite Durham, Buncombe, Cabarrus, Orange, and Union Counties as evidence (Ladd and Singleton 2017). However, looking at the actual audits tells the exact-opposite story. For example, Cabarrus County not only has an increase in ADM, total revenues, and per-pupil expenditures, but its net position has increased by over \$30 million. Its unassigned cash also grew, to over \$7 million, even while its pension liability has exploded. Durham complains its net position has decreased, in large part because of its capital assets. While its ADM has decreased for

Table 4

PER PUPIL EXPENDITURE / YEAR

| FISCAL YEAR | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|-------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Ashe | 9,742 | 9,825 | 9,608 | 9,607 | 9,516 | 9,765 | 9,579 | 9,993 | 9,900 | 9,516 |
| Buncombe | 7,940 | 8,057 | 7,876 | 7,873 | 7,788 | 7,992 | 7,812 | 8,386 | 8,579 | 8,914 |
| Cabarrus | 7,422 | 7,566 | 7,442 | 7,489 | 7,215 | 7,496 | 7,369 | 7,779 | 7,903 | 8,178 |
| Chatham | 10,797 | 11,530 | 12,130 | 10,766 | 10,250 | 10,530 | 10,063 | 10,697 | 11,081 | - |
| Durham | 10,150 | 11,139 | 10,163 | 11,805 | 11,669 | 11,602 | 10,959 | 11,168 | 11,217 | 11,469 |
| Forsyth | - | - | - | - | 9,199 | 9,186 | 9,325 | 9,350 | 9,241 | 9,415 |
| Gaston | 7,812 | 8,265 | 7,964 | 7,869 | 7,732 | 7,772 | 7,956 | 8,151 | 8,116 | 8,754 |
| Guilford | 9,012 | 9,190 | 8,901 | 8,819 | 9,076 | 9,213 | 8,708 | 9,372 | 9,327 | 9,726 |
| Iredell | - | - | 7,159 | 7,088 | 7,217 | 7,271 | 8,494 | 8,572 | 8,545 | 9,296 |
| Johnston | - | - | - | - | 8,689 | 8,514 | 8,699 | 8,665 | 8,656 | 9,330 |
| Mecklenburg | 9,104 | 9,686 | 8,614 | 8,675 | 8,746 | 9,114 | 8,815 | 8,944 | 9,080 | 9,959 |
| New Hanover | 9,286 | 9,092 | 8,803 | 8,729 | 8,421 | 8,590 | 8,834 | 8,973 | 9,111 | 9,662 |
| Orange | 7,426 | 9,874 | 9,340 | 9,437 | 9,188 | 9,169 | 9,243 | 9,826 | 9,874 | 9,480 |
| Union | 7,913 | 8,113 | 7,658 | 7,544 | 7,808 | 7,816 | 7,606 | 8,176 | 8,128 | 8,479 |
| Wake | 8,060 | 8,220 | 7,801 | 7,825 | 7,657 | 7,853 | 7,812 | 8,227 | 8,570 | 8,730 |

All numbers from district CAFRs. Not all counties included here because those numbers were not reported in their CAFR.

2017, it has been growing and has seen overall an increase in its net position and ADM since 2008. In fact, it has seen an increase in cash as well as a healthy tax increase in the county specifically for its district schools (Bridges 2017; see also DPS 2017, 4). Yet even while charter-school nonprogrammed charges are increasing, the county's revenues are more than keeping pace. Durham County also has one of the most unenviable highest costs per pupil in the state. Buncombe, Orange, and Union Counties are experiencing modest growth in their net position, even though there may be a small decrease in 2017. Still, their cash, revenues, and ADM are either growing or static. Iredell County shows a decrease in its overall position (even while revenues are up). However, this will not continue

as the county not only has increased taxes, but is undergoing a vigorous renovation and expansion of its system even while it is decreasing in ADM (ISBE 2017, 4). These improvements will increase its net position in the coming years.

For the remainder of the counties in this study, even with an increase of charter enrollment, revenues are increasing. In fact, payments to charters as reimbursement do not account for any decrease in either revenues or net position. The net-position measure is certainly useful to see the overall health of the district at a particular time, but the net position fluctuates from year to year. Even when there is a decrease, capital assets are usually the culprit. We should also consider that a given board's management of district funds

