POLITICAL ECONOMY
IN THE CAROLINAS

Vol. 2

Classical Liberals
THE CAROLINAS

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POLITICAL ECONOMY
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POLITICAL ECONOMY
IN THE CAROLINAS

FROM THE EDITOR

Dr. Roy Cordato, Editor
John Locke Foundation, Raleigh, NC
North Carolina State University

Welcome to Volume 2 of Political Economy in the Carolinas, the peer-reviewed academic journal of Classical Liberals in the Carolinas!

In publishing a new academic journal in a very large pool of well-established publications, we are having to distinguish ourselves as a worthy outlet, not only for potential contributors, but also as a source for those interested in becoming more informed in cutting-edge research related to public policy in North and South Carolina. I think the articles in this second issue, as in Volume 1, clearly pass the test. They are written by respected scholars from prominent institutions and meet the standards expected of a high-quality academic journal.

All of the submissions in the Articles section of the journal have passed a rigorous double-blind peer review process by scholars who are experts in fields relevant to the topics being discussed. Both essays featured in the Notes and Commentary section were solicited by the editors, though we are happy to consider unsolicited submissions for future volumes. These essays play an important role for PEC. They are shorter, less technical, and therefore easier to digest in a single read than those in the Articles section. Our hope is that these essays will bring some readers to PEC that might not otherwise be attracted to an academic journal and ultimately encourage interest in the publication more broadly.

Noting this, I want to thank all of the authors who submitted articles for this volume, whether they were ultimately included in this issue or not. We are honored by your belief in the long-term value of being published in PEC. We also want to thank those scholars who agreed to participate in the peer review process. A publication like this one could not exist without high-quality scholars willing to act as referees. Being a reviewer takes a great deal of work, and because the work is anonymous it brings no personal reward or outside

recognition. The comments on all the papers submitted for this issue were insightful and helped improve the papers.

Moreover, by matching reviewers with different professional backgrounds from the authors, we have made it possible for them to make a major contribution to the overall quality of the journal and the mission of CLC in appealing to different audiences. While an important purpose of the journal is to stimulate academic research on topics that might otherwise be neglected, we do not want it to be a forum in which academics speak only to each other. Our hope is that many of the articles published in these pages will make an important and lasting contribution to public policy debates.

More specifically, one of our goals is to deliver sound, policy-relevant research to a wider audience including think tanks, the media, pundits, and policy makers. This means we will be taking several steps to broaden our outreach efforts. These will include encouraging submission authors and others to pen op-eds highlighting findings from PEC articles for distribution to relevant newspapers and websites; distributing press releases to targeted media announcing particularly important conclusions of specific articles; and promoting the work of the journal through participation in conferences, possible legislative testimony, and other forums. We plan to utilize all of these tools to ensure the journal and the research that it stimulates are more visible and accessible.

In conclusion, there are several people whose efforts need to be recognized. First and foremost, I want to thank my managing editor, Dr. Adam C. Smith. He has once again performed all of the difficult logistical tasks needed to put this journal together. Adam is great to work with and makes my life as editor easy. I also want to thank CLC's board chairman, Dr. Michael Munger, and all of the CLC board members for their support and encouragement over the last year. Lastly, I want to thank the John William Pope Foundation for the financial support it has provided to make this project a reality.

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

By: Erik S. Root, Roger Bacon Academy

ABSTRACT

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.

JEL CODES:

H75, I20

KEYWORDS:

Charter Schools, District Schools, Public Education

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 schools.[2] 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

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.

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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 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

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

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):

> 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 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:

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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).

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.

- 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. Carbarrus'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 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

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.

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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.

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.

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 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

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.

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.

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

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.

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. 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

Table 1

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

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

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.

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 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

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

Table 3

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

	2016 ESTIMATED	2010 CENSUS	# OF CHARTERS (LEA)	DISTRICT SCHOOL ADM 2017	DISTRICT SCHOOL ADM-CHARTER ADM 2017	CHARTER SCHOOL ADM 2017	HOME SCHOOL 2015-16	HOME SCHOOL 2016-17	PRIVATE SCHOOL 2015-16	PRIVATE SCHOOL 2016-17
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	2,240	4,121	4,330	3,461	3,534
Cabarrus	201,590	178,011	4	31,941	28,757	3,184	2,963	3,178	2,127	2,083
Cumberland	327,127	319,431	2	50,459	49,371	1,088	3,011	3,363	4,268	4,651
Durham	306,212	267,587	13	34,013	27,523	6,490	1,983	2,122	4,585	4,837
Forsyth	371,511	350,670	5	54,552	51,661	2,891	3,867	4,259	4,458	4,505
Gaston	216,965	206,086	2	31,665	28,969	2,696	2,477	2,704	2,081	2,195
Guilford	521,330	488,406	9	71,710	65,432	6,278	4,239	4,618	6,318	6,536
Iredell	172,916	159,470	5	20,754	16,378	4,376	2,402	2,627	1,139	1,212
Johnston	191,450	168,878	1	34,985	34,068	917	2,843	3,097	411	442
Mecklenburg	1,054,835	919,628	27	148,951	137,620	11,331	8,773	9,396	18,524	18,506
New Hanover	223,483	202,667	6	26,458	25,361	1,097	1,968	1,963	3,111	3,081
Orange	141,796	133,801	2	7,551	6,923	628	1,011	1,116	1,201	1,181
Union	226,606	201,292	3	42,278	39,938	2,340	4,229	4,725	2,085	2,027
Wake	1,046,791	900,993	22	159,462	148,323	11,139	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.

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 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

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 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.

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 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 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.

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

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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THE IMPORTANCE OF PLACE PROSPERITY IN ECONOMIC MOBILITY: AN EXAMINATION OF OCCUPATIONAL/INDUSTRIAL MISMATCH IN FORSYTH COUNTY

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ABSTRACT

Forsyth County, North Carolina, is currently the third-least economically mobile county in the entire country. Rather than using massive subsidies and tax abatements to attempt to attract businesses, the county needs to focus more on occupational/industrial mismatch and allow the private sector to guide its efforts while providing assistance to its citizens to allow them to take advantage of the employment opportunities. We argue that the current targeted industries approach adopted by local government economic developers is unlikely to significantly rectify the mismatch and that rather than pursuing a top-down approach to economic development, a bottom-up approach that focuses on developing the workforce and providing transportation linkages to poorer individuals so they can take advantage of employment opportunities will be more beneficial for county residents.

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KEYWORDS:

competitive advantage, comparative advantage, economic mobility, local development,

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location quotient, spatial mismatch

I. INTRODUCTION

Forsyth County and the city of Winston-Salem are at a crossroads. Once supported by tobacco, furniture, and textiles manufacturing, the region is reinventing itself by targeting the following industries according to the Legacy 2030 plan (Winston-Salem/Forsyth County Planning Board 2018):

- advanced manufacturing
- biomedical research, production, and regenerative medicine
- corporate and regional headquarters
- design
- financial services
- insurance and investment companies
- logistics/distribution
- medical services
- travel/tourism

A nonprofit that does external marketing for the region, Winston-Salem Business Inc. (2018), has similarly targeted the industries of advanced manufacturing, financial services, distribution/logistics, healthcare/life sciences, and data centers. We do not include data centers in the discussion because they tend to create few permanent jobs despite often attracting huge incentive offers (Lenio 2015). However, if well-paying jobs created by these industries are not suitable for current residents, positions will go to migrants, which can exacerbate regional economic inequality.

We examine the Legacy 2030 Plan and the Winston-Salem Poverty Thought Force Report (2017) in order to determine whether planned future growth will perpetuate or mitigate existing inequities. This is especially important as Forsyth County is the third-least economically mobile county in the entire country (Garber 2017).

The demographics in Forsyth County suggest a region well suited for the targeted industry clusters. Nearly 32 percent of Forsyth County residents have a bachelor's degree according to Winston-Salem Business Inc. (2018). Although wages are below the national average, so is the cost of living. The city hosts two Fortune 500 companies: Hanesbrands, one of the largest clothing manufacturers in the world, and BB&T, one of the top ten banks in the country.[2] It also serves as the headquarters for Reynolds American, the wholly owned American subsidiary of British American Tobacco, the world's largest cigarette manufacturer.

1. This might not last as BB&T plans to relocate its headquarters to Charlotte as part of its merger with SunTrust.

Forsyth County has tried to shift its focus from tobacco and textiles to services and biotechnology. As the environment has changed, workers who once earned solid middle-class wages have found themselves unemployed or working in the much lower-paid retail sector.

The county is not to blame for the loss of those old industries. Market environments inevitably change. In the face of shifting circumstances, the government rightly realizes it must chart a new way forward for the region. However, while the county is attempting to attract businesses using tax abatements, which will further reduce its ability to alleviate poverty, it has done little to position its poorest residents to be able to take advantage of these opportunities. Currently, the healthcare and social-assistance industry accounts for 18 percent of county employment and only 9 percent of employees in the area work in manufacturing (Winston-Salem Business Inc. 2016). While this mirrors the rest of the country, trade and jobs flow based on *relative* strengths, not absolute ones.

Is Forsyth County targeting the right industries, given its workforce's training and occupational skill sets? To examine this question, we explore two economic concepts: industrial clusters (industries with similar employment qualifications and wages and benefits) and occupational structure (regarding which occupations are required for various industries).

The term "industrial cluster" comes from Michael Porter (1990), who uses the term to discuss how certain industries display agglomeration effects that allow companies within those industries to create a competitive advantage that allows for huge industrial potential for the entire region. However, what happens when the industry upon which your region's competitive advantage rests starts to decline? It is necessary to stake out a new competitive advantage. It is to that task that we turn.

Industries clustered together provide similar opportunities. If declining industries are clustered with growing industries, workers can easily move between them. If Forsyth County is not attracting industries providing well-paying jobs to current residents, the county will lack economic mobility (the ability to improve one's standard of living over time). In order to maximize the ability of individuals to rise economically, the transition from declining industries to growing industries needs to be as smooth as possible.

We study currently existing industrial clusters and occupational structures as clues to why the county has little upward economic mobility. The local government's reaction to the diminishing of old industries has been to stimulate economic activity by targeting industries that require high degrees of education. However, these types of industries are not good matches for workers who have lost jobs in more traditional industries. At the same time, some industries spur growth in others. Attracting industries that directly or indirectly provide jobs for everyone in an area will drastically reduce economic inequality

and boost economic mobility.

Finally, we provide an overview of the local labor market and business climate that can be used as a blueprint for future economic development efforts to provide the highest "return on investment" for the region given the county's occupational skill sets. If regional developers consider whether industries provide full-time jobs with benefits for workforces with similar training and occupational skill sets to those found in Forsyth County or if they can create the labor force needed for such businesses before they offer incentives to attract business, the economic climate in Forsyth County can be significantly improved.

Economic mobility is not a new problem. Should jobs move to where the people are, or should people move to where the jobs are? This question has puzzled economists for generations. If the only goal is to have individuals move from relative deprivation to relative abundance, individuals should migrate to where opportunities exist. However, if communities are to be nurtured, the conversation shifts from promoting *people* prosperity to promoting *place* prosperity.

When people fail to move, they often require government assistance; reducing such assistance tends to induce migration. The critical issues are whether migrants are better off in their new location and whether the regions are more viable economically over the long term (Courchene 1981: 512). Savoie (1986) points out a critical missing factor. The debate over people versus place prosperity rests on the tenet that labor is as fully mobile as capital. But the tenet is not true. Individuals have an emotional attachment to place that capital does not. The resulting relative labor immobility detracts from economic mobility.

Some types of labor immobility are obvious and deep-rooted: language and citizenship are stumbling blocks for people looking to move across borders. Even within the United States, family obligations may prevent relocation or raise its costs. Housing tenure is at the highest level ever recorded. Once it was common to move every five years, but today the average length of tenancy is over ten years (Kusisto and Rexrode 2017). The rise of two-income households means location decisions are actually co-location decisions. When individuals are tied to households, the entire household must benefit from a move, not just the individual.

If individuals were as freely mobile as capital, people could simply move to where they could be successful. Labor mobility would be synonymous with economic mobility. However, if labor is less mobile than capital, capital should move to labor and there may be a role for government intervention to develop the workforce and keep people off welfare.

How can a region achieve the right match of capital for the currently available labor? Government must examine the industrial and occupational structure of a region and its demographics. When there is a mismatch, economic deprivation occurs. Creating

jobs by attracting industries that do not match the demographics of a region can lead to real problems. The resulting influx of workers from outside the area may well produce widespread discontentment that, when exacerbated by poverty, will bring no peace to a city, no prosperity to a place.

Those with high levels of education and experience tend to be more geographically mobile, but a hidden cost to moving is that much of the valuable social capital individuals have created around themselves is lost. For those on the bottom rungs of the economy, moving is often not even an option. Additionally, people tend to congregate with like-minded individuals from similar cultures. Individual relocation has a social cost as well as an economic cost.

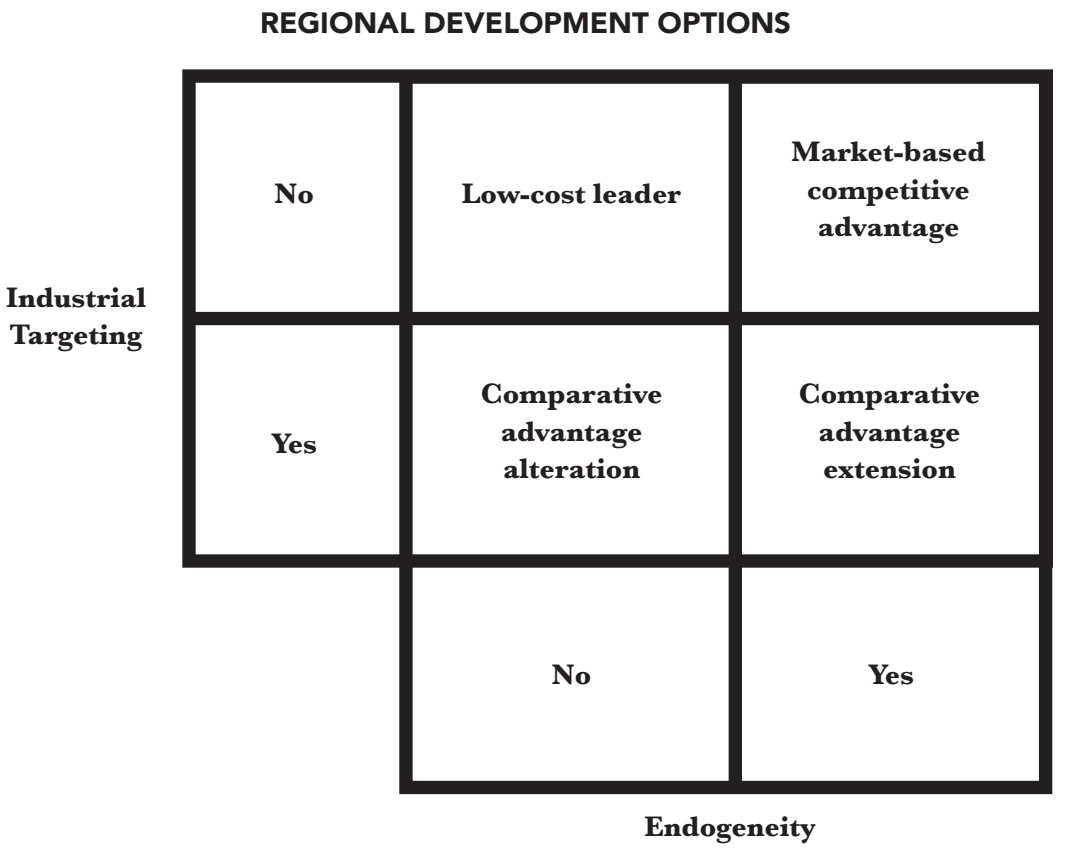
The opportunity and transaction costs involved in moving increase with age, and they may prove too burdensome for individuals to overcome. Individuals drop out of the labor market altogether, creating a tragic economic inefficiency and setting the individual and society on a trajectory toward poverty, not wealth. Furthermore, even if they can move or are forced to move because an increased cost of living makes the current situation untenable, unless individual job skills are upgraded, moving may merely make the problem move rather than go away since all this may end up doing is replicating the problem in a different location. Mitigating these inefficiencies requires decreasing geographic inequalities, not just *individual* inequalities.

II. METHODOLOGY AND DATA

Comparative advantages tend to lead to competitive advantages. A comparative advantage exists when one can produce a good at a lower opportunity cost than other goods. This can be because of large-scale investments in the industry, low labor costs relative to other industries in the same area, large amounts of resources, or a well-trained workforce. Areas that are very efficient in producing one particular good or service tend to specialize in that good or service and attract additional capital and labor to it. However, when external demand falls, what was once a vibrant industry that generated a lot of jobs can become an albatross around the neck of the area. The key to revitalizing an area is to shift one's comparative advantage as quickly as possible toward a new industry in ascendancy. Thus, one can look at the same things that led to the comparative advantage in the first place and seek to alter it by targeting new industries or by allowing the market to seek a new pathway given the available resources.

Madjd-Sadjadi and Pagiavlas (2011) identify four regional development options along two interrelated dimensions: endogeneity and industrial targeting. Endogeneity refers to whether the development strategy is to grow existing businesses in the area (endogeneity) or to attract new businesses to the area (non-endogeneity). Industrial targeting refers to

Figure 1. Regional Development Options (Madjd-Sadjadi and Pagiavlas 2011:4)



whether development officials are pursuing specific industries or whether their aim is merely to keep costs low in general.

The low-cost leader strategy is the most common method utilized and attempts to follow the pathway of reducing taxation and the costs of labor and land to induce outside firms to relocate and lead the region to prosperity. Such a method relies on tax increment financing, revenue bonds, tax abatements, and loan programs, among other policies. These policies place an increased strain on existing firms and households, which must pay higher taxes to pay for the tax incentives of new entrants. It can also pit localities against their neighbors trying to secure jobs and development.

When areas look to keep costs for firms low but do not favor outside firms with incentives, they are pursuing a market-based *competitive* advantage strategy. This allows the market to pick winners and losers and provides a low-cost playing field, encouraging growth from inside but also allowing for outside firms to relocate, effectively ensuring a level playing field.

Industrial targeting seeks to extend or alter a region's *comparative* advantage. Giving

favored treatment to firms currently in a region, as with the funding the High Point government provides to the High Point Furniture Market, is an example of comparative advantage *extension*, while attempts to gain traction with new firms, such as the establishment of Research Triangle Park in the Raleigh-Durham area of North Carolina in the late 1950s and early 1960s, is an example of comparative advantage *alteration*.

Industrial targeting is often engaged in for political reasons, rather than economic ones. Having a large firm create two hundred jobs in one location is politically very palatable to politicians even if it means that two hundred firms each lose one job because of higher taxes since public attention will always be drawn to the large company and the smaller company's losses will typically go unrecognized. Similarly, losing two hundred jobs from one firm will draw a lot of press scrutiny, while having two hundred firms each gain one job will likely be just a footnote. Such targeting reflects the notion that governments are "doing something positive" and politicians can point to their "successes" since these are highly concentrated visible benefits while the costs of higher taxation are often invisible as they are diffused across large constituencies. This, of course, assumes that the industrial targeting actually tips the balance such that firms relocate as a result of the incentives provided. But Bartik (2018) estimates that the provision of incentives for firms to relocate or expand does not actually impact the firms' decision at least 75 percent of the time and that this number could be as high as 98 percent. In such cases, the corresponding incentives are a pure net loss for the region. Yet even when they do tip the balance, it is unclear whether such measures are worth it given the unintended consequence of increasing the relative costs of other entities in the region. For further discussion on the political economy of industrial targeting and its ineffectiveness in creating employment opportunities, see Calcagno and Hefner (2018a, 2018b), Coyne and Moberg (2015), and Patrick (2014).

The effects of these four types of activities on economic growth are well documented, but there has been little research on their impact on individual economic mobility. This paper begins bridging this research gap. It takes a bottom-up approach to examine which industries are the most likely to increase economic mobility within Forsyth County.

We collected occupational data on the Winston-Salem, NC MSA (metropolitan statistical area) and all other MSAs in North Carolina greater than 250,000 in population. These were Charlotte-Concord-Gastonia, NC-SC MSA; Greensboro-High Point, NC MSA; Raleigh, NC MSA; Durham-Chapel Hill, NC MSA; Fayetteville, NC MSA; Asheville, NC MSA; Hickory-Lenoir-Morganton, NC MSA; and Wilmington, NC MSA. The MSA data were used rather than county-level data, which were not always as readily available. However, when information could be found at the county level, it was used. The inter- and intra-county commuting patterns reveal Winston-Salem to be the hub of

a substantially economically interdependent MSA. More than half the population of the MSA is in Forsyth County, with more than a third being in Winston-Salem itself.

The largest employers in Forsyth County are in the areas of healthcare, education, financial services, public administration, apparel, tobacco manufacturing, retail, communications, beverage distribution, aerospace, technology and logistics services, insurance, manufacturing, automotive sales and service, packaging, food and beverage, medical devices, legal services, healthcare supplements, benefits consulting, transportation, and heavy equipment (Winston-Salem Business Inc., 2016). We found that many of these companies are located relatively far away from the poorer neighborhoods and require high levels of specialized training that poorer residents do not have. Also, the fact that they contribute so much to the employment picture does pose some risks. While these large companies provide many opportunities for individuals in the area, what happens when one them leaves? Opportunities once granted can easily be taken away, as many former Reynolds and Hanesbrands employees know all too well. The county has historically relied on a few large employers rather than an abundant number of smaller employers. Could this be at the heart of the economic immobility in Forsyth County? It may be, as just thirty-four employers provide over 73,000 jobs in the county and just five private companies (Novant Health, Wake Forest University Baptist Medical Center, BB&T, Wells Fargo Bank, and Wake Forest University) provided 36,500 jobs in the county (Winston-Salem Business, Inc., 2017).

As noted above, five industries are currently being targeted by Winston-Salem Business, Inc. (advanced manufacturing, logistics/distribution, healthcare/life science, financial services, and data centers). The list overlaps with that in the Legacy 2030 report with the exception of the addition of data centers. Unfortunately, data centers often consist of server farms that do not provide widespread employment.

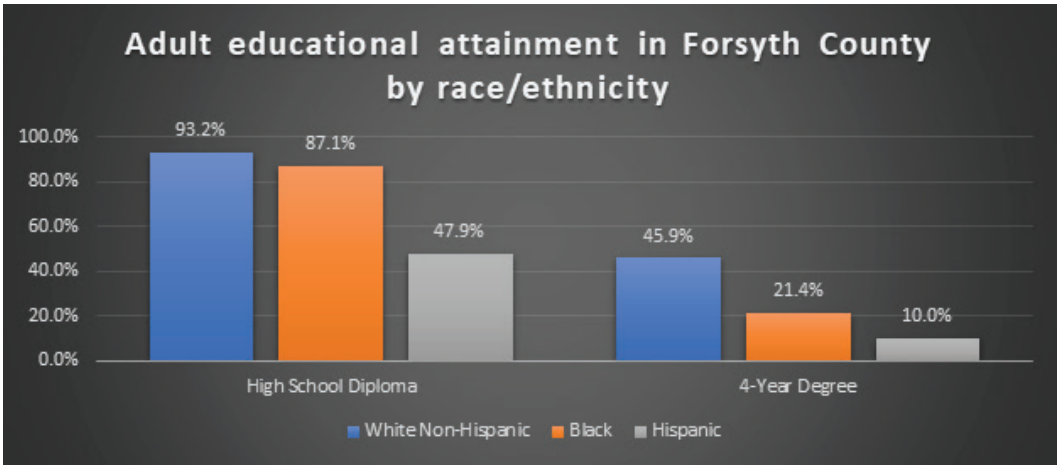
The principal source of data on occupational patterns is the county-level Occupational Employment Statistics (calculated annually) supplemented by occupational requirements.

III. RESULTS

The Winston-Salem/Forsyth County Planning Board (2018) notes, "Since many of the new jobs will require a higher skill and education level, there may be a mismatch between job skills demanded and job skills available." This is the biggest problem with the local government's current economic development efforts. If successful, one demographic segment will benefit and demand will be created leading to the migration of more of

3. Adults are defined as any resident who is at least twenty-five years of age. Anyone who completes a bachelor's degree has also received a high school diploma, and some people who have a high school diploma have gone on to take some college courses and may have an associate's degree even if they do not have a bachelor's degree.

Figure 2. Adult Educational Attainment in Forsyth County by Race/Ethnicity (US Census Bureau 2019)



that demographic into the area. While 32 percent of the overall population has at least a bachelor's degree, when broken down by race, the differences are significant.[3]

What is especially troubling is that while a little less than half of all whites who have at least a high school diploma also have at least a bachelor's degree, fewer than a quarter of all blacks and Hispanics who have completed high school have earned at least a bachelor's degree and fewer than half of all Hispanics have even completed high school.

This is an issue because most of the industries identified for industrial targeting require a college degree. Indeed, occupations in biomedical research, production, and regenerative medicine, corporate and regional headquarters, design, financial services, insurance and investment companies, and medical services all require highly specialized training in excess of high school diplomas and often require at least a bachelor's degree, if not more advanced degrees.

Additionally, with the exception of medical services, the percentage of total employment in these industries in the region is below that of the country as a whole. In other words, Winston-Salem suffers a competitive *disadvantage* in being able to provide labor for each of these industries. There is only one logical conclusion possible: Winston-Salem will have to attract labor from elsewhere. Such a migration will transform the community, will lead to gentrification, and will not address the critical social problem the city actually faces: how to ensure that people born at the lowest levels of the economy in Forsyth County are able to achieve economic success.

As shown in table 1, Winston-Salem enjoys a fairly significant labor-cost advantage in the vast majority of major occupational groups relative to the rest of the country. However, the area does not have a large trained workforce relative to the rest of the

Table 1. Occupational Wages and Employment by Major Group (Bureau of Labor Statistics 2017)

MAJOR OCCUPATIONAL GROUP	% OF TOTAL EMPLOYMENT		MEAN HOURLY WAGE		
	USA	WINSTON-SALEM	USA	WINSTON-SALEM	% DIFFERENCE (1)
Total, all occupations	100	100	$24.34	$21.59*	-11
Management	5.1	4.0*	57.65	61.60*	7
Business & financial operations	5.2	4.4*	36.7	35.78	-3
Computer & mathematical	3	1.7*	43.18	37.40*	-13
Architecture & engineering	1.8	1.1*	41.44	35.60*	-14
Life, physical, & social science	0.8	0.5*	35.76	28.86*	-19
Community & social service	1.5	1.0*	23.1	22.48	-3
Legal	0.8	0.6*	51.62	36.79*	-29
Education, training, & library	6.1	6.8	26.67	27.7	4
Arts, design, entertainment, sports, & media	1.4	0.8*	28.34	26.57*	-6
Healthcare practitioners & technical	6	8.3*	38.83	33.32*	-14
Healthcare support	2.9	4.2*	15.05	13.81*	-8
Protective service	2.4	1.8*	22.69	17.63*	-22
Food preparation & serving	9.3	9.1	11.88	10.08*	-15
Building & grounds cleaning/maintenance	3.1	3	13.91	11.46*	-18
Personal care & service	3.6	2.4*	13.11	11.91*	-9
Sales & related	10.2	9.6*	19.56	18.20*	-7
Office & administrative support	15.4	15	18.24	16.97*	-7
Farming, fishing, & forestry	0.3	0.1*	13.87	14.89	7
Construction & extraction	4	3.1*	24.01	18.61*	-22
Installation, maintenance, & repair	3.9	3.8	23.02	20.65*	-10
Production	6.3	10.4*	18.3	16.83*	-8
Transportation & material moving	7	8.2*	17.82	14.67*	-18

(1) A positive percent difference measures how much the mean wage in Winston-Salem is above the national mean wage, while a negative difference reflects a lower wage.
*The percent share of employment or mean hourly wage for this area is significantly different from the national average of all areas at the 90 percent confidence level.

Table 2. Occupational Wages and Employment by Detailed Occupation (Bureau of Labor Statistics 2017)

OCCUPATION	EMPLOYMENT		MEAN WAGES	
	TOTAL	LOCATION QUOTIENT	HOURLY	ANNUAL
Production occupations	27,360	1.6	$16.83	$35,000
First-line supervisors of production & operating workers	1,540	1.4	29.50	61,350
Coil winders, tapers, & finishers	70	2.7	14.27	29,670
Electrical/electronic/electromechanical assemblers, except coil winders/tapers/finishers	550	1.1	16.84	35,030
Assemblers/fabricators, all other, including team assemblers	4,400	1.8	13.87	28,850
Bakers	400	1.2	11.19	23,280
Butchers & meat cutters	240	1.0	14.27	29,670
Food & tobacco roasting, baking, & drying machine operators/tenders	330	8.5	24.90	51,800
Computer controlled machine tool programmers, metal/plastic	50	1.2	25.43	52,890
Extruding & drawing machine setters/operators/tenders, metal/plastic	290	2.1	14.51	30,180
Cutting, punching, & press machine setters/operators/tenders, metal/plastic	720	2.1	14.66	30,500
Machinists	890	1.3	20.15	41,920
Molding/coremaking/casting machine setters/operators/tenders, metal/plastic	920	3.2	14.98	31,160
Multipler machine tool setters/operators/tenders, metal/plastic	450	2.0	18.40	38,280
Tool & die makers	150	1.1	22.24	46,260
Welders, cutters, solderers, & brazers	990	1.4	17.50	36,410
Welding, soldering, & brazing machine setters/operators/tenders	290	4.0	22.68	47,170
Heat-treating equipment setters/operators/tenders, metal/plastic	60	1.7	12.56	26,130
Prepress technicians & workers	70	1.3	19.46	40,490
Printing press operators	610	1.9	16.95	35,250
Print binding & finishing workers	110	1.2	13.70	28,490
Pressers, textile, garment, & related materials	130	1.6	11.70	24,340
Sewing machine operators	670	2.6	11.31	23,510
Textile bleaching & dyeing machine operators & tenders	50	2.9	13.96	29,040

OCCUPATION	EMPLOYMENT		MEAN WAGES	
	TOTAL	LOCATION QUOTIENT	HOURLY	ANNUAL
Textile cutting machine setters, operators & tenders	80	3.2	13.01	27,050
Textile knitting/weaving machine setters, operators & tenders	170	4.5	no data	no data
Textile winding, twisting & drawing out machine setters/operators/tenders	930	16.3	14.23	29,590
Upholsterers	150	2.5	17.24	35,870
Textile, apparel, & furnishings workers, all other	70	2.6	13.39	27,860
Cabinetmakers & bench carpenters	240	1.3	15.22	31,660
Furniture finishers	70	2.0	15.00	31,190
Sawing machine setters, operators, & tenders, wood	280	2.9	15.66	32,570
Woodworking machine setters, operators/ tenders, except sawing	800	5.4	14.17	29,470
Power plant operators	140	2.3	39.01	81,130
Separating/filtering/clarifying/precipitating/still machine setters/operators/tenders	650	7.3	29.52	61,400
Mixing and blending machine setters, operators, & tenders	260	1.1	17.06	35,480
Cutting & slicing machine setters, operators, & tenders	230	2.1	16.67	34,670
Extruding, forming, pressing, & compacting machine setters/operators/tenders	150	1.1	17.64	36,690
Furnace, kiln, oven, drier, & kettle operators & tenders	80	2.3	13.99	29,100
Inspectors, testers, sorters, samplers, & weighers	1,330	1.3	16.95	35,260
Medical appliance technicians	40	1.6	18.96	39,440
Packaging & filling machine operators & tenders	1,090	1.5	20.01	41,620
Coating, painting, & spraying machine setters, operators/tenders	370	2.3	16.26	33,820
Painters, transportation equipment	120	1.2	20.63	42,910
Photographic process workers & processing machine operators	50	1.2	15.07	31,340
Adhesive bonding machine operators & tenders	160	5.4	14.38	29,920
Paper goods machine setters, operators & tenders	310	1.8	17.25	35,890
Helpers — production workers	2,230	3.0	14.25	29,640

nation except in the areas of transportation and material moving, production, and healthcare practitioners. We define an area as having a competitive advantage when the location has more labor than the national average, given its population. When the location quotient is above 1, there are more workers in the area than the national average. Thus, if an occupation has a location quotient of 2, there are twice as many workers as the national average, given the area's population size. As can be seen from table 1, Forsyth County has a competitive advantage in only two areas identified in the Legacy 2030 Plan, logistics (using the occupational group of transportation and material moving) and healthcare.

Simply put, Forsyth County does not currently have the labor force in place to allow the targeted industries to create a substantial number of jobs for the current populace. This takes us to the next question: if the county does not have the labor force in place, can it train the existing labor force to do these jobs quickly enough so as to not have to bring in much labor from other areas? After all, why recruit companies when you do not already have a trained workforce for them to use? Training costs money, and since other areas have comparable labor costs but also have a workforce that is already trained and available, we do not see the county's low costs helping it much in comparison to its competitors. Yet the Legacy 2030 plan is supposed to be fully implemented in just eleven years.

As noted, things do not improve when we drill down to individual occupations. Given the large number of individuals who lack a college education, we showcase in table 2 those occupations for which a community college or university education is not needed and for which we have evidence that the location quotient is at least 1. The figure for total employment is the number of individuals employed in that occupation, excluding self-employed individuals.

Competitive advantages are in food and tobacco roasting, baking and drying machine operators and tenders, textile workers, and woodworking. These have been the traditional fields in the local economy for generations. For all the talk of going from tobacco to technology (Elliott 2016), the county hasn't moved sufficiently in that direction compared to the rest of the country.

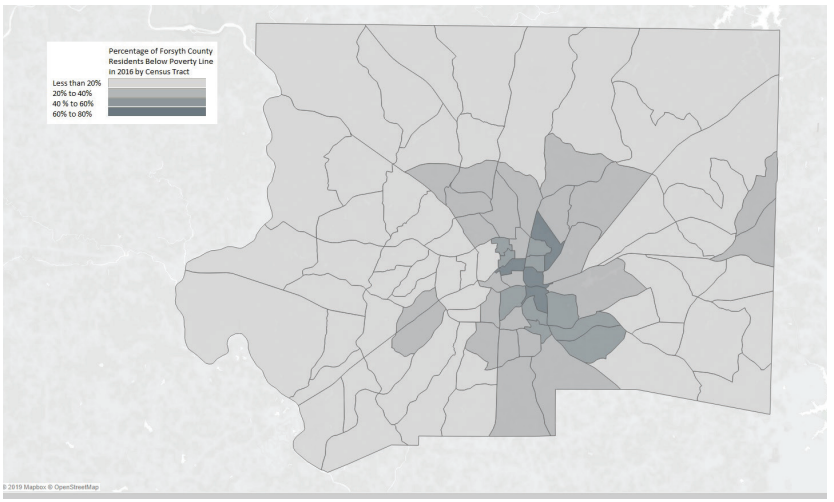
Could education help citizens adapt and achieve success within the next eleven years? It appears highly unlikely. More students are coming from poor and minority groups who do not attend postsecondary schools to the same extent. The percentage of white students has fallen dramatically over the past twenty-five years, while the percentage of blacks has remained level and the Hispanic student population has grown rapidly. Black and Hispanic youth are not attending university at the same rates as white students. Currently, 29 percent of all elementary and secondary school students in Forsyth County are black and 25 percent are Hispanic (WSFCS 2019a) but blacks only account for 25 percent and

Hispanics only 4 percent of all postsecondary degree holders (DataUSA 2018).

Of college students attending schools in Winston-Salem, fewer than half are getting degrees leading to jobs in targeted industries. Of those that are getting related degrees, more than half are in the medical-services industry (DataUSA 2018), with over 20 percent of students in the area majoring in nursing. An expanding economy cannot be supported solely by an industry serving local health needs.

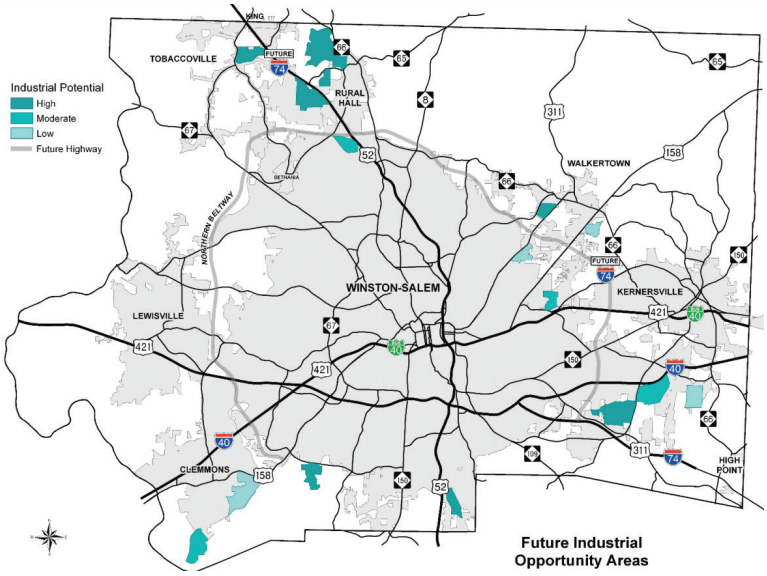
The three targeted industries that don't require a college degree are advanced manufacturing, logistics, and travel/tourism. Can these contribute to *place* prosperity? The poor do not live in areas where tourist destinations can be developed. Logistics could be expanded, especially since the area has a competitive advantage, which will only grow with the addition of the I-74 freeway connector, but we should expect this to happen naturally without need for targeted government incentives. Growing advanced manufacturing will not help much because locations where facilities can be located are not near the main areas of poverty. Unless poverty-stricken areas, which are primarily concentrated around I-40 to the south of the city and east of US Route 52 (the darker the region in figure 3, the greater the percentage of the population in poverty), can be

Figure 3. Percent of Population in Poverty by Forsyth County Census Track (US Census Bureau 2018)



connected with the potential industrial opportunity areas, which are principally on the outskirts of the county (the green areas shown on figure 4 have the greatest potential for industrial activity), those at the bottom of the economic ladder will not benefit. Unfortunately, the current public transportation system does not adequately do this. City bus routes use a hub-and-spokes system that does not deliver efficient transportation to work sites as buses only come once an hour and multiple buses are required to reach most

Figure 4. Forsyth County's Potential Industrial Areas (Winston-Salem/Forsyth County Planning Board 2018: 94)



destinations in the city, if they can be reached at all by bus. Requiring workers to spend over an hour each way on the bus is simply not tenable. In fact, lack of access to adequate transportation is the reason that many bus riders turn down higher-paying opportunities (Richardson 2018).

The Winston-Salem MSA has a huge competitive advantage in textiles, furniture, and tobacco. In fact, as can be seen in table 3, of the top ten occupations for which the Winston-Salem MSA holds a competitive advantage based on location quotient (a location quotient of greater than 1), half are in those three industries and only one occupation, nurse anesthetist (in tenth place), is in one of the targeted industries.

Among the top twenty-five occupations, more than a third are related to those three industries and only four are found in targeted industries. Those occupations are in medical services (nurse anesthetists, healthcare support workers, and phlebotomists) or logistics (hand packers and packagers) and are not the type of export-oriented jobs necessary for a dramatic alteration of the economy. After all, medical services see demand driven almost exclusively by local needs and hand packing of materials is likely to be automated in the near future.

Leaving aside the medical-services industry, of the top 165 occupational groups for which the Winston-Salem MSA holds a competitive advantage based on location quotient over the rest of the country, only the occupations in table 4 are found in targeted industries and, in many cases, the area has only a slight competitive advantage.

Examining the top thirty occupations on this list reveals that Winston-Salem holds

Table 3. Detailed Occupational Location Quotients (Bureau of Labor Statistics 2017)

DETAIL OCCUPATIONAL LISTING	LOCATION QUOTIENT
Textile winding, twisting, and drawing out machine setters, operators, & tenders	**16.31**
Food & tobacco roasting, baking, & drying machine operators & tenders	**8.46**
Separating, filtering, clarifying, precipitating, & still machine setters, operators, & tenders	7.26
Criminal justice & law enforcement teachers, postsecondary	7.21
Adhesive bonding machine operators & tenders	**5.41**
Woodworking machine setters, operators, & tenders, except sawing	**5.39**
Textile knitting & weaving machine setters, operators, & tenders	**4.47**
Welding, soldering, & brazing machine setters, operators, & tenders	4.03
Career/technical education teachers, middle school	3.51
Nurse anesthetists	***3.37***
Helpers — electricians	3.32
Textile cutting machine setters, operators, and tenders	**3.24**
Molding/coremaking/casting machine setters/operators/tenders, metal/plastic	3.20
Helpers — production workers	2.99
Textile bleaching & dyeing machine operators & tenders	**2.91**
Sawing machine setters, operators, & tenders, wood	**2.86**
Healthcare support workers, all other	*2.85*
Real estate brokers	2.79
Coil winders, tapers, & finishers	2.67
Sewing machine operators	**2.64**
Phlebotomists	***2.61***
Textile, apparel, & furnishings workers, all other	**2.60**
Upholsterers	**2.52**
Career/technical education teachers, secondary school	2.46
Packers & packagers, hand	***2.45***

Table 4. Location Quotients of Top 165 Occupations in Targeted Industries (Bureau of Labor Statistics 2017)

RANKING	OCCUPATIONAL DESCRIPTION	INDUSTRY	LOCATION QUOTIENT
25	Packers & packagers, hand	Logistics/distribution	2.45
34	Credit analysts	Financial services	2.18
44	Claims adjusters, examiners, & investigators	Insurance/investment	2.02
47	Industrial engineering technicians	Advanced manufacturing	1.99
53	Loan officers	Financial services	1.95
59	Biomedical engineers	Biomedical	1.91
65	Compensation & benefits managers	Corporate/regional HQs	1.82
70	Financial examiners	Insurance/investment	1.76
80	Industrial truck & tractor operators	Logistics/distribution	1.61
84	Ushers, lobby attendants, & ticket takers	Travel/tourism	1.57
85	Pharmacists	Biomedical	1.55
86	Chemists	Biomedical	1.53
87	Cooks, fast food	Travel/tourism	1.52
88	Packaging & filling machine operators/tenders	Logistics/distribution	1.50
98	Industrial production managers	Advanced manufacturing	1.38
99	Industrial engineers	Advanced manufacturing	1.38
105	Medical records & health information technicians	Insurance/investment	1.33
106	Inspectors, testers, sorters, samplers, & weighers	Logistics/distribution	1.33
110	Order clerks	Logistics/distribution	1.30
111	Data entry keyers	Corporate/regional HQs	1.30
113	Receptionists and information clerks	Corporate/regional HQs	1.28
116	Food preparation/serving workers, including fast food	Travel/tourism	1.27
117	New account clerks	Corporate/regional HQs	1.27
118	Human resources assistants, except payroll/ timekeeping	Corporate/regional HQs	1.27
120	Amusement and recreation attendants	Travel/tourism	1.26

RANKING	OCCUPATIONAL DESCRIPTION	INDUSTRY	LOCATION QUOTIENT
122	Office & administrative support workers, all other	Corporate/regional HQs	1.26
123	Personal financial advisors	Insurance/investment	1.25
124	Nuclear medicine technologists	Biomedical	1.25
126	First-line supervisors of food preparers/servers	Travel/tourism	1.24
130	Loan interviewers and clerks	Financial services	1.22
131	Medical secretaries	Biomedical	1.22
132	Computer numerically controlled machine tool programmers, metal & plastic	Advanced manufacturing	1.22
140	Hosts, restaurant, lounge, & coffee shop	Travel/tourism	1.19
143	Pharmacy technicians	Biomedical	1.18
145	Computer/automated teller/office machine repairers	Advanced manufacturing	1.18
146	Automotive service technicians & mechanics	Logistics/distribution	1.18
147	Mobile heavy equipment mechanics, except engines	Logistics/distribution	1.18
153	Maids & housekeeping cleaners	Travel/tourism	1.14
157	Bus & truck mechanics & diesel engine specialists	Logistics/distribution	1.13
158	Electrical, electronic, & electromechanical assemblers, except coil winders, tapers, & finishers	Advanced manufacturing	1.13
160	Weighers/measurers/checkers/samplers, recordkeeping	Logistics/distribution	1.12
162	Title examiners, abstractors, & searchers	Insurance/investment	1.11
164	Cargo & freight agents	Logistics/distribution	1.11
165	Tool & die makers	Advanced manufacturing	1.11

a competitive advantage in the nine found in tables 5a and 5b compared to its primary North Carolina rivals in that it has a location quotient greater than all other MSAs in the state.

With the exception of claims adjusters/examiners/investigators and pharmacists, an available workforce in these occupations is unlikely to drive corporate investment and relocation.