Table 5

PENSION LIABILITY & CASH

| | PENSION LIABILITY (2016) | PENSION LIABILITY (2017) | CASH 2016 | CASH 2017 |
|-------------|---------------------------------|---------------------------------|------------------|------------------|
| Ashe | 1,634,586 | 1,635,724 | 1,758,586 | 1,666,548 |
| Buncombe | 36,633,448 | 91,348,001 | 4,307,083 | 4,460,491 |
| Cabarrus | 41,371,138 | 108,320,920 | 6,127,562 | 7,406,823 |
| Cumberland | 68,577,452 | 163,160,106 | 28,441,184 | 28,323,657 |
| Durham | 56,785,953 | 145,085,971 | 453,577 | 2,835,538 |
| Forsyth | 23,397,537 | 25,737,186 | 9,081,075 | 12,707,504 |
| Gaston | 38,920,465 | 99,920,315 | 4,267,131 | 3,713,330 |
| Guilford | 112,178,901 | 274,024,215 | 2,229,326 | 5,282,181 |
| Iredell | 27,883,682 | 67,730,562 | 6,186,548 | 4,481,667 |
| Johnston | 119,471,481 | 78,850,395 | 4,142,772 | 2,805,807 |
| Mecklenburg | 209,273,000 | 539,165,000 | 17,500,000 | 114,570,000 |
| New Hanover | 38,600,965 | 98,394,604 | 17,223,140 | 15,509,260 |
| Orange | 12,258,443 | 31,588,661 | 1,930,624 | 1,283,855 |
| Union | 57,969,270 | 145,495,891 | 1,833,000 | 1,896,467 |
| Wake | 227,014,746 | 591,446,648 | 13,880,710 | 9,899,217 |

All Data taken from county CAFR

could be handled better in terms of planning and spending. If there is a cause for districts to lose more revenue than they otherwise would, it is related to the rising pension liability (see table 5). In the end, there is no evidence from the audits that charters are causing a decrease in revenues. If there is a decline, the explanation is elsewhere. It should be noted that nowhere in Ladd and Singleton's model do they account for the rising pension costs (which far exceed any charter payments), nor do they note the millions most districts have as cash on hand.

V. CONCLUSION

The aim of social science is to demonstrate correlations and explain phenomena. Professors who employ this tool use it to try to understand what is going on in society and culture. However, especially in our universities, much of the social science modeling being done is the result of the politicization of the scientific method. This modeling leads to biased conclusions. The best that modeling and statistics may do is speak probabilistically. Researchers therefore overplay their hand and draw conclusions with much more certitude than the data allow. As pertains to research on charter schools and their effect, the most reliable data are found in the actual numbers expended and received. If we are going to speak factually about the effect of charter schools on district schools fiscally, then the obvious first step would be to look at the balance sheet. It is a critical oversight to ignore, or cherry-pick from, the single most informative document that would shed light on the financial status of district schools, especially those that have the most numerous charters: the CAFRs. These reports demonstrate to the objective observer that charters are not harming district schools.

Studies such as the one we have examined here

suffer from a flaw: the problem of internal validity. The ability to capture the direct effect of one thing upon another suffers from a confounding-variable problem. That is, there are variables not considered in the Ladd-Singleton working paper that are not accounted for in the study. This problem has been noted by serious scholars well informed about the subject (Gill 2016). Weak internal validity limits the ability of researchers to recognize the reality of education markets and their effects. Viewing the student supply as a zero-sum market hampers sound analysis. As an example, internal validity is compromised because Ladd and Singleton never consider whether student attrition in district schools might *not* lead to revenue losses (Cremata and Raymond 2014).

Districts have significant amounts of cash on hand (table 5) and have healthy revenue streams (table 2). These sources of revenues raised through the taxing authority provide a disincentive for district schools to adjust their spending habits. Furthermore, pension payments are increasing and hence represent a bigger threat to expenditures than any other category. At this point in the history of charter schooling, more parents choose homeschool or private school options than they do charters. This choice matches the polling on the subject that parents overwhelmingly desire to place their kids in a school other than a district school. District schools have access to funds in capital projects that charters do not, and they further pad their balance sheet by denying charters full funding. Therefore, districts are not suffering monetarily because of charters. In fact they are not being harmed at all by the existence of charters. Both segments of North Carolina's public education system are in fact thriving.

To recap the arguments and conclusions made in this paper:

- Prior studies on the effect of charter

schools on district school suffer from internal-validity problems.

- The Ladd-Singleton thesis that charters cause fiscal harm to district schools is unsupported by the evidence found in county CAFRs.
- Charter schools do not draw fiscal resources away from the public system.
- As the legal record shows, by their own admission district schools deny charters the totality of their funding, thus making the claim that charters are funded at the same per-pupil rate false.
- Private school and homeschool enrollments are increasing, and their totals surpass charter enrollment.
- District schools' financial position is thriving, not deteriorating.
- After adjusting for inflation, revenue increases are seen in most districts, even where enrollment is declining.
- If a district is experiencing any fiscal pressure, the likely culprit is pension liability.
- State percentage of total spending equates with share of enrollment.

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