Industries require multiple occupations that tend to be within the same broad categories. The only major occupational category in which Winston-Salem holds a

Table 5a. Detailed Occupational Location Quotients by MSA (Bureau of Labor Statistics 2017)

MSA	DETAILED OCCUPATION	LOCATION QUOTIENT
Winston-Salem, NC	***Packers and packagers, hand***	***2.45***
Greensboro-High Point, NC	Packers and packagers, hand	1.61
Charlotte-Concord-Gastonia, NC-SC	Packers and packagers, hand	1.41
Raleigh, NC	Packers and packagers, hand	0.76
Durham-Chapel Hill, NC	Packers and packagers, hand	0.64
Wilmington, NC	Packers and packagers, hand	0.49
Winston-Salem, NC	***Claims adjusters/examiners/investigators***	***2.02***
Raleigh, NC	Claims adjusters/examiners/investigators	1.32
Charlotte-Concord-Gastonia, NC-SC	Claims adjusters/examiners/investigators	1.19
Greensboro-High Point, NC	Claims adjusters/examiners/investigators	1.15
Durham-Chapel Hill, NC	Claims adjusters/examiners/investigators	0.65
Wilmington, NC	Claims adjusters/examiners/investigators	0.59
Winston-Salem, NC	***Industrial engineering technicians***	***1.99***
Raleigh, NC	Industrial engineering technicians	1.93
Asheville, NC	Industrial engineering technicians	1.84
Greensboro-High Point, NC	Industrial engineering technicians	1.33
Charlotte-Concord-Gastonia, NC-SC	Industrial engineering technicians	0.91
Durham-Chapel Hill, NC	Industrial engineering technicians	(data suppressed)
Winston-Salem, NC	***Industrial truck & tractor operators***	***1.61***
Charlotte-Concord-Gastonia, NC-SC	Industrial truck & tractor operators	1.52
Greensboro-High Point, NC	Industrial truck & tractor operators	1.33
Wilmington, NC	Industrial truck & tractor operators	0.77
Raleigh, NC	Industrial truck & tractor operators	0.74
Durham-Chapel Hill, NC	Industrial truck & tractor operators	0.28
Winston-Salem, NC	***Pharmacists***	***1.55***
Durham-Chapel Hill, NC	Pharmacists	1.23
Wilmington, NC	Pharmacists	1.00
Raleigh, NC	Pharmacists	0.95
Charlotte-Concord-Gastonia, NC-SC	Pharmacists	0.85

MSA	DETAILED OCCUPATION	LOCATION QUOTIENT
Greensboro-High Point, NC	Pharmacists	0.79
Winston-Salem, NC	***Cooks, fast food***	***1.52***
Wilmington, NC	Cooks, fast food	1.41
Durham-Chapel Hill, NC	Cooks, fast food	0.57
Charlotte-Concord-Gastonia, NC-SC	Cooks, fast food	0.47
Raleigh, NC	Cooks, fast food	0.42
Greensboro-High Point, NC	Cooks, fast food	0.24

Table 5b: Detailed Occupational Location Quotients by MSA (Bureau of Labor Statistics 2017)

MSA	DETAILED OCCUPATION	LOCATION QUOTIENT
Winston-Salem, NC	***Medical records/health information techicians***	***1.33***
Charlotte-Concord-Gastonia, NC-SC	Medical records/health information techicians	0.96
Durham-Chapel Hill, NC	Medical records/health information techicians	0.88
Greensboro-High Point, NC	Medical records/health information techicians	0.72
Wilmington, NC	Medical records/health information techicians	0.68
Raleigh, NC	Medical records/health information techicians	0.62
Winston-Salem, NC	***Data entry keyers***	***1.30***
Raleigh, NC	Data entry keyers	1.25
Wilmington, NC	Data entry keyers	1.18
Greensboro-High Point, NC	Data entry keyers	0.95
Charlotte-Concord-Gastonia, NC-SC	Data entry keyers	0.75
Durham-Chapel Hill, NC	Data entry keyers	0.63
Winston-Salem, NC	***Nuclear medicine technologists***	***1.25***
Raleigh, NC	Nuclear medicine technologists	0.79
Charlotte-Concord-Gastonia, NC-SC	Nuclear medicine technologists	0.56

Table 6. Major Occupation Location Quotients by MSA—Advanced Manufacturing (Bureau of Labor Statistics 2017)

MSA	MAJOR OCCUPATIONAL GROUP	LOCATION QUOTIENT
Greensboro-High Point, NC	Installation, Maintenance, & Repair Occupations	1.16
Charlotte-Concord-Gastonia, NC-SC	Installation, Maintenance, & Repair Occupations	1.11
Wilmington, NC	Installation, Maintenance, & Repair Occupations	1.08
Raleigh, NC	Installation, Maintenance, & Repair Occupations	1.02
Winston-Salem, NC	***Installation, Maintenance, & Repair Occupations***	***0.99***
Durham-Chapel Hill, NC	Installation, Maintenance, & Repair Occupations	0.74
Greensboro-High Point, NC	Production Occupations	1.86
Winston-Salem, NC	***Production Occupations***	***1.64***
Charlotte-Concord-Gastonia, NC-SC	Production Occupations	1.05
Durham-Chapel Hill, NC	Production Occupations	0.71
Wilmington, NC	Production Occupations	0.55
Raleigh, NC	Production Occupations	0.53
Greensboro-High Point, NC	Transportation & Material Moving Occupations	1.40
Charlotte-Concord-Gastonia, NC-SC	Transportation & Material Moving Occupations	1.20
Winston-Salem, NC	***Transportation & Material Moving Occupations***	***1.17***
Wilmington, NC	Transportation & Material Moving Occupations	0.87
Raleigh, NC	Transportation & Material Moving Occupations	0.84
Durham-Chapel Hill, NC	Transportation & Material Moving Occupations	0.83

competitive advantage against all major competitors is healthcare support occupations. Looking at the individual major occupational groups necessary for each of the targeted industries reveals how difficult it will be to attract major companies to the area without large-scale tax incentives.

Major occupations in advanced manufacturing are production and maintenance workers and logistics. Greensboro is the best-equipped MSA for these particular areas as it has the highest location quotient of any MSA for these occupations (table 6):

In biomedical research, workers are needed in the Life, Physical, and Social Science

Table 7. Major Occupation Location Quotients by MSA—Biomedical Research (Bureau of Labor Statistics 2017)

MSA	MAJOR OR DETAILED OCCUPATIONAL GROUP	LOCATION QUOTIENT
Durham-Chapel Hill, NC	Major or detailed occupational group	3.89
Raleigh, NC	Major or detailed occupational group	1.60
Wilmington, NC	Major or detailed occupational group	1.44
Winston-Salem, NC	***Major or detailed occupational group***	***0.67***
Greensboro-High Point, NC	Major or detailed occupational group	0.62
Charlotte-Concord-Gastonia, NC-SC	Major or detailed occupational group	0.61
Durham-Chapel Hill, NC	Healthcare practitioners & technical occupations	1.50
Winston-Salem, NC	***Healthcare practitioners & technical occupations***	***1.40***
Wilmington, NC-SC	Healthcare practitioners & technical occupations	1.19
Raleigh, NC	Healthcare practitioners & technical occupations	0.87
Greensboro-High Point, NC	Healthcare practitioners & technical occupations	0.83
Charlotte-Concord-Gastonia, NC-SC	Healthcare practitioners & technical occupations	0.82
Durham-Chapel Hill, NC	Biomedical engineers	7.15
Winston-Salem, NC	***Biomedical engineers***	***1.91***

Occupations group, the Healthcare Practitioners and Technical Occupations group, and the Biomedical Engineer group. Durham-Chapel Hill clearly leads in all of these (table 7):

Corporate and regional headquarters, financial services, and insurance and investment companies need workers in management, business and financial operations, computer and mathematical, legal, sales, and administrative support (table 8). Out of the six major MSAs in the state Winston-Salem ranks last or fifth in all but administrative support (fourth) and legal occupations (third) in terms of location quotient.

Nothing is less competitive than tourism/travel and design when it comes to the location quotient of the Winston-Salem MSA in comparison to that of the other MSAs (table 9). This is troubling since Winston-Salem calls itself the City of the Arts and is home to the University of North Carolina School of the Arts. With few local opportunities for these graduates, the area rarely holds onto the individuals who come from all over the world to study.

Table 8. Major Occupation Location Quotients by MSA—Headquarters/Finance (Bureau of Labor Statistics 2017)

MSA	MAJOR OCCUPATIONAL GROUP	LOCATION QUOTIENT
Durham-Chapel Hill, NC	Management	1.15
Charlotte-Concord-Gastonia, NC-SC	Management	1.03
Raleigh, NC	Management	0.96
Greensboro-High Point, NC	Management	0.81
Winston-Salem, NC	***Management***	***0.78***
Wilmington, NC	Management	0.77
Durham-Chapel Hill, NC	Business & financial operations	1.36
Charlotte-Concord-Gastonia, NC-SC	Business & financial operations	1.29
Raleigh, NC	Business & financial operations	1.23
Greensboro-High Point, NC	Business & financial operations	0.87
Winston-Salem, NC	***Business & financial operations***	***0.84***
Wilmington, NC	Business & financial operations	0.73
Durham-Chapel Hill, NC	Computer & mathematical	2.07
Raleigh, NC	Computer & mathematical	1.81
Charlotte-Concord-Gastonia, NC-SC	Computer & mathematical	1.34
Wilmington, NC	Computer & mathematical	0.63
Greensboro-High Point, NC	Computer & mathematical	0.62
Winston-Salem, NC	***Computer & mathematical***	***0.57***
Raleigh, NC	Legal	0.99
Charlotte-Concord-Gastonia, NC-SC	Legal	0.83
Winston-Salem, NC	***Legal***	***0.80***
Wilmington, NC	Legal	0.73
Durham-Chapel Hill, NC	Legal	0.64
Greensboro-High Point, NC	Legal	0.44
Raleigh, NC	Sales & related	1.18
Wilmington, NC	Sales & related	1.18
Charlotte-Concord-Gastonia, NC-SC	Sales & related	1.11
Greensboro-High Point, NC	Sales & related	0.97

MSA	MAJOR OCCUPATIONAL GROUP	LOCATION QUOTIENT
Winston-Salem, NC	***Sales & related***	***0.94***
Durham-Chapel Hill, NC	Sales & related	0.78
Greensboro-High Point, NC	Office & administrative support	1.04
Wilmington, NC	Office & administrative support	1.02
Charlotte-Concord-Gastonia, NC-SC	Office & administrative support	1.00
Winston-Salem, NC	***Office & administrative support***	***0.97***
Raleigh, NC	Office & administrative support	0.95
Durham-Chapel Hill, NC	Office & administrative support	0.87

Table 9. Major Occupation Location Quotients by MSA—Tourism and Design (Bureau of Labor Statistics 2017)

MSA	MAJOR OCCUPATIONAL GROUP	LOCATION QUOTIENT
Durham-Chapel Hill, NC	Arts, design, entertainment, sports, & media	1.08
Raleigh, NC	Arts, design, entertainment, sports, & media	0.94
Charlotte-Concord-Gastonia, NC-SC	Arts, design, entertainment, sports, & media	0.86
Wilmington, NC	Arts, design, entertainment, sports, & media	0.75
Greensboro-High Point, NC	Arts, design, entertainment, sports, & media	0.64
Winston-Salem, NC	***Arts, design, entertainment, sports, & media***	***0.59***

IV. RECOMMENDATIONS

Industrial targeting will not successfully provide economic mobility for current county residents. Although technological brain hubs can provide meaningful employment for local service workers (Moretti 2012), realizing a strategy of altering comparative advantage, given current low location quotients, would require large-scale in-migration of laborers, which would dramatically alter the culture of the region. Other regions in the state are better positioned to attract these industries. Shifting from industrial targeting

toward making the region more competitive and providing incentives for entrepreneurial efforts can achieve exceptional dividends.

We are at the beginning of the fourth industrial revolution. The first three were production mechanization, mass production, and production automation. Of those now in first grade (class of 2030), 65 percent may end up working in occupations that currently do not exist (Davidson 2011: 18). Therefore, we make the recommendations below and urge a refocusing on creative entrepreneurial opportunities so Forsyth County can be at the forefront of emerging technology. Rather than catching the last wave, Winston-Salem would be better off positioning itself for the next.

A. CREATION OF AN EARLY COLLEGE AT WINSTON-SALEM STATE UNIVERSITY

We recommend creation of an "Early College" at Winston-Salem State University for bright high school students located in low-income areas. This would allow students to obtain a high school diploma and two years of college credit by the age of eighteen,

Table 10. 2013-14 Bachelor's Degree Recepients (After 4 Years of Employment)

PUBLIC UNIVERSITY	% OF GRADUATES EMPLOYED IN NC
Winston-Salem State University	**80%**
UNC Pembroke	75%
North Carolina Central University	74%
UNC Greensboro	73%
UNC Charlotte	72%
Western Carolina University	72%
East Carolina University	70%
Appalachian State University	69%
Fayetteville State University	66%
North Carolina State University	66%
North Carolina A&T	64%
Elizabeth City State University	61%
UNC Wilmington	61%
UNC Asheville	56%
UNC Chapel Hill	46%
UNC School of the Arts	17%

Source: North Carolina Department of Commerce Labor and Economic Analysis Divsion (2019)

with no tuition or textbook cost. Forsyth County has only one Early College program, located at Forsyth Technical Community College, and it serves about 220 students (Winston-Salem/Forsyth County Schools 2019b). Neighboring Guilford County has three times that number enrolled in Early Colleges at Greensboro College, Guilford Technical Community College, North Carolina A&T State University, and University of North Carolina at Greensboro, despite having a student population only 50 percent larger.

Poverty is like being locked in a room with no way to open the door. Early College can open the door for kids trapped in poverty and allow them to enter the workforce two full years sooner. Early College should be given a top priority in the county if we wish to see equitable growth. While one could theoretically simply increase the size of an Early College at Forsyth Technical Community College, having a pathway to a four-year institution provides additional options for students that are not afforded them if their option for an Early College is at a community college. It is for this reason that Guilford County has Early Colleges at multiple universities, not just at Guilford Technical

Table 11. 2013-14 Bachelor's Degree Recepients (After 4 Years of Employment)

PUBLIC UNIVERSITY	MEAN ANNUAL WAGES
Winston-Salem State University	**$48,664**
North Carolina State University	$48,466
UNC Charlotte	$45,280
East Carolina University	$43,186
UNC Chapel Hill	$41,480
Western Carolina University	$40,183
UNC Wilmington	$38,701
Appalachian State University	$38,242
UNC Greensboro	$36,549
North Carolina A&T	$34,791
Fayetteville State University	$34,580
UNC Pembroke	$34,248
North Carolina Central University	$32,671
UNC Asheville	$30,364
Elizabeth City State University	$28,247
UNC School of the Arts	$24,466

Source: North Carolina Department of Commerce Labor and Economic Analysis Divsion (2019)

Community College. Winston-Salem State University is ranked as the seventh-best university in the entire country and the best university in the Southern United States in terms of taking low-income students and graduating them in fields that allow them to do well financially (CollegeNet 2019). It also has the highest employment rate and highest average annual salary of any university in the University of North Carolina system (see tables 10 and 11) according to data from the North Carolina Department of Commerce's Labor and Economic Analysis Division (2019), which reinforces the fact that the university has already proven itself more than capable of fundamentally lifting its graduates out of poverty and into well-paying employment in the state.

This does not mean that the other three major universities in the area could not engage in a similar project. Indeed, we would welcome such an outcome. However, we do not think that the other three would be as suitable as Winston-Salem State University. One of them (Salem College) is a private women's-only college, which would mean that a significant demographic group (young men) would be left out. There is also the North Carolina School of the Arts, which, by its effective nature as a "public Julliard," has degree programs that are not well positioned for creating a well-remunerated North Carolina–based workforce without a corresponding large-scale government subsidy for the arts. Indeed, it has the lowest employment rate and lowest average annual salary of any university in the University of North Carolina system (North Carolina Department of Commerce Labor and Economic Analysis Division 2019). Finally, there is Wake Forest University, but it is located a considerable distance from the poorer areas of the city and would therefore require more busing. In addition, Wake Forest University is a national highly selective liberal arts university. Its graduates tend to leave the area, and its requirements for admission would mean that it could accommodate far fewer students than a regional public university could.

B. CREATION OF A PATENT-LAW PROGRAM

Patents are the primary mechanism by which new inventions and innovations are protected from copying. Patent-law attorneys must be qualified with a bachelor's degree in a STEM field and must pass the patent bar administered by the US Patent and Trademark Office. Instituting a one-year patent-law curriculum at either Wake Forest University or Winston-Salem State University would position it to be among a handful of schools around the country to have such a program. The program would also allow those with STEM degrees but without law degrees to qualify as patent agents. The median salary of a patent agent in the United States is $124,000 (American Intellectual Property Law Association 2015). The institution of such a program would make the area more attractive to innovative companies and give opportunities for patent-law attorneys and agents to provide meaningful and valuable services to area innovators.

C. REDISTRIBUTION OF FUNDING TO SCHOOLS IN LOW-INCOME AREAS

To provide similar educational opportunities for poorer children, we propose increasing funds available to schools on a per-pupil basis when the school serves a high-poverty area. This might be accomplished by reallocating existing funds. However, it should be noted that in 2014–15, Guilford County spent 22.8 percent more per student than Forsyth County (Public School Forum of North Carolina 2018). Given that each county is the other's closest competitor, reallocating funds rather than increasing funds could create a competitive disadvantage that significantly harms schools in poorer areas since supplemental instruction programs are often cut when budgets are tight as such after school instruction not considered a "core" academic element (Mehta and Fine 2019). Having the extra cushion of funding could help mitigate this consequence. At the same time, numerous studies find that simply increasing funding across the board is not the answer to improving educational outcomes since such funding can simply lead to decreased efficiency (Lips, Watkins, and Fleming 2008; Eom and Lee 2014; Stoneberg 2015; Ciro and Garcia 2018). However, participation in supplementary after-school education programs is highly correlated with superior outcomes (Zhou and Kim 2006; National Center for Education Evaluation and Regional Assistance 2009; Ramalingam and Griffith 2015; McCombs, Whitaker, Yoo 2017). Thus, funds would be used exclusively for supplementary after-school education and would have the added benefit of ensuring students are not left to return home as latchkey kids. These funds also do not have to be spent directly by the schools themselves but could instead be distributed to either for-profit or nonprofit enterprises. These private providers could come in to the various schools to provide the enrichment. Alternatively, funds could be distributed directly to families in the form of a scholarship enrichment account that would be portable and could be used for a variety of enrichment opportunities in the manner of Florida's innovative Reading Scholarship Accounts, which allow the funds to be used for private tutoring and summer reading classes (Florida Department of Education 2019).

Horizontal equity suggests equally situated individuals ought to be treated equally, while vertical equity means treating unequally situated individuals unequally. Schools in poorer neighborhoods face unique challenges and are often underfunded relative to needs when compared to more affluent areas. Numerous enrichment opportunities for children of wealthier parents are unavailable to children of poorer parents. Wealthier parents can supplement their children's lessons with private tutoring and, because they have college degrees themselves, they are better equipped to assist their children with homework. Often, poorer parents are unable to effectively get involved in their child's educational attainment (Chavkin and Williams 1989). One way to alleviate this is school-provided after-school tutoring, which impoverished families can rarely afford on their own.

D. CREATION OF ENTERPRISE ZONES

We propose creating enterprise zones in all census tracts where average family income is below the poverty line, which will limit the degree to which the benefits of the zones are captured by upper-income households (Reynolds and Rohlin 2015). We utilize this objective definition in order to get around the substantive issue that has plagued the creation of many enterprise zones, whereby they are located on the basis of political rather than economic rationales (Butler 1982). Although such a definition is not without its faults, its objective nature will reduce the likelihood of political interference. While evidence of job creation ranges from nonexistent (Neumark and Kolko 2010) to substantial (Ham et al. 2011), we believe such a zone would incentivize entrepreneurial development through tax abatements, subsidized infrastructure improvements, and regulatory relief not found in other areas, thereby channeling development dollars into the area. Effectively, the county could use enterprise zones to encourage voluntary transactions with corporate developers, offering them attractive business conditions in exchange for meaningful work opportunities for citizens in poorer areas. This is a way to open yet another door for people trapped economically.

E. RELOCATION ASSISTANCE

Whenever redevelopment in enterprise zones forces residents to move (Freedman 2012), the county can provide a five-year supplemental payment program to assist such individuals with the costs of relocation either within their community or to areas with better schools. This is in keeping with the advice of Moretti (2012, 158–65) to provide "relocation vouchers" to deal with the spatial-mismatch problem first identified in the literature by Kain (1968).

F. TRANSPORTATION ASSISTANCE

Reliable transportation decreases distance between places of poverty and prosperity, thereby reducing the significance of place for economic mobility. Because of issues with routes, existing public transit may limit the ability of individuals to adequately navigate the city. Ride-transportation solutions can be made available as part of a public-private partnership system. Hanesbrands, for example, often provides transportation for its workforce in other countries, while several Florida cities subsidize Uber rides within their municipalities (Dovey 2017). Dispelling fears that this might mean that government would end up cannibalizing existing regulated taxi services, Uber is also partnering with Mears Taxi to provide services in Central Florida (Herrera 2018). In the United States it assumed that transportation is the responsibility of the employee or the government. However, this is an unusual country in that while it has an advanced industrial living

standard for much of its population, there exists a massive economic disparity more akin to a composite developed/developing nation (Rieff 1992).

V. CONCLUSION

Forsyth County is third from the bottom in the entire nation when it comes to economic mobility, which clearly demonstrates that the current system is not working. Given that the targeted industries do not have a significant labor-market presence, targeting them is highly unlikely to improve mobility anytime soon. In addition, given that governments are notoriously bad at picking winners and losers, rather than targeting particular industries, governments could create the framework to allow markets to do the heavy lifting themselves. It is also necessary to position the county's poorer residents so that they can take advantage of such opportunities and to ensure that the government splits the benefits from growth in a more equitable manner by effectively compensating not just owners but also renters who may be required to relocate in order to create better opportunities for everyone. This will help to ensure the political buy-in necessary to advance pro-market reforms.

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CALCULATION AND CORPORATE TAX INCENTIVES

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ABSTRACT

Amazon's HQ2 campaign drew both large support at the possibility of job creation and backlash for perceived cronyism. In this paper we evaluate corporate tax-incentive policies in light of the Austrian contribution to the problem of economic calculation. In doing so we highlight the contextual nature of the knowledge problem associated with policy packages and the potential cronyism arising from such a problem. We argue that because political decision-makers lack the knowledge generated via competition in the market process, they are unable to allocate resources in a way that achieves economic growth. In place of this knowledge, through the political process they tend to gain knowledge, which helps them respond to political incentives and rent-seeking behavior by special interest groups.

KEYWORDS:

market process, economic calculation, knowledge problem, corporate tax incentives, rent-seeking

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"New York City is about to get tens of thousands of new, good paying jobs and Amazon is about to meet the most talented workforce in the world in one of the most diverse places on the planet."

-New York City mayor Bill de Blasio (Hanbury 2018)

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"We rarely agree with socialist Congresswoman-elect Alexandria Ocasio-Cortez, but she's right to call billions of dollars in taxpayer subsidies for Amazon 'extremely concerning'. These handouts to one of the richest companies in the history of the world, with an essentially zero cost of capital, is crony capitalism at its worst."

-Wall Street Journal Editorial Board (2018)[1]

I. INTRODUCTION

The preceding quotes provide a good picture of arguments often made for and against corporate tax incentives. The arguments themselves are based, ostensibly, on good intentions since both are plausible. On the one hand, when money is used to accomplish some particular goal (creating jobs) it can succeed. On the other hand, politicians' ability to give multibillion-dollar tax incentives provides ample space for political exchanges, which bestow concentrated benefits on well-informed special interest groups at the expense of ill-informed taxpayers, who bear the dispersed costs. Despite the truth in each of these claims, there is a glaring omission in both. Neither argument directly addresses the solution to the *economic* problem whereby resources are allocated to their most valued uses. But both of these arguments can be examined and evaluated in terms of the problem of economic calculation.

The purpose of this paper is to consider the ability of corporate tax incentives to accomplish identified objectives in light of politicians' inability to engage in economic calculation. Economic calculation refers to a competitive process whereby resources are allocated to their most highly valued uses. This process is generated in the marketplace by entrepreneurs who are lured by expected profit opportunities and disciplined by expected losses (Kirzner 1973).

While Amazon has drawn particular attention in the state of New York and the commonwealth of Virginia, our argument pertains to the Carolinas as well. Amazon recently declined the North Carolina Triangle Region's $2.2 billion incentive package offered to bring HQ2 to the area. While many mourned the loss of the potential HQ2, the analysis offered here paints a brighter picture of the state's inability to attract Amazon. By not needing to fulfill the promise of tax incentives, North Carolinians will avoid an unknowable opportunity cost. Citizens will not be required to support wealth-destroying jobs. Moreover, a potential instability associated with individuals'

1. As this quote illustrates, the terms "corporate tax incentives" and "subsidies" are often considered synonymous. However, Rothbard ([1970] 2009, 1218–21) effectively differentiates the two concepts. We agree with this differentiation, and we emphasize that corporate tax incentives are a different means whereby politicians encourage companies to take actions they would not otherwise take. In this way the policies are used to pick winners, as will be discussed throughout the paper.

declining confidence in the rule of law has been avoided. Finally, the non-intervention will also prevent the diversion of profit opportunities from productive to unproductive entrepreneurship. Although the benefits of nonintervention are hidden and dispersed, they are not totally unknowable. Our paper provides good reason for Carolinians and all others who "lost" the Amazon deal to celebrate the economic opportunities that exist in its stead.

In order to gain a full appreciation of how corporate tax incentives for Amazon relate to the problem of economic calculation, we start by discussing the problem of economic calculation in light of the socialist calculation debate. Ludwig von Mises ([1920] 1975) originally developed the critique that there could be no rational economic calculation within the institutional setting of socialism.[2] Outside the context of exchangeable private property rights, there are no market prices. Without prices, central planners would have no way to obtain the knowledge necessary to determine how to allocate capital to its most valued uses. This is because outside the context of private property, such economic knowledge embodied in market prices and profit-and-loss signals does not exist. Hayek (1940, 1945) further developed this critique by emphasizing the role prices play in the transmission and use of knowledge. Boettke (1998, 132) restates the Mises-Hayek position on the problem of economic calculation as one of discovering *contextual* knowledge and draws attention to its importance as "the contribution of twentieth-century Austrian economics to the discipline of political economy." As Boettke and many other economists recognize, however, the relevance of the question of economic calculation extends far beyond the socialist calculation debate.

In recent years there has been a deeper existential question posed by politicians and citizens in the United States regarding the ability of a free market to continue to provide economic growth. At the extreme, some have renewed calls for the socialist system of economic organization Mises and Hayek criticized. There are also seemingly less extreme yet more pervasive calls for engineering of the economy via incentives. Plans to grow the economy by creating jobs through tax incentives have been created and executed at the national and statewide levels. The latter policy type can be described as a sort of "noncomprehensive planning."

Despite the plans' promises of growth, it's not obvious that they engage in economic calculation to solve the economic problem. Thus, a proper understanding of economic calculation is needed to address national and state tax-incentive plans such as those associated with Amazon's HQ2. This paper contributes to a large literature that

2. Mises points out that because socialist economies lack private ownership of the means of production, there is no market in which the latter are exchanged. Without a market, there can be no monetary prices for the means of production. Finally, without monetary prices it is impossible to engage in rational economic calculation regarding the alternative uses of scarce capital goods.

applies the calculation argument to noncomprehensive planning in general. Lavoie ([1985] 2016) lays the groundwork for this literature by demonstrating that the socialist calculation debate is relevant to national economic planning. Lavoie specifically discusses reindustrialization plans of both "preservationists" and "futurists" and how the lack of profit-and-loss signals frustrates these approaches. Coyne (2013) and Skarbek and Leeson (2009) show how the success of international aid is limited by the inability of aid organizations to engage in economic calculation. Powell (2005) uses this approach to analyze the East Asian miracle and documents how that growth came about as a result of movement away from central planning. Duncan and Coyne (2013) and Coyne and Hall (2019) consider the calculation argument in the context of noncomprehensive planning in the state provision of defense. Finally, Coyne and Moberg (2015), along similar lines to this paper, address noncomprehensive planning associated with state-targeted benefits.

Our paper builds on this literature by considering the inability of politicians to engage in economic calculation to allocate resources via tax incentives in an economically efficient way. Since politicians do not have residual claimancy, as entrepreneurs do, they lack the knowledge to engage in economic calculation. Accordingly, the opportunity cost of the technical goals they are pursuing is not known. We contribute further by analyzing the fact that policy packages (such as the HQ2 policy) are implemented by a single authority and therefore their profitability is not subject to the same sort of contestability present in the market. We then highlight this point with a thought experiment that posits competing corporate tax-incentive policies. Lastly, we examine the knowledge that is discovered in the political process and how it leads to the arguments regarding cronyism often associated with such policies. In doing so, we demonstrate how these arguments, though important, follow from a more fundamental problem regarding the inability to engage in economic calculation.

The rest of the paper is structured as follows. Section II expounds upon the knowledge problem in corporate tax-incentive policies. Section III discusses the public choice implications of discovery in the political process as opposed to the market process. Section IV concludes with implications for incentive policies concerning Amazon's HQ2 and related policies.

II. THE KNOWLEDGE PROBLEM OF CORPORATE TAX-INCENTIVE ALLOCATION

In order to gauge the success or failure of any government program, there must be a standard to which we compare it. One option is to take the goals of each program as stated and consider whether the means are sufficient to accomplish those goals. In the case of Amazon HQ2 and corporate tax-incentive programs generally, proponents often

make several related claims.

One of the most common claims by politicians is the increasing number of jobs that could come as a result of the program.[3] The above quote by Mayor de Blasio is an oft-repeated refrain regarding these sorts of incentive schemes. The logic often goes that by offering competitive packages for corporations, they will invest heavily in the area and create long-lasting opportunities for the taxpayer that more than make up for the cost of any incentives offered to the company. These goals frequently go hand-in-hand with noncomprehensive industry-cluster plans that leverage metaphors such as "a new Silicon Valley" to illustrate a vision of a region built on the foundation of abundant high-paying jobs.

However, programs aren't often marketed on the basis of jobs alone. Often proponents contend that as a result of the new jobs in the region, the economy will grow. In a press conference regarding Amazon's HQ2 decision on New York, New York governor Andrew Cuomo echoed this sentiment, saying, "This is the largest economic development initiative that has ever been done by the city or the state or the city and state, together" (Soper, Brady, and Goldman 2019). Economic growth can then be considered a distinct but inextricably related goal on the basis of which success or failure can be determined.

One last associated goal is industrial robustness. Corporate tax-incentive policies can, on this view, be used to either preserve an existing industry viewed as vital or to accelerate the region's movement into futuristic industries that establish economic security for the years ahead. This is related to Lavoie's ([1985] 2016, 199) aforementioned distinction between "preservationist" and "futurist" goals. In this case, politicians attempt to act as entrepreneurs speculating on the success of industries. The futurist take is captured by a press conference in which Governor Cuomo argued in favor of the incentives on the basis that "Amazon is the technology of the future." He continued, "Either you are part of the economy of tomorrow, or you are a part of the economy of yesterday" (Raskin, 2019).

We first consider the goal of jobs alone. Empirical arguments can be made about whether any given policy creates jobs on net. For example, analyses considering factors such as crowded-out employers can estimate net job creation. Note that there is no reason to rule out a priori the possibility of job creation due to corporate tax incentives. Job creation is a technical problem. As with any *technical* problem, redirecting resources to the creation of an output creates more of that output.[4] Concretely, we can think of plenty of programs likely to result in job creation. Allocating resources to pyramid building or

3. Here and henceforth when we refer to politicians attempting to increase the number of jobs, we refer to attempts to increase expected employment and not to increase the number of potential jobs. Following Alchian and Allen ([1977] 1983, 304–5), we acknowledge the number of potential jobs is unlimited (see also Alchian 1969).

4. We can visualize this is through a simple production possibilities frontier, whereby more of good "Y" can be obtained provided society gives up increasing amounts of all other goods "X".

window breaking will lead to the creation of more jobs in architecture and window repair, respectively. In this sense the means of corporate tax incentives are sufficient to bring about the technical goal of job creation. However, this technical problem should not be mistaken for the *economic* problem of calculating the opportunity costs of scarce resources allocated to competing ends. Stated differently, the process of economic calculation, driven by profit-seeking entrepreneurs, tends to sort land, labor, and capital from a set of *technologically* viable projects those projects that are *economically* viable.

To illustrate this distinction, let us consider the production of railroads, as did Mises ([1920] 1975, 108–109; [1922] 1951, 121–122). An entrepreneur can choose between producing railroads made from platinum or iron. Generally speaking, however, we tend to see railroads built with iron. From a technological standpoint, it makes sense to produce railroads with platinum, given that it is a harder, more durable metal than iron. Why, then, are railroads not built with platinum? One might say, correctly so, that price of platinum is higher, and therefore entrepreneurs will tend to use less platinum in the production of railroads. But this introduces another question: where do the money prices come from? Such money prices are generated by entrepreneurs bidding for scarce platinum from owners of platinum and redirecting such platinum towards uses that are higher valued by consumers than the production of railroads. Herein lies the fundamental lesson of economic calculation: *within a context of private ownership of the means of production, it is only through the act of exchange that consumers' subjective valuations of scarce resources are communicated to entrepreneurs as economic knowledge through the price mechanism.*

The price mechanism serves a twofold role. First, prices serve an ex ante role of guiding expectations about the profitability of a productive activity. Second, prices serve an ex post role of assessing previous economic decisions, through profit-and-loss accounting, to determine whether in fact inputs were allocated to their most valued use (Boettke and Candela, 2017). However, economic calculation is predicated on the idea that entrepreneurs are residual claimants to their decision-making, and therefore respond to the economic knowledge embodied in prices and profit-and-loss accounting. Therefore, if entrepreneurs accrue profits, such knowledge will incentivize them to produce more of a good or service, whereas if entrepreneurs sustain losses, they will learn to adjust and curtail their production and redirect resources to more valuable uses. Given that political officials are not residual claimants to their decision-making, resources will be misallocated through the political process. This is not because political officials are malevolent, but because they are precluded from capturing profits and absorbing losses and therefore cannot respond, as entrepreneurs do, to informational signals embodied in money prices. Instead, as we discuss below, political officials respond to the knowledge made available to them in the political setting; more specifically, they learn how to allocate rents to special

interest groups that value them the most in exchange for votes.

Recall that the economic problem is distinct from the technical problem in that increasing some particular output comes at the opportunity cost of what could have been done with the resources used to increase that output. In this case, job creation as a goal comes at a cost. Since resources are scarce and can be used as means for competing ends, merely maximizing some technical output is not sufficient for creating economic growth. Entrepreneurs must also choose an allocation of resources that brings about the economically efficient output that maximizes the value of the output to the individuals in the society.[5] Therefore, there is a problem with considering job creation and economic growth as goals that are always compatible. Because job creation comes at some cost, tax credits and other incentives to corporations may encourage the employment of scarce labor in less valued productive activities that would have otherwise been forgone absent such incentives. Moreover, policy makers cannot claim that the intended goal of economic growth comes about by increasing jobs because it's possible that these two goals are antithetical to one another. Deeper still, without residual claimancy in their decision-making, policy makers cannot know all of the information (tacit and explicit) necessary to determine when resources have been allocated to their highest-valued use. They are unable to determine whether and when corporate tax-incentive-based job creation is worth the opportunity cost (that is, whether and when it is consistent with economic growth). A decision to move toward more "futuristic" industries will face the same sort of knowledge problem.[6]

In the free market, the competitive process characterized by entrepreneurial discovery of previously unnoticed profit opportunities acts as a means of solving the knowledge problem. The central role of the entrepreneur in the market has been elucidated by Mises (1949) and Kirzner (1973, 1985). Kirzner emphasizes how prices in the context of the market system transmit information to alert agents. When resources are misallocated, there is a price discrepancy. By discovering and subsequently exploiting the discrepancy, they make a "pure gain" or profit. Since the entrepreneur is the residual claimant to profit, they have an incentive to discover the misallocation of scarce resources. Therefore, economic growth and the knowledge necessary to achieve it are woven into the fabric of the market process. Ventures that misallocate resources and reap losses instead of profits are consequently abandoned.

This process does not operate symmetrically in public policy decision-making

5. We can think of this "economic efficiency" as a specific point on the production possibilities frontier.

6. This is dealt extensively by Lavoie ([1985] 2016) wherein he provides evidence of political decision-makers being unable to identify which industries and businesses would be successful in the future. Even if it were possible for policy-makers to make correct selections about which industries would be successful in the future, it does not follow that spending resources to develop that industries in a particular region would be worth the forgone alternative resource uses.

though. Prices are analogous to a telephone cord through which consumer demands are communicated to entrepreneurs, who allocate land, labor, and capital accordingly. However, in the political process, this cord that transmits knowledge to producers from consumer demands is severed between policy makers and voter demands. DeCanio (2013) contrasts the different mechanisms of knowledge transmission associated with the market process and political process. DeCanio argues that the market process mimics scientific experimentation in that several types and iterations of the same good are pitted against one another and success is determined by profit-and-loss calculations. The political process does not resemble experimentation, because government retains exclusive authority over the production of policies. Because of this, citizens neither have the knowledge to effectively compare counterfactual technical proposals for the production of the same good nor can they successfully determine whether the production of a good is itself an efficient use of resources. Even in the case in which differing policies are adopted consecutively or in different locations, the complexity inherent in the economy renders the situations incomparable. The same is true of choosing not to produce such policies at all. It is impossible to know the counterfactual of what would have happened had a policy been adopted. An economy may grow after the adoption of a policy *in spite* of the policy.

Following DeCanio, we consider a thought experiment through which we can observe the different knowledge problems encountered by voters. We first consider two corporate tax-incentive policy proposals with the goal of creating more jobs. Returning to an earlier theme, we can label one proposal preservationist and one proposal futurist. The preservationist policy seeks to attract firms to the state's existing coal-mining industry. The futurist proposal involves an attempt to lure tech companies to the state. The first problem voters face is the necessity of a great deal of knowledge about how each proposal would increase jobs to determine which does so more effectively. For example, it may be the case that an increase in mining jobs would cause manufacturers to move closer to the mines in order to capitalize on lower raw material transportation costs. Additionally, the workforce in any given state may have more training in either the mining or the tech sector. If this is the case, jobs may have to be outsourced to workers in neighboring states, or capital may be used as a substitute for labor, and any job-increase estimate will be overly optimistic. In order for voters to choose between these policies from a technical perspective, they would have to have extensive knowledge of the effects the attracted industry has on other industries. They would have to know details of the training of the workforce in their respective states. If the goal was to increase the number of jobs over a certain amount of time (as opposed to an immediate goal of increased jobs today), voters would need to be informed of potential future changes to the industries. Are rival technologies being developed that would make the tech firm in question irrelevant soon? How will

the continued relative success of electric cars affect the number of jobs in coal mining? The knowledge associated with these policies and more would be needed for the voter to evaluate the relative technical efficiency of these two proposals.

The problem is exacerbated when we consider the economic problem in the context of exclusive corporate tax-incentive packages offered by alternative parties. Voters cannot determine ex ante whether the preservationist or futurist proposal will provide some fixed number of jobs utilizing fewer scarce resources. Nor can they determine whether one policy offers fewer jobs at a more acceptable cost to society. This is in stark contrast to the free market, in which experimentation can occur. If the voters select politicians who opt to provide futurist corporate tax incentives, they must be able to evaluate the counterfactual knowledge about how the preservationist policy would have unfolded in practice. Even if voters feel they have enough knowledge to solve both of these problems, the problem is made more complex by the fact that the mechanism for providing feedback from voters to politicians does not provide clear information about which policies voters like or dislike. This simple thought experiment sheds light on the enormous difficulty associated with solving the knowledge problem in the political process relative to the market process.

III. THE INCENTIVE PROBLEM IN THE CONTEXT OF POLICY PROVISION

Policy makers are not the residual claimants to the profits or losses associated with their exclusively provided services. Recognition of this fact leads to several observations. First, politicians must utilize a method of evaluating policies other than the knowledge gained from profit-and-loss accounting. It follows that self-interested political agents may utilize the political knowledge associated with their monopoly on policy production to cater to special interest groups in exchange for political support (Boettke, Coyne, and Leeson, 2007). Second, entrepreneurs and firms respond to profit opportunities created by rents in the form of corporate tax credits. Third, corporate tax-incentive policies inherently violate the rule of law since they involve picking specific winners and losers. This section will examine these three observations in more detail to shed light on the cronyism often associated with corporate tax incentives.

Wagner (1989) emphasizes that the policy maker must be able to do three things in order to improve economic efficiency by correcting market errors. First, they must have knowledge of the market error. Second, they must know how to fix the error. Finally, incentives must be compatible such that the policy maker will be willing to properly implement the correction. Until Buchanan and Tullock's (1962) analysis of politics as exchange, the third condition was mostly ignored by economists. In light of the first two conditions being confounded by the knowledge problem, we have even less reason to

expect incentives to be consistent with generating economic efficiency. Instead, politicians may seek to produce policies that help them retain power. Corporate tax-incentive policies fit well into this view of politics.

Following Olson (1965), it is clear that policies such as these provide very visible concentrated benefits. The workers employed by Amazon are grateful to the politicians for creating the policies. Further, those whose assets would appreciate from the presence of Amazon have an interest in securing its presence. Those who benefit from the newly incentivized company see the benefits plainly. The costs are less visible. It is not clear who specifically loses on net from the presence of Amazon. Some sense that the taxpayer bears the burden of the multibillion-dollar deal, but the cost is dispersed among millions of individuals. Since the forgone alternatives are both unseen and dispersed, it is difficult to imagine a politician being punished more relative to the rewards from special interests. Additionally, Wagner points out that the process of generating information about the success and failure of policies itself is contingent on the institutional setting. Unlike the market, in which losses provide incentives to understand why a project is failing quickly, policy makers may lack an incentive to identify policy failures since they are not residual claimants to their decision-making.

Leeson (2006) points out that even in the case in which some individual politicians have compatible incentives (in this case because they are benevolent), there is reason to believe that they will not behave as though their incentive are compatible so long as there is a possibility that other politicians are not perfectly benevolent. Leeson shows that in order for benevolent politicians to prevent themselves from being selected out of the political process by those who aren't benevolent they must be willing to cater to special interest. This is a complementary point to the voter-preference-extraction problem in democratic systems highlighted by DeCanio. Both points make clear that political institutions select for politicians willing to create rents and attract rent-seekers regardless of the moral character of the agents within the institutions.

Kirzner (1985) criticizes regulation on the basis of how it affects entrepreneurial discovery. Unlike others who critique the effects of regulation, Kirzner contrasts the process by which economic inefficiency is corrected by the market with the process by which regulation supposedly corrects these inefficiencies. Current inefficiencies are future profit opportunities for entrepreneurs, and government regulation rules out the possibility that all worthwhile discoveries have been made. Not only is regulation potentially unfounded when discovery is considered, but the possibility also exists for it to be harmful.

Policy can act as a barrier to discovery. This is very clear in the case of corporate tax incentives. The fact that Amazon will pay zero state income tax for over a decade and has received grant money significantly reduces the incentive for potential entrepreneurs

to enter the market. Any entrepreneur considering entering the market in competition with Amazon in pursuit of an unexploited discovery will now have to compete with a firm whose costs are made relatively lower, serving as artificial barrier to entry. So some opportunities may go unexploited in the face of Amazon's enormous advantage, exemplifying what Kirzner refers to as "the stifled discovery process" (1985, 141). In the place of these productive entrepreneurial discoveries, there may be a tendency for new, unproductive discoveries to be created by government intervention that hampers the market process, namely rent-seeking. Kirzner dubs this category as "wholly superfluous discovery" (1985, 144-145). The artificial barriers created by these policies may also give firms monopoly power, which in turn can lead to further calls for intervention to sustain their monopoly privilege. This observation follows Mises's ([1926] 2011) theory of interventionism. Candela and Geloso (2018) explore this theory of interventionism as it relates to the knowledge generated by the political process and argue that public policy decision-makers are incentivized to seize greater regulatory authority in order to cater to special interest groups. In this way, the dynamics of interventionism are directly related to the incentive problem in policy provision.

Since government is able to grant monopoly privileges, interference in the market provides new profit opportunities for participants in the capitalist process. Instead of profit calculations being made in the context of benefits to consumers, entrepreneurs now receive knowledge about what is beneficial to politicians, making it more likely that production decisions become based on political demand rather than consumer demand. These unexploited opportunities need not be the intended consequences of regulators. The evolution of corporate tax-incentive competition is a perfect example of this. In providing incentives for Amazon to build its headquarters in their own state, it's unlikely policy makers intended to create a situation whereby jurisdictions publicly compete to be chosen. Political decision-makers offering Amazon tax incentives must now offer increasingly costly incentive packages to "win" the competition. Absent corporate tax incentives, this opportunity for city governments to compete for Amazon's HQ2 would not have existed. The opportunity itself was created by the regulatory process.

The difficulties generated for market decision-makers are compounded when it is recognized that these policies violate the rule of law, since corporate tax incentives involve dealings with the intention of benefiting specific companies at the expense of those who do not receive such corporate tax incentives. In this context, the law serves privileged corporations as opposed to the citizens to whom the law applies. Hayek highlights the importance of the rule of law in saying, "[Rules] are instrumental, they are means put at his disposal, and they provide part of the data which, together with his knowledge of the particular circumstances of time and place, he can use as the basis for his decisions"

([1960] 2011, 220). This point underscores the role rules play in the market economy. Businesses that compete with Amazon cannot properly orient their competitive decision-making if the rules of the game are constantly changing for Amazon alone. This effect carries into the future since the use of incentives may signal future incentive schemes to get companies to stay. Coyne and Moberg (2015) document several cases in which a corporation reversed its decision to close a certain location because politicians offered it incentives to keep it in operation. Again, politicians may have an incentive to do this to prevent people from learning of policy failure. Boettke and Candela (2014) point out that economic development itself rests on law because of its role in providing the framework whereby all other economic activities are coordinated. Without a proper arrangement of the fifth factor of production (the law), individuals cannot properly coordinate the other four factors (land, labor, capital, and entrepreneurship) in wealth-enhancing ways.

The rent-seeking nature of the political process, the violation of the rule of law, and the consequence of superfluous discoveries made by private companies are recognized by politicians and citizens alike. The very public process of HQ2 made this fact clear. Claims of cronyism and corruption were commonplace after Amazon's selection of New York as one of its two headquarters. The deputy leader of the New York City Council, Jimmy Van Bramer, voiced these concerns when he claimed, "When Jeff Bezos needed $3 billion the governor and mayor found it sure damn quick. The governor and the mayor conspired secretly to cut a deal with Bezos to the exclusion of everyone else. This is the ultimate case of 'three men in a room'" (Raskin, 2019). The scrutiny in New York was so intense Amazon rescinded its acceptance of New York's offer.

The public choice approach coupled with the Austrian account of the entrepreneurial market process and an analysis of the effects of violations of rule of law explains the effects of alleged cronyism well. It's important to recognize that this cronyism has its ultimate source in the knowledge problem. Since politicians and voters cannot fully absorb the profits and losses of policies, they cannot calculate the opportunity cost of the monopoly production of policy. They therefore pursue their own self-interest on other margins (catering to special interest groups). Fundamentally, an inability to engage in economic calculation is at the core of why cronyism results from corporate tax incentives.

IV. CONCLUSION

Understanding economic calculation is central to understanding the effects of offering corporate tax incentives to companies such as Amazon. Voters face a knowledge problem in assessing the economic efficiency of alternative policies. This knowledge problem, coupled with the inadequate feedback mechanisms associated with the political process, means that it is unlikely that policies will be selected that maximize the economic

efficiency of any stated goal. However, because job creation is a technical problem of allocating resources to achieve a pre-defined goal, nothing prevents authorities from producing more jobs by using more resources. An implication for voters and politicians, due to the difficulties above, is that one should be aware that the best policy, economically speaking, is one that allows firms to compete for profits in the market process, not for tax incentives through the political process.

Fundamentally, the stated goal of job creation is separate from (and even antithetical to) economic growth. Since political actors lack the ability to engage in profit-and-loss accounting, they suffer from a knowledge problem about the opportunity costs of policy proposals and are therefore unable to determine the policies' impact on economic efficiency and growth. Though technical improvements are likely to come about when more resources are used, there is no reason to think corporate tax incentives bring about economic improvements. The policy implication here is clear. Any voter or politician concerned with economic growth should be careful when considering any policy sold as creating economic growth by "adding more jobs" or some other technical goal.

Because politicians are not the residual claimants of profits and losses in the marketplace, they implement policies that generate political profits by concentrating benefits on well-informed and well-organized special interest groups and dispersing costs on ill-informed and ill-organized masses of voters. Information about policy failure tends not to be generated, as politicians have little incentive to absorb this information. Rent-seeking therefore is commonplace regardless of the moral character of the politicians. Intervention into the market process by political actors causes further distortions by creating previously nonexistent profit opportunities that can be discovered. This discovery is "wholly superfluous" and may serve to distort both the market and political processes even more. The violation of the rule of law inherent in corporate tax incentives further hinders the market process by confounding the plans of individuals. Economic growth is severely impeded when the rule of law is undermined. This leads to a third implication for voters and policy makers. The fact, commonly proclaimed, that cronyism "pollutes the political process" is not the result of weak political oversight. Rather, since the incentive issue stems from the problem of economic calculation, rent-seeking itself is a natural part of the political process. So long as there is monopoly policy production, there is cronyism, as entrepreneurs compete for privileges in the form of tax credits, subsidies, and other privileges that shield them from market competition. Voters and politicians should be aware of these omnipresent incentive issues when choosing which policies to support.

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THE COST OF COLLEGE ATHLETICS IN THE CAROLINAS: ESTIMATES AND POLICY IMPLICATIONS

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ABSTRACT

The rising cost of higher education is a concern to students, parents, government officials, and citizens across the United States. Nestled within this concern is a growing attention to the cost of college athletics. The citizens of North and South Carolina share these concerns, and in this paper, we examine the determinants of athletic costs, on a per-student basis, using data on sixty-three institutions of higher education in the Carolinas over the years 2003 to 2016. In particular, we highlight the critical roles of institution size, the size of the athletic program, whether the institution is public or private, the NCAA division in which an institution plays, and time. We complement this analysis with a closer look at eight schools in the Carolinas that have reclassified their NCAA division over this period. Our analysis suggests that the purported benefits of collegiate sports must be weighed carefully against the considerable costs, especially in light of the limited financial resources that confront many college students in the Carolinas.

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I. INTRODUCTION

Across the United States, students, their parents, government officials, and concerned citizens are showing increased concern over the cost of higher education. A quick look at some relevant statistics shows why. According to a recent article in *Forbes*, the inflation-adjusted cost of a four-year college education rose from under $53,000 in 1989 to nearly

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$105,000 in 2016, a pace that outstrips wage growth by eightfold. To worsen this bleak picture, financial aid has not been enough to rescue cash-strapped students. *Inside Higher Education* reports that tuition and fees, net of financial aid, have risen for eight consecutive years at four-year public institutions and for six consecutive years at four-year, nonprofit private institutions (Seltzer 2017).[1] Mounting student debt has been the result of this "disconnect" between the cost of higher education, wage growth, and financial aid, so much so that student debt is now the largest component of US nonhousing debt (Maldonado 2018).[2]

Documenting these trends is one thing; explaining them is another. Economists have long recognized that third-party payment dulls consumers' sensitivity to price and results in nonprice competition by producers. Ohio University's professor emeritus Richard Vedder places the blame squarely on the major third-party payee, the federal government, whose subsidies have given "'every incentive and every opportunity for colleges to raise their fees'" (Finley 2013). Of interest to our study, the rise in athletic costs is commensurate with that of federal aid. Slaper and Foston (2013) note that institutions are "only remotely disciplined by market forces," resulting in an athletics and facilities "arms race."[3] In a past study, the Center for College Affordability and Productivity (2010) listed twenty-five ways in which institutions of higher education can curb costs, including cuts to their athletic programs.

To supporters of college athletics, blaming rising college costs on athletic expenditures is naïve, short-sighted, and downright wrong. The costs, however high they may be, must be balanced against the benefits, which are often not monetary. Fort and Winfree (2013) contend that athletic expenditures are an investment like any other and an investment that often yields positive returns. This return may be reflected in student quality. In an early piece, McCormick and Tinsley (1987) conclude that the relationship between athletics and academics is "symbiotic" and find empirical evidence that membership in a "big time" athletic conference is associated with higher SAT scores, a result consistent with an "advertising effect," commonly referred to as the "Flutie effect,"[4] whereby athletics increases an institution's applicant pool. Mixon (1995) corroborates this finding with evidence that student quality, measured as an increase in SAT scores, is positively associated with basketball success, a result he too attributes to a beneficial "advertising effect." In later work, Mixon, Trevino, and Minto (2004) find that football success is positively correlated with higher freshman-retention rates and graduation rates and so is

1. The Inside Higher Education article is based on a more detailed report by the College Board, Trends in College Pricing 2017.
2. Articles by USA Today and CNBC sound a similar theme. See Caplinger (2017) and Martin (2017).
3. Nonetheless, they also cite low productivity and labor costs as reasons for rising costs.
4. Doug Flutie was a Boston College quarterback whose "Hail Mary" pass against the defending national champion, University of Miami, in 1984 brought about a much-celebrated Boston College victory and is associated with a large increase in student applications at Boston College the following year.

congruent with a university's overall mission. In a similar vein, Pope and Pope (2009) find that football and basketball success generate larger applicant pools that, in turn, allow schools to expand along the quality and quantity margins of their student body.

Other researchers have taken a different path, focusing instead on giving. Koo and Dittmore (2014) test whether athletic success and giving to the athletic program increase or crowd out giving to academic programs. They find that football success (but not basketball success) and athletic giving are positively correlated with giving to the academic program. In effect, success on the football field and donations from athletic boosters are associated with greater resources for the academic side of the institution. Stinson, Marquardt, and Chandley (2012) examine athletic spending as an investment and conclude it yields positive rates of return for an institution's core and gift revenues and is also associated with higher graduation rates.

However impressive this research is, much of the public and popular press remain skeptical. According to *USA Today*, the number of athletic programs that generate operating revenues that exceed operating costs has ranged in the low 20s since 2010, and these programs are restricted to members of the elite Power Five conferences: the Atlantic Coast Conference, the Big Ten, the Big Twelve, the Pacific Athletic Conference, and the Southeastern Conference (Berkowitz and Schnaars 2017). Since most athletic programs lose money, the gap, often reaching into the tens of millions of dollars, must be filled from some source, and that source is institutional resources (Wolverton, Hallman, Shifflett, and Kambhampati 2015 and Suggs 2017). Some analysts have questioned whether athletic spending is sustainable, while others argue that the continued viability of college athletic programs, in spite of their financial losses in most cases, indicates their nonpecuniary value to their institutions (Brady, Berkowitz, and Upton 2016).

Numerous scholarly studies have also questioned the viability of college athletic finances. The Knight Commission (2009) provided an early warning of the unsustainable trends in college athletic costs and institutional subsidies, and Zimbalist (2010) points out that the cost picture may be worse than is commonly perceived because institutions do not generally report athletic-department expenditures on capital and debt service. For institutions outside the Power Five conferences, the financial picture may be worsening. Gurney, Lopiano, and Zimbalist (2017) present evidence that lucrative television contracts and the College Football Championship Playoff have resulted in "revenue inequality" across college athletic programs, in which successful football and men's basketball programs earn increasing multiples of the revenues of average schools. The fallout is that most athletic programs run large deficits. In a penetrating analysis of who pays the institutional subsidies to fund these deficits, Lipford and Slice (2018) provide evidence that institutional subsidies are higher at schools with lower graduation rates and ACT scores and with higher shares of the student

body that receive Pell grants and take out student loans.

As to the nonpecuniary benefits, not all researchers share the optimism of athletics' supporters. Litan, Orszag, and Orszag (2003), Orszag and Orszag (2005a), and Orszag and Israel (2009) find no effect of operating expenditures on football or basketball on an institution's SAT scores or alumni giving. The latter papers also find evidence of an "arms race" for capital and operating expenses. Frank (2004) argues that college athletics are similar to a "winner take all" market and that escalating expenditures on college athletics contain features of an "entrapment game," whereby institutions continue to spend in hopes of gaining a relative advantage. Frank's survey of the literature examining the importance of nonpecuniary benefits shows that a large number of scholarly studies indicate that these benefits are small. Zimbalist (2010) concedes that athletic success may bring more or higher-quality students and greater donations but notes that if this is true, poor athletic performance should tilt these outcomes in a negative direction.

Our aim in this paper is to examine and explain the costs of college athletic programs in detail. Specifically, college athletic costs, on a *per-student basis,* depend critically on five variables: the number of undergraduates enrolled, the size of the athletic program as measured by the number of athletes, whether the institution is private or public, the NCAA division in which a school plays, and the passage of time. Our focus will be on sixty-three institutions of higher education in North Carolina and South Carolina for the years 2003 to 2016.[5] To gain further understanding of the importance of NCAA division, we look more closely at schools in the Carolinas that changed divisions during these years. Our intent is not to resolve debates over the merits of college athletics between its supporters and detractors; however, we do look at the financial need of students in the Carolinas and build the case that spending on athletics must have substantial benefits in order to be justifiable because students at many schools in the Carolinas incur significant debt to pay for their education. If our case stands, the policy implications are clear: college administrators and the state governments need to give serious consideration to the allocation of resources in higher education between athletics and academics, given that the primary purpose of an institution of higher education is to educate students.

In the following section, we model college athletic costs and present regression estimates of athletic costs per student across the schools in the Carolinas. In the third section, we present evidence on how athletic costs changed at schools in the Carolinas that changed NCAA divisions from 2003 to 2016. The fourth section presents evidence on the financial need of students of higher education in the Carolinas and the policy implications that follow from our work. We offer closing thoughts in a conclusion.

5. We have conducted a similar analysis with national data for the years 2003 to 2013. Those findings are consistent with the ones of this study. For both studies, the years of analysis have been determined by the availability of data collected by the Department of Education. See Lipford and Slice (2017).

II. THE COST ESTIMATES

Understanding the critical variables that determine college athletic spending is essential to understanding the choices schools make about their athletic programs. In this section, we examine those variables. We discuss the data first and follow with descriptive statistics and empirical estimates.

A. THE DATA

The US Department of Education, under the Equity in Athletics Disclosure Act (EADA), requires all institutions that receive Title IV funding to report data on their athletic programs to the Office of Postsecondary Education. These data, collected since 2003, provide the database used in the cost estimates of this study.

B. DESCRIPTIVE STATISTICS

Our sample consists of sixty-three schools in North Carolina and South Carolina over the period of 2003 to 2016, giving a total of 882 observations.[6] Table 1 presents descriptive statistics for three key variables: the number of total undergraduates, the number of total athletes, and athletic expenditure per undergraduate in 2016 dollars.[7]

Table 1. Summary Statistics: Full Sample

VARIABLE	MEAN	STANDARD DEVIATION	MIN	MAX
Total undergraduates	4,508	5,140	495	23,947
Total athletes	372	156	115	1,005
Athletic expenditures per undergraduate (2016 $)	$3,209	$2,614	$174	$15,521

As interesting as the full-sample data are, the importance of whether an institution is public versus private and the NCAA division at which a school plays are highlighted when the sample is broken down by these criteria, as shown in table 2. Among trends that emerge are three of interest. First, although athletic programs generally increase in size with NCAA division, schools that play in Division III or Division II field large athletic programs and have a higher ratio of athletes to total students than Division I schools.

6. We omitted schools for three reasons: (1) playing in the National Association of Intercollegiate Athletics (NAIA), (2) incomplete data for the sample years, or (3) a lack of clear NCAA division classification by the EADA database at some point during the sample period. Omitted schools in North Carolina are the following: Chowan University, Montreat College, Peace College, Salem College, and St. Andrews University. Omitted schools in South Carolina are Allen University, Coastal Carolina University, Columbia College, Morris College, Southern Wesleyan University, the University of South Carolina Beaufort, and Voorhees College.

7. We convert monetary figures to 2016 dollars using the personal-consumption-expenditure component of the implicit price deflator.

Table 2. Summary Statistics by NCAA Division

VARIABLE	MEAN	STANDARD DEVIATION	MIN	MAX
Divisional III Private, with Football				
Total undergraduates	1,490	486	697	2,268
Total athletes	392	95	161	633
Athlete expenditures per undergraduate (2016$)	$1,555	$658	$205	$4,345
Number of observations: 56				
Division II Public, No Football				
Total undergraduates	2,795	518	2,092	4,572
Total athletes	191	19	145	221
Athlete expenditures per undergraduate (2016$)	$1,414	$406	$560	$2,579
Number of observations: 46				
Division II Private, No Football				
Total undergraduates	1,287	562	495	3,264
Total athletes	305	114	115	714
Athletic expenditures per undergraduate (2016$)	$2,902	$1,545	$283	$7,279
Number of observations: 150				
Division II Public, with Football				
Total undergraduates	3,882	1,275	1,190	8,675
Total athletes	258	94	141	505
Athletic expenditures per undergraduate (2016$)	$800	$277	$198	$1,500
Number of Observations: 58				

Table 2. Summary Statistics by NCAA Division

VARIABLE	MEAN	STANDARD DEVIATION	MIN	MAX
Divisional II Private, with Football				
Total undergraduates	1,443	551	549	3,143
Total athletes	354	146	139	867
Athlete expenditures per undergraduate (2016$)	$3,442	$1,740	$174	$9,166
Number of schools: 177				
Division IAAA Public				
Total undergraduates	8,138	4,120	2,727	17,240
Total athletes	333	84	168	483
Athlete expenditures per undergraduate (2016$)	$1,388	$554	$509	$2,564
Number of observations: 89				
Division IAAA Private				
Total undergraduates	3,261	713	2,325	4,476
Total athletes	308	71	208	423
Athletic expenditures per undergraduate (2016$)	$2,747	$487	$1,963	$3,639
Number of observations: 19				
Division IAA Public				
Total undergraduates	6,612	4,132	2,037	18,982
Total athletes	381	112	188	616
Athletic expenditures per undergraduate (2016$)	$2,377	$1,674	$753	$6,730
Number of Observations: 81				

Table 2. Summary Statistics by NCAA Division

VARIABLE	MEAN	STANDARD DEVIATION	MIN	MAX
Divisional IAA Private				
Total undergraduates	2,517	1,211	943	5,854
Total athletes	418	76	266	574
Athlete expenditures per undergraduate (2016$)	$6,329	$2,845	$1,677	$14,515
Number of observations: 102				
Division IA Public				
Total undergraduates	17,881	2,692	12,857	23,947
Total athletes	647	134	432	1,005
Athlete expenditures per undergraduate (2016$)	$3,472	$1,295	$1,292	$5,856
Number of observations: 76				
Division IA Private				
Total undergraduates	5,447	996	3,930	6,538
Total athletes	575	151	355	899
Athletic expenditures per undergraduate (2016$)	$11,058	$2,406	$3,547	$15,521
Number of observations: 28				

Second, private schools spend significantly more than public schools in a given NCAA division. This is explained, at least in part, by the relatively high value of scholarships, since tuition and fees are higher at private schools. Third, athletic spending per student generally rises with moves to higher NCAA divisions.

C. EMPIRICAL MODEL AND RESULTS

To gain a more complete understanding of athletic costs, we examined the critical factors identified above: total undergraduates, total athletes, whether an institution is public or private, the NCAA division, and time.

1. THE EQUATION AND FINDINGS

Specifically, we estimated a regression equation with athletic costs per student as a function of the number of undergraduates, the number of athletes, public-versus-private status, NCAA division, and the year. The equation estimated is as follows:

Ln(Real Total Expenditures Per Undergraduatei,t) = α0 + α1Ln(Total Undergraduatesi,t) + α2Ln(Total Athletesi,t) + α3∑Public-Private and NCAA Division Variablesi + α4∑Year Dummy Variablest + εi,t.

The combinations of NCAA division and status as private (nonprofit) versus public are eleven: DIII Private; DII Public without football; DII Private without football; DII Public with football; DII Private with football; DIAAA Public; DIAAA Private; DIAA (FCS) Public; DIAA (FCS) Private; DIA (FBS) Public; and DIA (FBS) Private.[8] The years run from 2003 to 2016. DIII private schools and 2003 are omitted from the regression, so their values are captured by the intercept term.[9] We utilize a random-effects model to obtain our estimates.[10]

Table 3 shows the regression results. The overall explanatory power of the model is highly significant. In addition, each individual coefficient is significant at the 1 percent level for a two-tailed test. We now take a closer look at these coefficients.

Because athletic programs have a number of fixed costs that do not vary with enrollment, (for example, coaches' and athletic directors' salaries, number of athletic teams, game-day expenses, travel costs, and scholarships), we expect athletic costs per student to vary inversely with the number of students. The negative coefficient on the natural log of total undergraduates confirms this expectation: a 1 percent increase in the number of undergraduates reduces per-student spending on athletics by 0.65 percent. The size of the athletic program should raise costs, and the cost estimates indicate that a 1 percent increase in the number of athletes raises athletic expenditures by 0.77 percent.[11]

Turning to the public-private distinction and the NCAA division, we find that holding NCAA division constant, private schools generally outspend their public counterparts and that holding the public-private designation constant, moving up the NCAA-division ladder raises athletic costs in most instances.

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8. In an alternate specification, we designate private schools and NCAA classifications with separate dummy variables. We prefer the specification provided above because its explanatory power is higher. Further, estimating a separate dummy variable for private schools implies that the effect of being private is the same across all NCAA divisions.

9 There are no DIII public schools in the sample, and all DIII schools play football.

10. A Breusch and Pagan Lagrangian multiplier test for random effects indicates that a random-effects estimate is superior to a simple OLS estimate. We note that a Hausman test rejects a random-effects model in lieu of a fixed-effects model. Despite this, we chose the random-effects model for two reasons. First, we are keenly interested in the time-invariant variables of NCAA division. Running separate regressions for each NCAA division would have yielded relatively few degrees of freedom for divisions with relatively few observations (e.g., DII Public, no football and D1A Private). The D1AAA Private classification with only nineteen observations would be impossible to estimate. Second, when we estimate the fixed-effects model, the coefficients on the number of undergraduates, the number of athletes, and the year dummy variables are nearly identical to those of the random-effects model.

11. We note that the results are fundamentally the same when the variables are in levels with squared values of total undergraduates and total athletes. The explanatory power of the log-log estimate is higher, so we prefer it.

Table 3. Regression Results

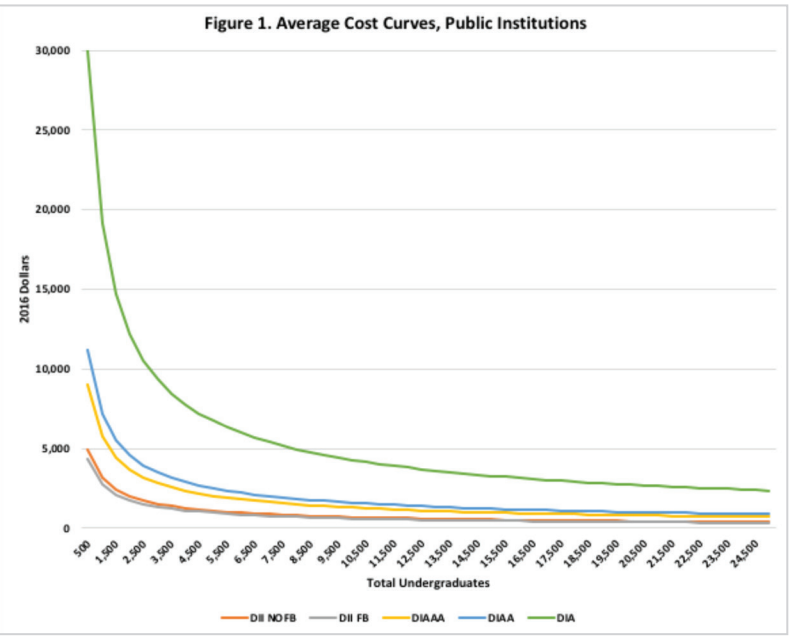
DEPENDENT VARIABLE: LN(TOTAL ATHLETIC EXPENDITURES PER UNDERGRADUATE, 2016$)		
VARIABLE	**COEFFICIENT**	**Z-SCORE**
Ln (total undergraduates)	-.0650	-13.82*
Ln (total athletes)	0.770	14.83*
DII Public, no football	0.930	5.65*
DII Private, no football	0.600	4.53*
DII Public, football	0.574	3.66*
DII Private, football	0.939	7.39*
DIAAA Public	1.114	7.30*
DIAAA Private	1.604	9.43*
DIAA (FCS) Public	1.226	8.16*
DIAA (FCS) Private	1.471	10.88*
DIA (FBS) Public	1.802	10.59*
DIA (FBS) Private	2.594	12.56*
2004	0.134	3.17*
2005	0.355	8.40*
2006	0.413	9.71*
2007	0.461	10.80*
2008	0.430	10.02*
2009	0.436	10.09*
2010	0.482	11.09*
2011	0.504	11.51*
2012	0.517	11.57*
2013	0.499	11.08*
2014	0.539	11.89*
2015	0.564	12.36*
2016	0.587	12.84*
Constant	6.976	17.51*
Wald Chi-square = 1,592.53*		
N = 882, Schools = 63, Years per School = 14		

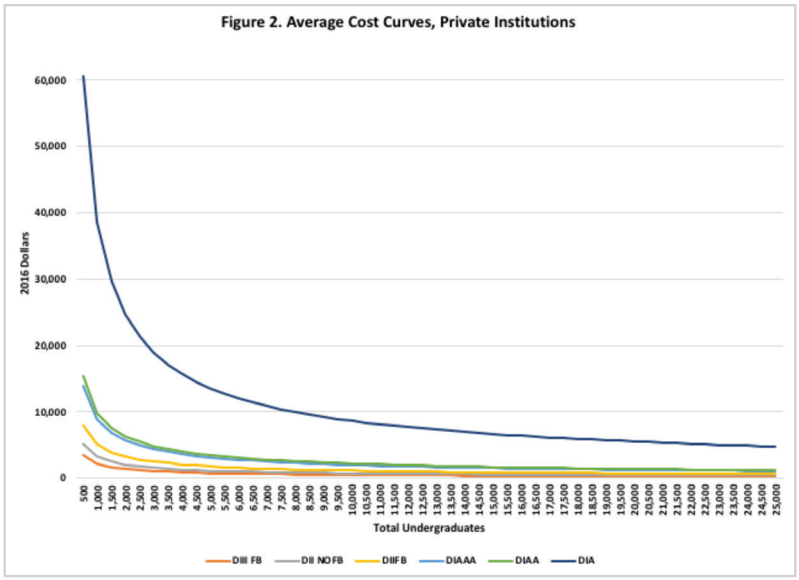
* significant at the 1% level for a two-tailed test

The year dummy variables tell an interesting story: with the exception of 2007 to 2008 and 2012 to 2013, the coefficients increase in value each year. The smaller coefficient in 2008 compared to 2007 is easily explained by the recession, although we are at a loss to explain the drop from 2012 to 2013. Far more important in our judgement are the overall rising values of these coefficients, which show clearly that athletic spending (in inflation-adjusted terms) is on an upward trajectory. These results support the assertions of those who argue that collegiate athletic programs are in an "arms race." These coefficients also suggest that administrators who want to curb athletic costs face a difficult battle.

2. THE ROLES OF INSTITUTION SIZE, WHETHER AN INSTITUTION IS PUBLIC OR PRIVATE, NCAA DIVISION, AND TIME: A CLOSER LOOK

To gain a fuller understanding of the critical role that institution size, as measured by the number of undergraduates, plays as a determinant of athletic costs, we estimated average (per student) cost curves for public and private institutions by NCAA division, using coefficients from the regression equations. These results are shown in figures 1 and 2 for public and private institutions, respectively. A quick glance reveals that private schools spend significantly more and that expenditures rise as an institution plays in a higher NCAA division. For any class of institution, however, per-student costs drop markedly as the number of students increases. Whatever the critics of athletic spending may say, when the largely fixed costs of athletic programs are spread over a large number of students, the cost per student is relatively small and may well be less than the associated benefits, even for schools that have operating expenditures that exceed operating revenues. In effect, the nonpecuniary benefits need not be large for the athletic program to have a





net positive benefit on the campuses of large schools. For small schools, however, the costs per student can be extremely high, making college athletics a burden to the overall institutional budget. Since these schools are unlikely to play in bowl games, receive bids to the NCAA men's-basketball tournament, or land lucrative television contracts, the nonpecuniary benefits must be substantial if the benefits of the athletic program are to exceed the costs. The upshot from the data is that the balance between costs and benefits is almost sure to be tipped toward costs for small schools that play at the Division I level.

To illustrate how athletic expenditures vary across schools and time, we show expenditures per student by institution in 2003 and 2016, for public and private institutions, respectively. Figure 3 for public institutions identifies the big spenders as members of the Atlantic Coast Conference (University of North Carolina [UNC] Chapel Hill, North Carolina [NC] State, and Clemson University) and the Southeastern Conference (University of South Carolina [USC]). Given that these schools are large and also generate substantial revenue from their athletic programs, these expenditures are of little concern. The Citadel stands out as the biggest spender of all, and, playing at the DIAA (FCS) level, it likely generates little offsetting revenue.

The figures for private schools, shown in figure 4, reinforce the findings for public institutions. Atlantic Coast Conference members Duke University and Wake Forest University stand out as big spenders, but a number of small schools that play at the DIAA (FCS) level, such as Davidson College, Furman University, Presbyterian College, and Wofford College, stand out as well. Small institutions spending in excess of $8,000 per student represent costly undertakings with relatively little offsetting revenue.

What stands out for all institutions, public or private (with the exceptions of Benedict

Figure 3. Public University Athletic Expenditure per Undergraduate in 2003 and 2016, 2016 Dollars

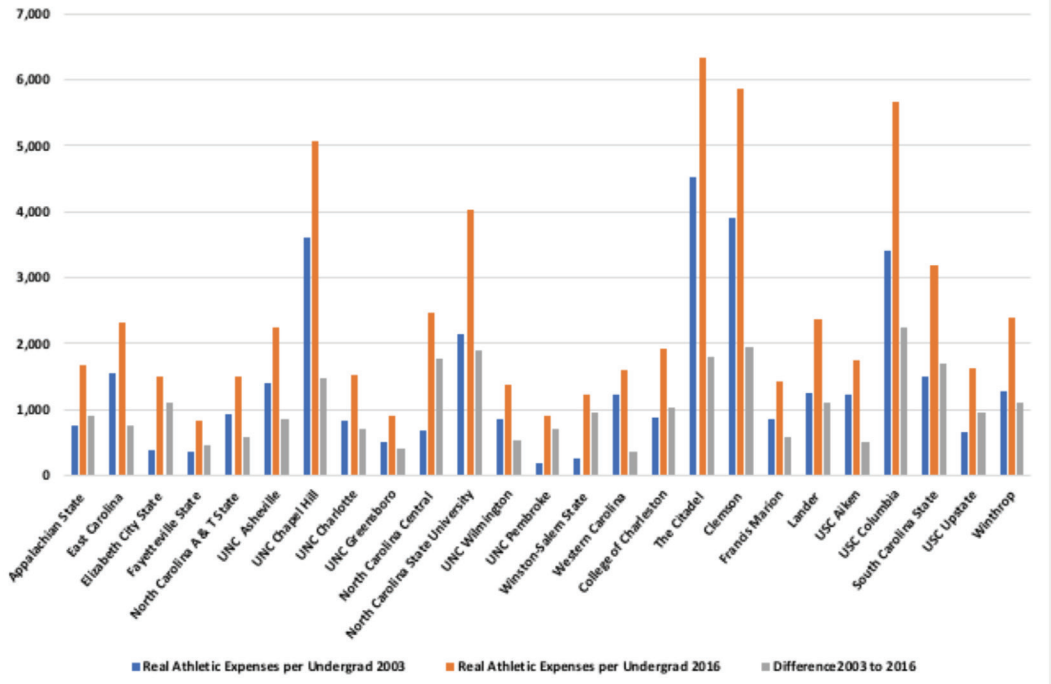
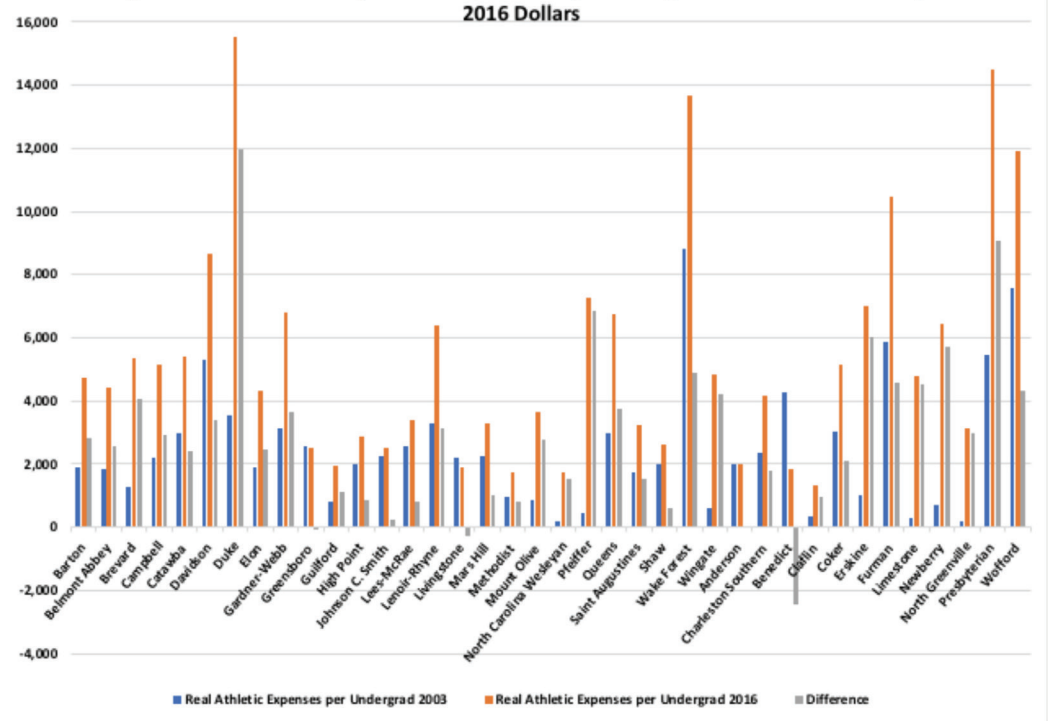


Figure 4. Private University Athletic Expenditure per Undergraduate in 2003 and 2016, 2016 Dollars



College, Greensboro College, and Livingstone College), is the remarkable rise in inflation-adjusted expenditures per student from 2003 to 2016. In many cases, expenditures have more than doubled, indicating that the benefits of athletic spending, monetary and nonmonetary, must be substantial and *rising* if the benefit–cost calculation is to favor the benefits.

III. CHANGING NCAA DIVISIONS: WHAT HAPPENS TO COSTS?

Next, we turn our attention to the eight institutions that changed NCAA divisions during our sample period. Before examining the cost changes these institutions experienced, we look briefly at the literature on the rationales institutions commonly offer for changes in NCAA division.

A. CHANGING NCAA DIVISIONS: WHAT DOES THE LITERATURE SAY?

Frieder and Fulks's (2007) study of institutional reclassification from Division II to Division IAA (FCS) and from Division IAA (FCS) to Division IA (FBS) explores a number of commonly cited benefits of reclassification that are channeled through enhanced exposure, reputation, and prestige. Among these are a larger applicant pool and greater diversity. For the schools the NCAA examined, gains in diversity were minimal at best and must be balanced against the significant cost increases that resulted in higher net losses for most athletic programs.

In a similar spirit, Tomasini (2005) examines twenty-seven Division II and Division III schools that reclassified to Division IAA (FCS) from 1993 to 1999, looking at trends in donations, football-game attendance, freshman applications, and undergraduate enrollment for three years after reclassification. In each case, the author compared reclassifying schools to schools that remained in the same division over the study period. Statistical analysis showed no positive advantages to reclassification for any of these variables, and Tomasini concludes with a warning of the higher costs of Division IAA (FCS) relative to Division II or Division III.

Similarly, Orszag and Orszag (2005b) do not find a systematic increase in enrollment for schools that moved from Division II to Division I, but they do find that the upward transition to Division I increased athletic costs significantly and reduced sharply net operating revenues of the athletic program.

Kelly and Dixon (2011) focus on the actual or planned addition of a football program specifically in thirty-eight Division I schools between 2004 and 2014. The authors examine feasibility studies from six institutions and rank five perceived benefits in order of importance: a sense of community, student recruitment, financial gain, prestige, and media exposure. In a similar analysis, Feezell (2009) examines the addition of football at Division II and Division III schools. Aspiring football schools at these lower levels of play

gave similar reasons to add football, including an enhanced reputation and improved school and community spirit. For small schools, another critical reason is to attract students who will attend the institution for the opportunity to play. Feezell's analysis focuses on six Division II or Division III institutions that added football during the 2002 and 2003 academic years and reached the following conclusions: gains in enrollment were short-lived, male enrollment increased, costs and subsidies from the broader institutional budget to the athletic program increased, and the percentage of the student body that were athletes increased.

In case studies of particular interest to this study, Weaver (2010) researched the decisions of two North Carolina schools, UNC Greensboro and Elon University, that transitioned to Division IAA (FCS). Administrators from both universities wanted to break with their institutions' past perceptions and raise their universities' reputation and prestige, especially relative to aspirational schools. The schools also sought to draw more students, especially those with greater financial and academic capability.[12] In another case study, Dwyer, Eddy, Havard, and Braa (2010) examine the attitudes of administrators, coaches, alumni, and students toward a transition from Division II to Division IAA (FCS) for an undisclosed university. Their study uncovered a disconnect between administrator perceptions and those of alumni and students, including student-athletes. Simply put, alumni and students did not share the administrators' enthusiasm for reclassification to Division I, and enrollment and donations did not meet administrative expectations. All along, the costs of the athletic program increased markedly.

Of interest, Moltz (2009) explores why some institutions chose to remain Division II. Supporters cited stronger emphasis on academics than at Division I programs, along with more championship opportunities and less travel. Lower costs were also a critical component of the decision not to reclassify to Division I.[13]

B. CHANGING NCAA DIVISIONS IN THE CAROLINAS: WHICH SCHOOLS RECLASSIFIED?

We now turn our attention to the schools that changed NCAA divisions in the Carolinas during our study period. Benefits, whether real or perceived, must be matched against cost increases that, on a per-student basis, rose for each of the schools that

12. The focus of this study is on the decision process used by these universities to reclassify to Division IAA (FCS). Although Weaver cites research skeptical of the benefits of upward reclassification in college athletics, he refrains from offering a judgement on the decisions of the universities he studied.

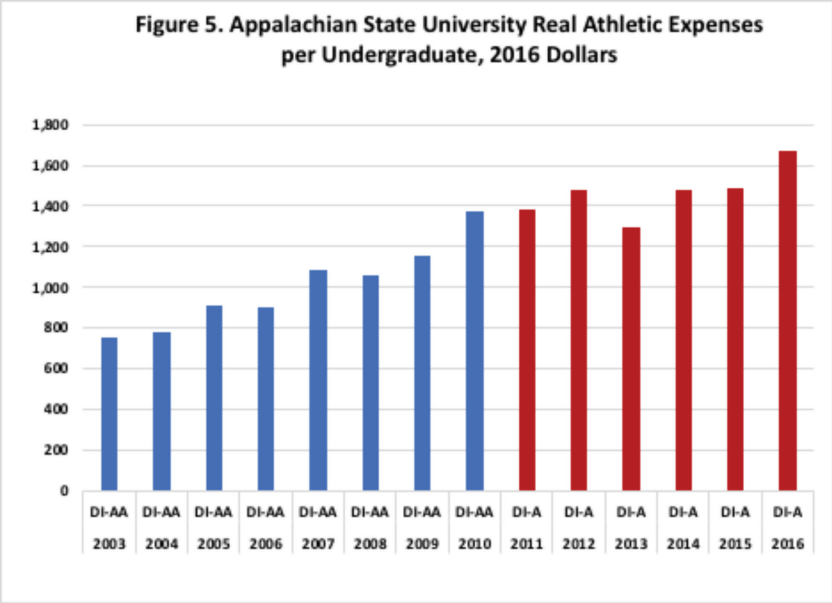
13. A related strand of literature addresses the political difficulties of moving down NCAA divisions or "de-escalating" the athletic program. Influential stakeholders, such as alumni, donors, and other athletic supporters, who are often poorly informed about athletic costs, tend to have undue influence on athletic decisions and prevent de-escalation. When de-escalation does occur, key factors are resource constraints and a fundamental incompatibility between the athletic program and the institution's philosophical mission. See Bouchet and Hutchinson (2011), Hutchinson (2013), Hutchinson and Bouchet (2014).

reclassified upward.

The schools in North Carolina and South Carolina that reclassified NCAA athletic divisions between 2003 and 2016 were Appalachian State University, Campbell University, North Carolina Central University, UNC Charlotte, Winston-Salem State University, Limestone College, Presbyterian College, and USC Upstate. We examine each school briefly, identifying its reclassification, the year the reclassification occurred, and the effect the reclassification had on athletic costs.

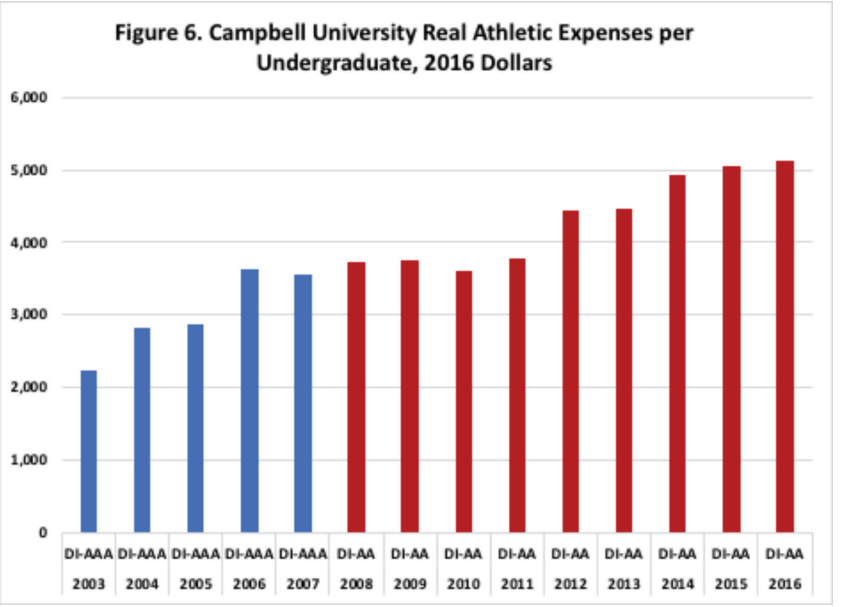
1. APPALACHIAN STATE UNIVERSITY

Appalachian State, a public university in North Carolina with over sixteen thousand undergraduates and a total athletic budget in excess of $27 million in 2016, competed as a member of the Southern Conference at the DI-AA (FCS) level from the time the division was formed in 1978 until 2011. That year, Appalachian State moved to the DI-A (FBS) level and joined the Sunbelt Conference. Successes while in DI-AA (FCS) included winning national championships in football in 2005, 2006, and 2007 and defeating the fifth-ranked Michigan Wolverines (34–32) in 2007, a feat that garnered national renown and an appearance on the cover of *Sports Illustrated*. Its football success has continued at the DIA (FBS) level, as they have won four consecutive bowl games beginning in 2015: the Camellia Bowl twice, the Dollar General Bowl, and the New Orleans Bowl. As shown in figure 5, athletic costs have continued to rise, although at a pace similar to that before the transition to DI-A (FBS).

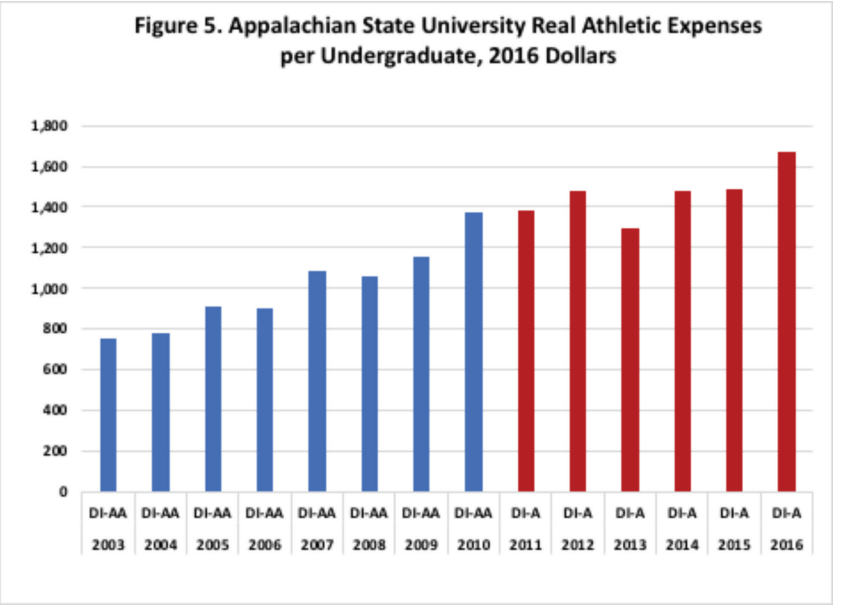


2. CAMPBELL UNIVERSITY

Campbell, a private institution in North Carolina with approximately 3,700 students, reclassified from DI-AAA in 2007 to DI-AA (FCS) in 2008, as it added football and began play in the nonscholarship Pioneer Football League. Campbell moved to the Big South Conference in football in 2018 (after the period of our study) to play DI-AA (FCS) scholarship football. Its athletic costs rose following the transition, and its recent move from the Pioneer Football League to the Big South will raise its costs even more.



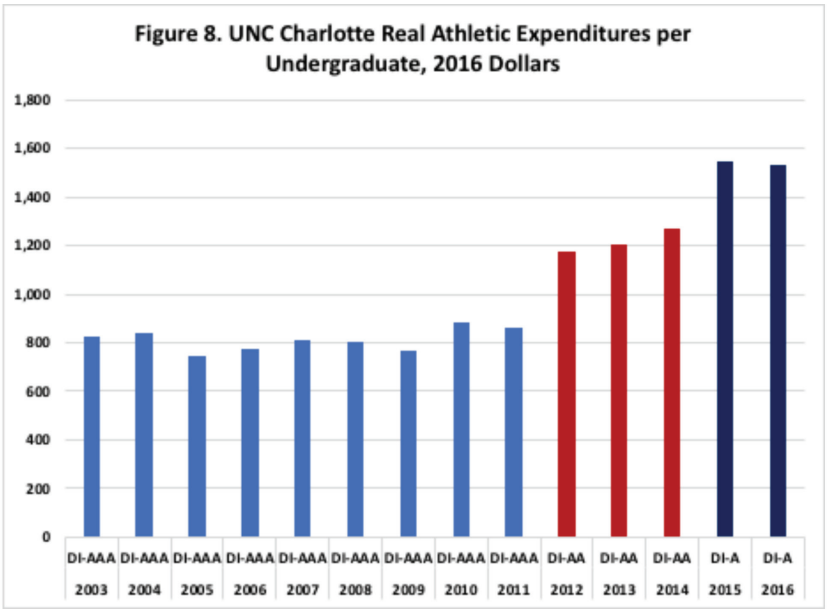
3. NORTH CAROLINA CENTRAL UNIVERSITY



North Carolina Central, a North Carolina public institution with over five thousand students, reclassified from DII with football to DI-AA (FCS) in 2007. Real athletic expenditure per undergraduate increased dramatically from $585 in 2006 to $2,458 in 2016.

4. UNC CHARLOTTE

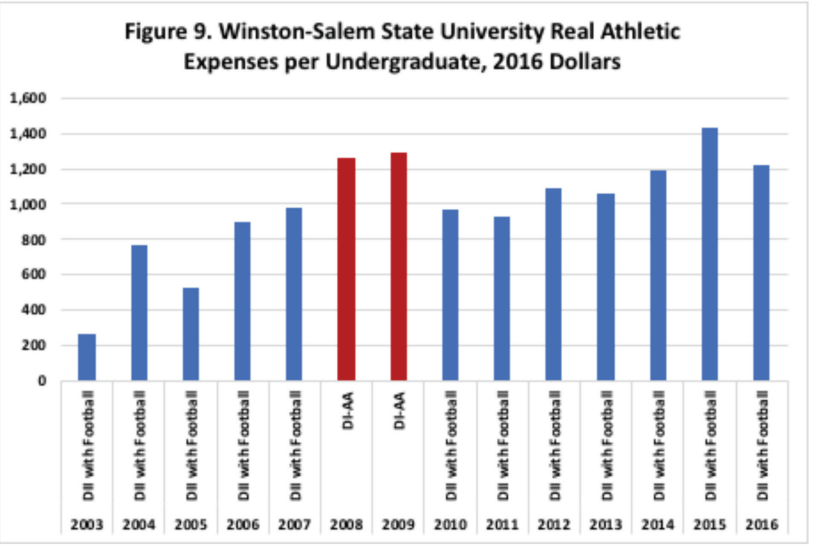
UNC Charlotte is a rapidly growing public institution in North Carolina with a student body of over twenty thousand undergraduates in 2016. The university was a member of the nonfootball Atlantic 10 Conference from the 2005–6 season through the 2012–13 season. The original plan was to play at the DI-AA (FCS) level, but it made the move all the way to DI-A (FBS) in the minimum time allowed by the NCAA, along with a move to Conference USA. The university built a new $27 million stadium with successful fundraising in the Charlotte community that included $10 million from Jerry Richardson, owner of the Carolina Panthers, for naming rights. The university introduced student fees of $320 annually, of which $120 goes to construction costs to help pay for the increased athletic expenditure from adding the football program (Smith, 2013). The per-student costs of the athletic program rose sharply in 2012.



5. WINSTON-SALEM STATE UNIVERSITY

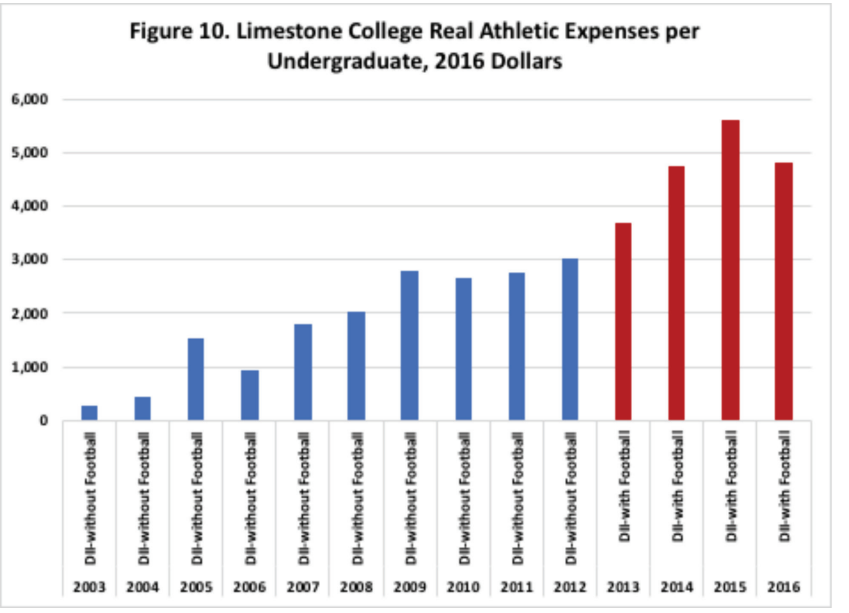
Winston-Salem State, a public North Carolina school with fluctuating enrollment, reclassified from DII with football to DI-AA (FCS) in 2008 and 2009, but returned to DII with football after costs increased dramatically. The upward reclassification necessitated three new sports, fifty additional scholarships, and numerous additional coaches. In

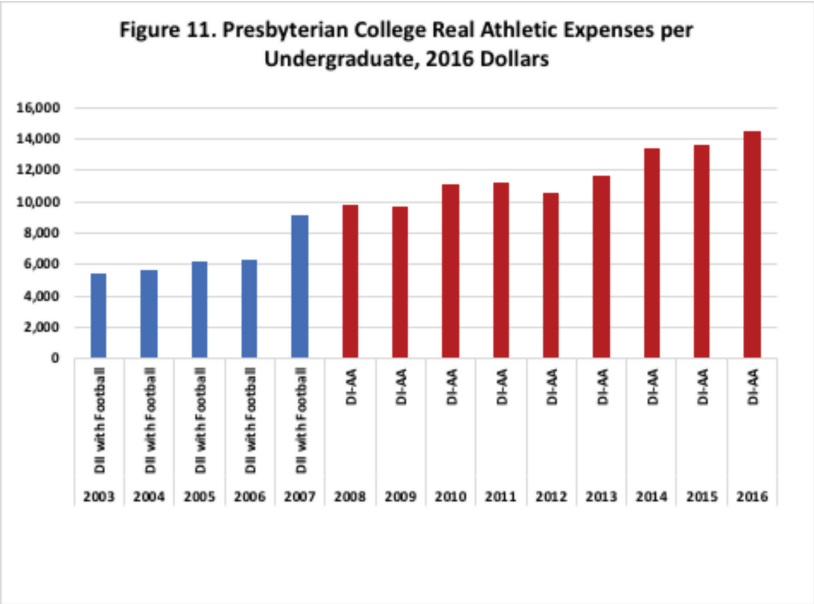
addition, the University of North Carolina Board of Governors denied a request for a 31 percent increase in student athletic fees (Anderson 2015).



6. LIMESTONE COLLEGE

Limestone, a small South Carolina private school with just over two thousand students, plays at the DII level and added football, men's volleyball, and field hockey in 2013. With higher athletic costs and a drop in the number of undergraduates from 2013 to 2016, Limestone's athletic costs rose from $3,023 to $4,804 per undergraduate. Limestone announced in 2018 that it is dropping the swimming program because of low participation and outdated facilities.



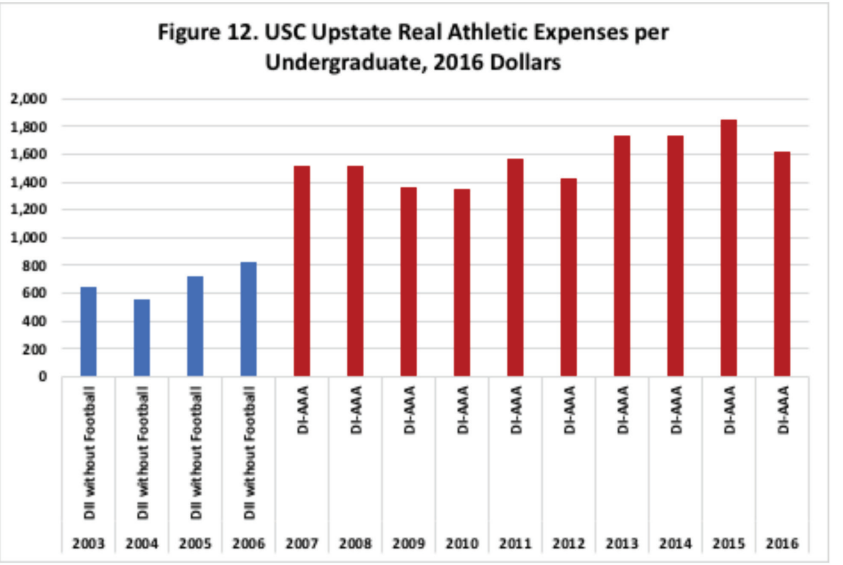


7. PRESBYTERIAN COLLEGE

Presbyterian, a small private South Carolina liberal arts college, moved from DII with football to DI-AA (FCS) in 2008 and is the smallest DI school in the country. Comparing 2008 to 2016, the number of undergraduates dropped from 1,126 to 943, and expenditure per undergraduate increased from an already-high $9,166 to $14,515. Presbyterian announced in 2018 that it will move to nonscholarship DI football and will play in the Pioneer Football League while remaining in the Big South Conference in other sports. The college announced in 2018 the addition of men's and women's wrestling and acrobatics and tumbling.

8. USC UPSTATE

USC Upstate, a public university in South Carolina with 4,403 undergraduates in 2016, moved from DII without football to DI-AAA in 2007. Despite rising enrollment, real undergraduate expenditures on athletics increased from $825 in 2006 to $1,615 in 2016. The institution moved from the Atlantic 10 Conference to the Big South Conference in 2018 to reduce travel costs.



IV. POLICY IMPLICATIONS

Our analysis of athletic costs at schools in the Carolinas has shown the pivotal roles played by the number of undergraduates, the size of the athletic program, public-versus-private classification, NCAA division, and the passage of time. We have also demonstrated that whatever benefits reclassification to a higher NCAA division may bring, this reclassification also brings higher costs.

All along, as tuition and fees have risen, many schools within and outside of the Carolinas have reclassified their athletic programs to play at more expensive levels, and student debt has grown into a national concern that has drawn increased media attention. [14] According to The Institute for College Access and Success, approximately two-thirds of college seniors had student debt that averaged $28,650.

For all institutions for which The Institute for College Access and Success has data, 57 percent of graduates in North Carolina (ranked twenty-fourth nationally) have an average debt of $26,526 (ranked thirty-seventh nationally), and 58 percent of graduates in South Carolina (ranked twentieth nationally) have an average debt of $30,891 (ranked fourteenth nationally).[15] Table 4 provides data on student debt by state and type of

14. Increases in student fees for athletics raise the costs of higher education and have also received considerable media attention in recent years. These fees vary significantly across institutions. Of interest to this study, Hartseel (2015) documents that among Division I public schools in South Carolina, per-student fees varied from $2,392, or about one-fourth of tuition and fees, at The Citadel to $0 at Clemson. An article by Hobson and Rich (2015) lists student fees to support athletics at $279 and $328 for UNC Chapel Hill and NC State, respectively. Ridpath, Porto, Gurney, Lopiano, Sack, Willingham, and Zimbalist (2015) of The Drake Group have called for greater transparency, fee caps, and referenda on student fees to pay for athletics. Although these fees are important and can be a significant contributor to rising tuition and fees, the transfer of resources to an institution's athletic program includes not only student fees but also government funds, institutional resources, and facilities and services for which no charge is made. A reduction in the transfer of all resources to the athletic program would bring the greatest reduction in students' tuition and fees. Such an analysis is beyond the scope of this paper.

15. Higher rank values mean higher proportions of graduates with debt and higher average debt per graduate.

Table 4. Graduates with Student Debt in North Carolina and South Carolina, 2017

NORTH CAROLINA			
GRADUATES	**% OF GRADUATES WITH DEBT**	**AVG DEBT**	**N**
All	57.5	$26,051	27
Public institutions	60.6	$24,942	10
Private institutions	48.4	$29,306	17

Public institutions included are these: Appalachian State, East Carolina, NC A&T, North Carolina State, UNC Ashville, UNC Chapel Hill, UNC Charlotte, UNC Greensboro, UNC Wilmington, and Western Carolina. Private institutions included are these: Barton, Belmont Abbey, Campbell, Catawba, Davidson, Duke, Elon, Gardner-Webb, Guilford, High Point, Johnson C. Smith, Lenoir-Rhyne, Methodist, Pfeiffer, Saint Augustine, Wake Forest, and Wingate.

SOUTH CAROLINA			
GRADUATES	**% OF GRADUATES WITH DEBT**	**AVG DEBT**	**N**
All	55.8	$30,014	14
Public institutions	54.6	$29,788	8
Private institutions	61.6	$31,138	6

Public institutions included are these: The Citadel, Clemson, College of Charleston, Francis Marion, USC Aiken, USC Columbia, USC Upstate, and Winthrop. Private institutions included are Anderson, Claflin, Coker, Furman, Newberry, and Wofford.

Source: The Institute for College Access and Success and authors' calculations.

institution for schools in both the EADA and Institute for College Access and Success databases. In North Carolina, a higher proportion of graduates from public institutions have debt, but the average debt per graduate is higher at private institutions. In South Carolina, the proportion of graduates with debt and the average debt per graduate are higher at private institutions.

The combination of rising student debt, rising athletic costs, and upward NCAA reclassification yields clear policy implications. To ensure affordability, colleges and universities in the Carolinas need to keep a close watch on athletic costs. For flagship schools, such as UNC Chapel Hill, NC State, Clemson, and USC Columbia, athletic spending on a per-student basis may be high (as shown in figure 3), but this spending

is offset by television appearances, gate receipts, bowl-game revenues, and bids to the NCAA men's-basketball tournament. The same can be said of well-heeled private schools such as Duke and Wake Forest.

Nonetheless, the athletic programs for many other schools in the Carolinas bring in little revenue. Aspirations to reclassify to more competitive NCAA divisions should be approached with caution by public and private schools alike, since upward reclassification raises costs with little offsetting revenues. Higher athletic expenditures at small, tuition-driven schools must be financed by the institutions' broader budgets and may pose a substantial financial burden. All schools should take account of the upward trend in athletic expenditures so evident throughout this period of study. An athletic program that is affordable today may not be affordable tomorrow. Although de-escalation of athletic programs is politically difficult, small schools that spend a large amount on athletics on a per-student basis, both public and private, may need to consider downsizing their athletic programs in the future.

V. CONCLUDING THOUGHTS

Our aim in this paper is to shed light on the cost of intercollegiate athletics, focusing on institutions of higher education in North and South Carolina. Consistent with our earlier work, we have found that the amount an institution spends on athletics, on a per-student basis, depends critically on the institution's size, the size of its athletic program, whether the institution is public or private, the NCAA division in which it plays, and the passage of time. Athletic costs per student decline with the number of undergraduates but rise with the number of athletes, the level of NCAA classification, and the passage of time. For schools in the Carolinas, real athletic expenditures per student rose markedly from the beginning of our sample period in 2003 to the end of our sample period in 2016. Further, whatever the benefits reclassification to higher levels of play may bring, our analysis of eight schools that reclassified during our study period shows that costs rose in each case, sometimes substantially.

With over half the students in the Carolinas taking out student loans that leave them with debt that averages over $25,000, it is time to examine the costs of intercollegiate athletics carefully. In particular, small schools with athletic programs that spend thousands of dollars per student but earn little offsetting revenue may be called into question, if not now, then in the future. University administrators, state legislators, college students, and the students' parents need assurance that athletic spending is in line with a school's financial capabilities. Monitoring the financial burden of college students in the Carolinas—and the role athletics may play in that burden—is not only prudent financially but also equitable to the students who pay for their education, often with borrowed funds.

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NOTES AND COMMENTARY

NORTH CAROLINA'S ANTI-MONOPOLY CLAUSE: STILL RELEVANT AFTER ALL THESE YEARS

By Jon Guze, John Locke Foundation

> *Monopolies in times past were ever without law, but never without friends.*
>
> Sir Edward Coke, 1644

I. INTRODUCTION

In 2017, a North Carolina surgeon named Gajendra Singh opened a diagnostic-imaging center in Forsyth County. The center currently provides x-rays, ultrasound, and CT imaging seven days a week at low, fixed prices. Dr. Singh would like to offer low-cost MRI scans seven days a week as well, but he can't. Under North Carolina's certificate-of-need (CON) law, only the owners and operators of existing medical facilities are allowed to provide certain types of medical services, including MRI scans. Rather than accept this lying down, Dr. Singh filed a complaint last summer asking the Wake County Superior Court to declare that the CON law violates several provisions of the state constitution, including Article I, Section 34, which declares, "Perpetuities and monopolies are contrary to the genius of a free state and shall not be allowed."

Commonly known as the "anti-monopoly clause," that declaration has been part of North Carolina's constitutional endowment from the very beginning. It was part of the original state constitution, which was adopted by the Fifth Provincial Congress in 1776. It was part of the post–Civil War constitution, which was ratified by the voters in 1868. And, as noted, it is part of the current constitution, which was ratified in 1971.

As I will explain in this note, the anti-monopoly clause was originally adopted for the specific purpose of forbidding government-granted monopolies such as the one created by North Carolina's CON law. Fortunately for Dr. Singh—and for the thousands of other North Carolinians whose right to earn a living has been violated by state laws that confer monopoly privileges on politically favored groups—the anti-monopoly clause can still serve that purpose today.

II. WHAT THE ANTI-MONOPOLY CLAUSE MEANT IN 1776

There's nothing in the official record to indicate what the members of the Fifth

Provincial Congress had in mind when they added the anti-monopoly clause to the state constitution in 1776 (Minutes, 969, 971). Nevertheless, the target of the clause is clear from the intellectual and political context. In the eighteenth century, in North Carolina and throughout British North America, the colonists were literally up in arms about the British practice of granting exclusive trade privileges to certain companies. From their reading and from their direct experience, the colonists had learned that government-granted monopolies violated their rights and diminished their welfare. It seems clear, therefore, that the original purpose of the anti-monopoly clause was to forbid government-granted monopolies in the newly formed state of North Carolina.

1. WHAT THE COLONISTS LEARNED FROM THEIR READING

When it came to English law and English legal history, the colonists relied, above all, on the voluminous works of the great seventeenth-century jurist Sir Edward Coke. For them, Coke was more than just a legal authority; he was a heroic advocate for liberty. In the words of legal historian Thomas Barnes, "Our Founding Fathers had no doubt which side Lord Coke was on, and none questioned the magnitude of the aid he gave them" (quoted in Calabresi and Liebowitz 2018, 1007).[1] If, therefore, we want to know what the members of the Fifth Provincial Congress had in mind when they added the anti-monopoly clause to the North Carolina constitution, a good place to start is by considering what they would have learned about monopolies from their reading of Edward Coke.

To begin with, they would have learned something important about seventeenth-century semantics. As defined by Coke, "A monopoly is an institution, or allowance by the King . . . to any person or persons, bodies politick or corporate, of or for the sole buying, selling, making, working, or using of any thing" (Coke 1644, 181).

They would also have learned about the long fight—led for many years by Coke himself—to put a stop to such monopolies in England. And they would have learned, specifically, about two major victories in that fight: the Court of King's Bench's holding in Darcy v. Allen in 1603, and Parliament's passage of the Statute of Monopolies in 1624.

Coke's report of *Darcy v. Allen*—published as *The Case of Monopolies*—was widely read in the colonies. According to the report, Edward Darcy ("a Groom of the Chamber to Queen Elizabeth") had purchased the exclusive right to manufacture, import, and sell playing cards. He accused Thomas Allen ("Haberdasher of London") of violating that monopoly and sought damages for loss of income. The court found in favor of Allen,

1. While some modern scholars have cast doubt on Coke's reliability as a guide to legal developments in early-modern England (Letwin 1954; Malament 1967; Nackbar 2005), nobody doubts that the colonists regarded him as authoritative.

and—despite the fact that it was the first time a monopolies case had been heard in a common-law court, and despite the fact that it happened more than four hundred years ago—the arguments and analysis are depressingly familiar.

Darcy attempted to justify his monopoly by suggesting that, because playing cards were "things of vanity" and subject to "great abuse," it was right and proper for the Queen to "take such order for the moderate use of them as shall seem good to her" (*Darcy* 1603, 85b). The court, however, found that "the end of all these monopolies is for the private gain of the patentees," and it held that the Queen's grant to Darcy was void because "the same is a Monopoly, and against the Common Law" (*Darcy* 1603, 86a). In addition to citing scriptural support and legal precedents going all the way back to Magna Carta, the court noted that monopolies violate the "liberty of the subject," are "against the freedom of Trade and Traffick," and "leadeth to the impoverishment of divers artificers and others." It also noted that, once a monopoly is granted, "the price of the said commodity shall be raised" and "the Commodity is not so good and merchantable as it was before" (*Darcy* 1603, 86b).

Darcy was decided at the very end of Elizabeth's reign. Her successor, James I, ignored the decision and continued to grant monopolies as a source of revenue. In response to James's obstinacy, Coke, who was by that time a member of Parliament and chairman of the Committee of Grievances, led a successful campaign to impose a statutory remedy. The Statute of Monopolies, which Coke himself drafted, declared:

> All monopolies and all commissions, grants, licences, charters and letters patents heretofore made or granted, or hereafter to be made or granted to any person or persons, bodies politic or corporate whatsoever, of or for the sole buying, selling, making, working or using of any thing . . . are altogether contrary to the laws of this realm, and so are and shall be utterly void and of none effect, and in no wise to be put in use or execution. (Statute of Monopolies 1623, Sect. 1)

In the short term, the Statute of Monopolies was no more successful than *Darcy v. Allen* had been. James's successor, Charles I, ignored them both, and the practice did not come to an end in England until royal prerogative itself came to an end under the settlement of 1688 as recorded in the Bill of Rights. Nevertheless, those early victories had a large and lasting impact. They established the law of the land by which William and Mary and their successors were bound; they provided the foundation for the subsequent development of monopoly and patent law in England and America; and, most importantly for our purposes, they provided the legal basis for the colonists' opposition to government-granted monopolies.

2. WHAT THE COLONISTS LEARNED FROM THEIR DIRECT EXPERIENCE

While the Glorious Revolution and the Bill of Rights may have put a stop to the abuse of government-granted monopolies in England, they did not put a stop to them in the colonies, and this became a source of increasingly bitter resentment. The colonists regarded themselves as Englishmen, and they believed English common law and English statutes—including *Darcy v. Allen* and the Statute of Monopolies—applied to them. However, the authorities in eighteenth-century England saw things differently. The official position was that the colonial charters superseded English common law within the colonies and that English statutes only applied to the colonies when the statutory language explicitly said so. Unfortunately, the Statute of Monopolies did not include such a statement, and, making matters worse, by its own terms it applied only to monopolies "within this realm, or the dominion of Wales" (Statute of Monopolies 1623, Sect. 1). As a result, Britain continued to grant legal monopolies on the colonial trade, with dire consequences for the imperial project in North America.

In a recent law-review article, Steven G. Calabresi and Larissa C. Leibowitz describe the resulting spiral of escalating hostilities:

> England enacted an extensive set of laws granting English merchants monopolies in colonial trade for a variety of markets—from manufactured goods to all kinds of raw materials, . . . black markets arose [in] response, . . . [and] English mercantile laws were enforced with great intrusiveness. . . . The havoc wreaked by the English monopoly system on England's relationship with the American colonies cannot be overstated. (Calabresi and Leibowitz 2013, 1008)

One particularly vivid example of that havoc would have been fresh in the minds of members of North Carolina's Fifth Provincial Congress in 1776: the Boston Tea Party. While it is often described as a tax protest, what happened at Boston Harbor in 1773 was also very much a protest against the British East India Company's monopoly on the tea trade.

Given this intellectual and political context, there can be little doubt that the members of the Fifth Provincial Congress had government-granted monopolies specifically in mind when they added the anti-monopoly clause to the state constitution in 1776. By declaring that such monopolies ought not to be allowed, they meant to secure for themselves and their posterity the same right that *Darcy v. Allen*, the Statute of Monopolies, and the Glorious Revolution had secured for their cousins back in England: the right to earn an honest living by engaging in a lawful occupation.

III. WHAT IT MEANS TODAY

While the original understanding of the anti-monopoly clause seems clear, one might nevertheless ask: two constitutions and 243 years later, does it still mean today what it meant in 1776? To be more specific, does it still forbid government-granted monopolies? Perhaps surprisingly, the answer is yes.

If that answer seems surprising, it is because—in addition to eliciting a political response in the form of state and federal antitrust legislation—the emergence of the great trusts in the late nineteenth century inspired a semantic change as well. Here's how a contemporary observer described that change:

> Monopoly now means something vastly different from that which [was] so vigorously opposed in the times of Elizabeth and James, and against which the founders of our nation had such a deep-rooted antipathy. Then it meant an institution founded and kept in existence by royal favoritism; now it means an institution which may have come into existence without direct governmental assistance, and which may have maintained itself in spite of administrative and legislative opposition. (Forrest 1896, 414)

Given that the word "monopoly" retained that new meaning in 1971 when the current constitution was ratified, and given that it has continued to retain that new meaning ever since, it could be argued that the anti-monopoly clause should now be understood to forbid, not just the government-granted monopolies that were its original target, but organizations that have achieved monopoly power without government assistance as well.[2] What could not be seriously argued, however, is that the clause should now be understood to apply *only* to businesses such as Google and Facebook and *not at all* to monopolies such as the one created by North Carolina's CON law. From the late nineteenth century all the way up to the present day, dictionary definitions for the word "monopoly" have invariably included something like the following: "an exclusive privilege of engaging in a particular business or providing a particular service granted by a ruler or by the state" (Collins 2019). It would be strange indeed for a court to conclude that the voters who ratified North Carolina's current constitution intended to narrow the scope of the anti-monopoly clause in a way that both excluded a conventional meaning of the word "monopoly" and frustrated the purpose for which the clause was originally adopted; and, indeed, no court has done so. On the contrary, in a case decided soon after the current constitution was ratified, the North Carolina Supreme Court did not hesitate to apply the anti-monopoly clause to a government-granted monopoly. Ironically enough, that monopoly was created under an earlier version of the law that is being challenged by Dr. Singh.

North Carolina enacted its original CON law in 1971. Like the current version, the 1971

2. Even if it were successful, such an argument would have little substantive impact because federal antitrust law preempts state law in this area.

law gave existing health care providers the power to exclude competing medical-service providers in their regions. It was immediately challenged by a private hospital that wanted to replace its existing facility with a new and larger one. In an opinion more than a little reminiscent of *Darcy v. Allen*, the North Carolina Supreme Court rejected the state's attempt to defend the law on public health grounds and held the following:

> The right to work and to earn a livelihood is a . . . right that cannot be taken away except . . . for reasons of health, safety, morals, or public welfare. . . . We find no . . . reasonable relation between the denial of the right . . . to construct and operate . . . an adequately staffed and equipped hospital and the promotion of the public health. . . . [Denying] the right to construct and operate [a] hospital except upon the issuance . . . of a certificate of need . . . establishes a monopoly in the existing hospitals, contrary to Art. I, Sec. 34 of the Constitution of North Carolina. (*Aston Park* 1973, 551, quotations and citations omitted)

IV. CONCLUSION

In 1603, England's highest court held that monopolies are "against the Common Law." In 1624, Parliament enacted the Statute of Monopolies, which stated that monopolies are "altogether contrary to the laws of this realm." In 1776, North Carolina's first constitution declared that monopolies "ought not to be allowed." In 1868, the state's second constitution made the same declaration in the same words, and, in 1971, North Carolinians ratified the current constitution, which declares, even more emphatically, that monopolies "shall not be allowed." And, in 1973, the North Carolina Supreme Court held that a law giving existing medical-facility operators the exclusive right to provide medical services violated the anti-monopoly clause.

None of that, however, has deterred North Carolina's state government from granting legal monopolies on a scale that would have made Elizabeth and James (and even Charles I) blush. On average, between 1970 and 2008 North Carolina created a new licensing board every ten months, and, because some of those boards were given control over more than one occupation, the number of newly licensed occupations—each of which is, in effect, a government-granted monopoly—grew considerably faster than that (Sanders 2018). In 2078, just five years after the North Carolina Supreme Court handed down its decision in *Aston Park*, the General Assembly enacted a new CON law, and, unless Gajendra Singh succeeds in getting that law struck down, the state will go on protecting the hospital cartel's monopoly on the provision of medical services for the foreseeable future.

Clearly, the fight against government-granted monopolies can never be decisively won. The potential rewards are huge, and would-be monopolists and politicians will never stop trying to secure and share those rewards. Those who wish to exercise their right to engage in lawful occupations will, therefore, have to go on fighting. Fortunately, the anti-

monopoly clause of the North Carolina constitution gives them a powerful weapon to use in that fight.

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NOTES AND COMMENTARY

PROVIDING PARTISAN AFFILIATION IN JUDICIAL ELECTIONS

By Bryan C. McCannon, West Virginia University, Center for Free Enterprise

In 2017 North Carolina changed its policies regarding the election of judges. Since the legislature overrode a gubernatorial veto in March 2017, the partisan affiliation of superior court and district court judges has been on the election ballot. North Carolina joins the twelve other states that have partisan elections. Interestingly, this policy change reverses the state's 2001 and 1996 changes that respectively eliminated partisan affiliation for these two positions. Given the variation in selection and retention mechanisms used across the country, it is possible to investigate what effects this policy change might have. This note's objective is to discuss the impact partisan affiliation may have so as to shed light on the properness of North Carolina's policy.

In free societies, the legal system is of primary importance. We all want ourselves and our possessions to be protected from violence and harm. We want those who cause harm to be punished and those who are law-abiding to not be wrongfully sanctioned. Importantly, we want crime deterred. Regarding civil law, there are economic benefits to clear, unambiguous contract enforcement. Property rights should be defended and fraud reduced. In short, we all benefit when legal systems are functioning properly.

At the center of the legal system is judges. Judges are asked to uphold the rule of law. They are meant to properly apply the rules of evidence, statutes passed by the legislative branch, and judicial precedents. As Friedrich von Hayek (1944) argued, the value of the rule of law is that we can plan our lives easier. Arbitrarily applied law frustrates the planning of our lives. Additionally, arbitrary law favors one person or group at the expense of others and hence is discriminatory. We rely on judges to consistently apply the law in clear, predictable ways.

Across the US, states differ in how judges are held accountable for their decisions. Many jurisdictions, including North Carolina, use the election mechanism. Citizens are asked to cast a vote between competing candidates for judge positions. Judges serve fixed terms in office, and to remain in office they must run for re-election. For example, superior court judges in North Carolina serve eight-year terms. This provides voters the opportunity to express their support for the judges' job performance. Also, it allows other legal insiders to challenge the incumbent judge for the position, which expresses to the

citizens the incumbent's shortcomings. The United States is unique in the world in its use of the election mechanism, which empowers citizens to hold their judges accountable.

Going hand-in-hand with the use of the election mechanism is partisanship. Most political officeholders have partisan affiliation. In elections for legislative or executive offices, because legislative and executive policy is often distributional (benefitting one group at the expense of another), partisanship is to be expected. In fact, the phenomenon of plurality voting leading naturally to a two-party system is known as Duverger's law (Duverger 1972). For the judicial branch, on the other hand, it is not clear what benefit partisan affiliation has.

Ultimately, the decision of whether to list partisan affiliation on the ballot is a regulatory decision made by a state government. Is it in society's best interest to provide the information to voters, or is it welfare enhancing to suppress it? My objective in this note is to use economic theory and empirical analysis to discuss partisan affiliation as a regulatory action.

At the core of welfare economics is the fundamental welfare theorem. It states that competitive markets achieve Pareto-efficient outcomes. Stated plainly, if a market is competitive then it will naturally lead to a "good" outcome in the sense that some individuals cannot be made better off without hurting others. If this occurs, then regulation does not have societal value.

What is the value of including partisan affiliation on ballot? The question is one of providing information. Obviously, a motivated voter can put the time and effort into learning about a candidate's partisanship. Given that the probability a particular individual will swing the election's outcome is very small, it is not necessarily in the individual's best interest to exert this effort (Tullock 1971). This phenomenon has been referred to as rational ignorance (Caplan 2007). Thus, providing partisan affiliation on the ballot provides information to voters cheaply.

While direct evidence of voters' preferences is not observable, actors in the legal system behave as if voters care about partisan affiliation in judicial elections. One way to observe judges' responses to elections is to evaluate changes in their decision-making over time. A common presumption is that voters are myopic. That is, they pay attention to the choices of their elected representative when it is close to election time. Incumbents, anticipating this, behave differently closer to the election than farther away from it. If the pattern of their choices over time correlates with the political cycle, then the influence of voters' information can be identified.

One important work studying such a pattern is by Berdejó and Yuchtman (2013). They consider judges in Washington State, who are chosen in partisan elections. Evaluating sentencing data, they find that as the time until election shrinks the harshness

of the judges' sentences increases.

Relatedly, Lim (2013) studies judicial sentencing in Kansas. Kansas is unique in that the state is divided between jurisdictions that elect their trial court judges and those in which such judges are appointed. She compares the two and finds that sentencing varies with the election cycle in areas that elect their judge, but in areas with appointments, judicial sentencing is flat over time.[1]

Along with sentencing, the quality of judges' decisions correlates with the election cycle. Building off the earlier work of McCannon (2013) on election of prosecutors, DeAngelo and McCannon (2018a) use data on appealed felony convictions in New York to evaluate judicial elections. They use reversed or modified convictions as a measurement of lower-court error and ask whether the errors are correlated with re-election pressures on judges. They find an important difference between judges who are former prosecutors and those that are not. Prosecutors-turned-judges are more likely to have the appellate court affirm their convictions, and they see an improvement in the election season. Judges who were not prosecutors are worse and get even more worse close to re-election.

The results of these papers strongly suggest that voters care about judicial performance. But do they care about the information partisan affiliation provides? The role of information in judicial elections is explored in depth by Lim, Snyder, and Strömberg (2015). They argue that the media has an important role in providing information. The media's informational value is largest when voters have the weakest prior knowledge. They argue that voters' prior knowledge is weakest when they are denied information on the judge's party affiliation. Hence newspaper coverage of judges should be most impactful when judges face nonpartisan election. This is precisely what they find. Evaluating sentencing harshness of judges across the country, who differ in the use of partisan elections and differ in newspaper coverage of their district, they find that newspaper coverage leads, overall, to harsher sentences and that this effect is concentrated for judges who face nonpartisan elections. Thus, stripping away information about partisan affiliation takes away important information that voters care about, which must be supplemented via media coverage of the courtroom.

If voters value party affiliation, then why regulate it? A common argument in economics is that regulation is a potential solution when there are externalities. An externality is an unintended spillover of one person's or organization's action onto others. To justify restricting information availability, then, one must identify negative spillovers and these spillovers must create harm exceeding the benefits.

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1 Similar work confirming the electoral cycle's influence on the legal system can be found in elections of prosecutors. See Bandyopadhyay and McCannon (2014) for empirical evidence on the relationship between such elections and the increased use of jury trials, rather than plea bargaining, and Bandyopadhyay and McCannon (2015) for a theoretical investigation.

So where is the harm? One important concern is that partisanship provides bad information. The argument usually goes that judges should not be political. They should make their decisions based solely on the laws of the nation or state. The law should be applied the same regardless of which political party the judge prefers. Therefore, if voters are making their decisions based on partisan affiliation, then they must be selecting candidates on dimensions other than those they should be acting on.

This argument has merit. If there is a law supported by the party currently in power and opposed by the other party, then it should concern us that democratic processes are being subverted when a judge affiliated with the latter refuses to uphold the law.

There is suggestive evidence that partisanship influences judges. For one example, Shepherd (2009) considers the relationship between state high court judges' decisions and partisan ideology. She finds that judges elected by Republican majorities or appointed by Republican governors, for example, are more likely to decide on typical Republican sides, such as siding with management in labor-management disputes or with businesses in environmental-damage cases. Interestingly, she finds that when the ideology of the retention agent changes, as happens when the voting majority switches from supporting Republicans to supporting Democrats, judges adjust their opinions in cases to coincide with the ideology of the retention agent. Finally, Shepherd (2009) documents that these effects are strongest for judges selected in partisan elections.

On the other hand, US judges have a substantial amount of discretion. For example, the separation of powers has curtailed legislative efforts to dictate sentencing decisions. Though given suggestive bounds via sentencing guidelines, judges have discretion to vary sentencing as they see fit. It seems reasonable in such a circumstance for citizens motivated by concerns of crime to be interested in harsher sentencing, which reduces crime through both an incarceration effect and a deterrence effect. It would also be reasonable for other citizens, motivated by data on sentencing disparity by race (Rehavi and Starr 2015) or mass incarceration, to prefer milder sentences. As another example, one citizen may prefer retribution through incarceration, while another citizen may prefer liberal use of alternatives to incarceration. If these different views on appropriate punishment coincide with differences in political party platforms, then partisan affiliation can provide useful shorthand information to voters, thus saving them the time and effort necessary to learn candidates' specific views on these issues.

Another potential harm is the deadweight loss associated with campaign spending. A substantial amount of money is spent on elections. The relationship between partisan versus nonpartisan elections and spending on these elections is, then, an important question. If having nonpartisan elections corresponds with less wasteful campaign spending, then social welfare may be higher with the regulation.

Little research has been done evaluating campaign spending in judicial elections. Experiments conducted by DeAngelo and McCannon (2018b) stand alone. In the laboratory, the authors create elections. An election is operationalized as a contest in which each party in the race chooses how much to spend, and the probability of winning the election is proportional to one's spending. That is, holding fixed the campaign spending by the other participants, the more a candidate spends the greater is the likelihood that the candidate wins the election. The authors compare a treatment intended to capture partisan affiliation with one meant to capture nonpartisan affiliation. Their insight is that in a particular district, one party dominates the electorate. Spending by that party's candidate is more effective than spending by the nondominant parties' candidates. This disparate effect is not as strong in nonpartisan elections.

DeAngelo and McCannon have laboratory subjects compete repeatedly in both treatments. The group's well-being is improved when they reduce the amount of money spent on the contest. Equilibrium, on the other hand, involves a modest (and thus excessive) amount of spending by each candidate. The authors find that their laboratory subjects, overall, spend too much on the election. The average amount put into the contest is approximately double what equilibrium predicts. Thus, not only does theory predict that there is excessive spending in such contests, but the amount real humans spend in a competitive environment exceeds these levels.

Importantly, the authors find that the spending is highest on candidates who have the dominant-party advantage. Spending is approximately 10 percent higher on those who have the dominant-party advantage than spending on those in the nonpartisan election treatment. There is a slight reduction in spending by those who do not have the partisan advantage, but the net effect of partisanship is to increase the deadweight loss of the campaign. They conclude that dropping partisan affiliation may have the benefit of reducing the wasteful spending of political campaigns for judges.

These are two spillovers of concern, and there may very well be others. Regulation can only be justified when these negative spillovers outweigh the benefits voters receive. How to balance these benefits and costs is a difficult value judgment. If the value voters place on the information is greater than the costs of potentially increased spending on the elections and of the partisan shift in judicial decisions, then the policy change in North Carolina can be justified. If not, then nonpartisan elections may have been better.

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BOOK REVIEW

THE CAMBRIDGE HANDBOOK OF CLASSICAL LIBERAL THOUGHT

Edited by M. Todd Henderson. Cambridge: Cambridge University Press, 2019. Pp. xiii + 313. $150.00, hardcover.

Review by Jenna Robinson, The James G. Martin Center for Academic Renewal

As a title, *The Cambridge Handbook of Classical Liberal Thought* does little to prepare potential readers for what they'll find in the recent book by that name. Those who pick it up despite this bland title will discover a thorough, modern, and varied discussion of classical liberalism from an impressive list of scholars. A better title might be *Modern Perspectives on Classical Liberal Thought*.

The book's editor, M. Todd Henderson of the University of Chicago School of Law, accurately describes the contents of the book in his exhaustive introduction. Across sixteen chapters, the book begins to answer an important question that classical liberal thinkers should consider—namely, does classical liberalism have a place in modern society?

> What is the future of classical-liberal thought in law and policy? What does classical liberal thought have to say about matters of pressing public concern, ranging from immigration policy to consumer welfare regulation to the growth of the prison system?

The question is a timely one. Many of the topics discussed in the book are ones that Locke and Bastiat never had to consider, such as antidiscrimination laws and environmental protection. Classical liberals must be prepared to address these questions. Henderson explains, "It is insufficient . . . to retreat to the enumerated powers of the Constitution" when confronting strains of illiberalism in our own society.

In a series of essays, the book (for the most part) makes the case that classical liberalism does have a place in modern society and can provide answers to complicated questions in contemporary politics. The book arose from a symposium on classical liberal thought hosted by the University of Chicago Law School in 2015. It features essays from respected scholars in law, economics, political science, and philosophy.

A chapter by the late Ralph Raico,[1] "The Rise, Fall, and Renaissance of Classical Liberalism," sets the stage. In just nine pages, he follows the history of liberalism from its

roots in the natural-law philosophies of Greece and Rome to Milton Friedman's influence in the second half of the twentieth century. A newcomer to classical liberalism could spend weeks unpacking the essay's full contents. Raico ends his concise history with a warning and a call to arms:

> And yet, in Western countries, the state keeps on relentlessly expanding, colonizing one area of social life after the other. In America, the Republic is fast becoming a fading memory, as federal bureaucrats and global planners divert more and more power to the center. O the struggle continues, as it must. Two centuries ago, when liberalism was young, Jefferson had already informed us of the price of liberty.

Unfortunately, not every chapter is as compelling as Raico's. Several of the practical chapters are dense and so burdened with jargon that their appeal will probably be limited to those who work in the same fields as the authors themselves. For that reason, it's good that each chapter can stand alone. With the exception of Leonard Read's classic "I, Pencil," included as chapter 6, this volume is not for beginners or for casual consumption.

Most of the chapters offer insight into how classical liberalism can confront current societal problems. One such chapter is "More and Better: Resources Defined through Property and Exchange" by Art Carden, an associate professor of economics at Samford University in Birmingham, Alabama. Carden's essay suggests that classical liberals should "explore the knowledge-generating properties of alternative property rights." Another such chapter is "Foot Voting and the Future of Liberty" by Ilya Somin, a law professor at George Mason University. Somin explores the concept of exit in a modern world.

But a few chapters contain criticism. A chapter by Louis Michael Seidman, professor of constitutional law at Georgetown University Law Center, is titled "Seven Problems for Classical Liberals." The titular problems deserve serious attention, including externalities, contextual choice, and private power. In another chapter, Jacob T. Levy, professor of political theory at McGill University and a classical liberal himself, makes the case that classical liberalism—as it is practiced today—has made itself irrelevant and insufficient to interact with modern politics.

The book also makes several overtures from the left arguing that classical liberals should find commonalities with progressives on issues such as social justice. This isn't surprising since several of the authors consider themselves "bleeding-heart libertarians" and blog on a website of that name. Jason Brennan, professor of strategy, economics, ethics, and public policy at Georgetown University, is the author of chapter 2: "Back to the Future: New Classical Liberalism and Old Social Justice." Chapter 10, by Fernando Téson, a legal scholar at Florida State University's College of Law, is "The Bourgeois

1. Raico's essay was first published in 1992 by the Future of Freedom Foundation. It is reprinted in this book by permission.

Argument for Freer Immigration." Levy, mentioned above, also counts himself among the "bleeding hearts."

An essay by Richard Epstein concludes the book. In it, he addresses the fundamental objections to classical liberalism propounded by Seidman. Epstein notes that "the current turn in political sentiments makes this an opportune time to determine whether the principles of classical liberalism are able to meet various theoretical challenges." He boils down classical liberalism (as well as anarcho-capitalism) into three key rights—autonomy, property, and exchange—and the understanding that "the entire system of autonomy, property and exchange is protected by a system of tort law that is directed to the use of force and/or fraud against any of these three interests." These rules, he says, "make up a huge start to a sensible society." Epstein's defense of classical liberalism is, as always, thorough and competent.

Those strengths, competence and attention to detail, are in evidence throughout the book. But, with a few notable exceptions, the book is cold. Its laser focus on accurate theory, important modern questions, and minute details means that readers will come away both impressed and better informed—but not inspired.

The Cambridge Handbook of Classical Liberal Thought would be an excellent addition to any serious library of classical liberalism. But, despite its name, it is not the first book I'll recommend to those who are looking for a true handbook on the topic.

BOOK REVIEW

THE CODDLING OF THE AMERICAN MIND: HOW GOOD INTENTIONS AND BAD IDEAS ARE SETTING UP A GENERATION FOR FAILURE

Greg Lukianoff and Jonathan Haidt. (New York: Penguin Press, 2018), 338 pages.

Review by Andrew Taylor, North Carolina State University

It is fashionable for wizened Baby Boomers and Gen Xers to characterize college students as "snowflakes." Ensconced in the protections afforded by today's luxurious campuses, these young people wish to avoid any intellectual conflict. Their professors indulge them. Course syllabi come with "trigger warnings" cautioning students they might find material discomforting. A large, intrusive, and increasingly emboldened university bureaucracy—much of which is housed in burgeoning diversity, campus-housing, and student-affairs units—"educates" about micro-aggressions and behavior it contortedly interprets as racist, sexist, homophobic, or guilty of any of numerous other sins. It polices the community's language down to the pronouns people can use when addressing friends and colleagues. Officious administrators staff "incident-response teams" to chase down any trace of bias, whatever they mean by that. They prohibit outside speakers who might challenge the orthodoxy. Dissenters who somehow secure a platform are intimidated and frequently silenced. The student mind is apparently so fragile that even seemingly innocuous stimulation or disturbance injures it.

"Coddling" is the adjective Greg Lukianoff and Jonathan Haidt give the development. It is very real, they argue. Lukianoff, the president of the Foundation for Individual Rights in Education (FIRE), and Haidt, a prominent psychologist and founder of Heterodox Academy, identify beliefs pervasive on campus, and indeed prominent in broader society, that have turned students into a collection of attention-seeking, offense-taking, conflict-averse neurotics.

This is not really the students' fault. Social and technological developments and a new generation of parents are partly to blame. Well before their arrival on college campuses,

students become captives of electronic devices such as iPads and video games. Parents fill their lives with scheduled and organized activities, such as soccer, violin, and Chinese lessons. All manner of safety devices, from rubberized playgrounds to new forms of psychological counseling, protect them from physical and emotional harm. Children are led to believe a strange man might abduct them at any moment. Gone are the days when American youngsters climbed trees or played baseball outside with friends until the sun set or their mothers called them in to eat dinner.

The result is widespread anxiety and depression. Teenagers are subject to "the fear of being left out"—what Deborah Tannen calls FOBLO—when they see pictures on Instagram of friends having fun without them. They get caught up in "the resume arms race" and go to pieces if they get a single bad grade. There are sometimes devastating consequences. The suicide rate among high school and college students, particularly females, has increased markedly over the past decade.

Once on campus, college administrators and faculty only make matters worse of course. Professors and academic administrators believe students are emotionally brittle and deserving of a self-centered customized experience to ready them for a world in which they will be doing good and fighting evil. Students are treated like customers, so college is now therapeutic. Libraries, gyms, classrooms, and dorms have state-of-the-art equipment. Cafeterias serve up gourmet food. Psychological comfort is as important as physical comfort. Professors protect their students from ideas they find disconcerting and work they might find too onerous. Administrators hawk "social justice" because it is fashionable in their circles and assuages guilt. There is no serious intellectual treatment of what it means. Good grades are an entitlement, not the mark of accomplished scholarship. To the extent education occurs, it is of the training, not liberal, variety. Higher education is now emotive rather than intellectual, a means of self-validation and not transformational and enriching. Today, education controls the mind; it does not liberate it.

The authors offer a catalog of remedies, all of which are likely to improve the situation, even if many of them are a little unrealistic. They call for parents to get their children off electronic devices and outside to play. They want to encourage more risk-taking and independence in childhood. They ask us to give people the benefit of the doubt and be more empathetic. They encourage students to undertake a year of public service before entering college.

Among their recommendations specific to higher education, the authors list reforms central to the ethos of the organizations they lead. Lukianoff's FIRE is committed to free speech on campus. It has had tremendous success with its "spotlight" program, which grades institutions on a three-point scale from red to green. (After an interminable

journey through university bureaucracy, I recently helped get my institution, North Carolina State, to change speech policies and earn a green light.) Haidt's Heterodox Academy promotes intellectual diversity on campus. It has the more formidable challenge. The university grows more liberal, and the politics of faculty hiring and tenure mean leftist professors propagate. Their domination of editorial boards and the process of reviewing research and scholarship result in further marginalization of alternative, mainly conservative or libertarian, views and the professors who hold them. The authors call for heterogeneity of viewpoint to be included in institutions' diversity policies. Good luck with that.

I think the authors exaggerate the pace at which the transformation occurred. This helps their argument and provides dramatic effect; the thesis hinges on events such as the bloody Berkeley riot in response to the visit of Milo Yiannopoulos and the anarchy that enveloped Evergreen State University. But the process has been underway since the 1990s. This is when a huge cohort of leftist professors adhering to the agenda of identity politics began to succeed their academic "parents," a generation more interested in Marx and American Cold War imperialism than the ideas of bell hooks and intersectionality. The developments the book describes are not sudden or surprising.

I have heard numerous commentators claim the future of Western civilization is at stake in the political conflicts that rage within the academy. Lukianoff and Haidt are more guarded. They are nevertheless despondent. Without robust protections for free speech and a genuinely wide-ranging and energetic discussion of diverse ideas, American college campuses are, at the very least, atrophying intellectually. They are losing broad public support, and their teaching of the humanities and social sciences is becoming increasingly irrelevant in the wake of accelerating change. We need to support traditional liberal education and faculty need to devote themselves to its premise of critical and independent thought taught within a coherent course of study guided by the ancients, the Renaissance, and the Enlightenment. This is not an antiquated philosophy, regardless of the educational establishment's remonstrations. The authors write in measured tone, but none of us can say after reading The Coddling of the American Mind that we were not warned.

BOOK REVIEW

WHY LIBERALISM FAILED

Patrick J. Deneen. (New Haven: Yale University Press, 2018), 248 pages. ISBN: 9780300240023 (pbk.). Hardback/Paperback: $30.00/18.00.

Review by Gregory J. Robson, Eudaimonia Institute at Wake Forest University, University of Arizona

In his latest book, Patrick Deneen criticizes the reigning normative account of politics in theory and practice: liberalism. His central argument is that liberalism's successes, including its vast cultural diffusion and the material prosperity it has enabled, have led to profound cultural and other failures. For this reviewer, Deneen has not shown that liberalism (left or right) has failed, largely because of a hazy definition of the target of his critique and a lack of engagement with some key contemporary liberals. Among the book's positive aspects are Deneen's arguments for the need to reform certain social practices within broadly liberal societies.

Deneen attributes many failures to liberalism. Liberalism has enabled a pernicious economic materialism that upholds selfishness and greed as virtues. It has undermined culture and tradition by creating a consumerist monoculture. It has promoted a false view of education as valuable in launching careers but not in fostering civic engagement and moral virtue. It has spread a false understanding of liberty as freedom from external constraint rather than freedom to engage in virtuous self-restraint. And it has abjured tradition as the seat of virtue-based culture and the vehicle for its intergenerational transmission. In short, liberalism has entered our sociopolitical room as a Frankenstein-like monster (p. 11). Deneen exhorts us to call it what it is.

According to Deneen, liberalism arose out of Machiavelli's rejection of what he saw as Christendom's unrealistically high moral expectations; Hobbes's and others' denial of the value of custom and tradition in favor of abstract reasoning; and a new social goal of controlling nature through science in order to better realize human desires (pp. 24–27). What Deneen calls liberalism (on which more soon) is an alternative to the political ideologies of fascism and communism (p. 5). In its "most basic and distinctive aspect," says Deneen, liberalism "base[s] politics upon the idea of voluntarism—the unfettered and autonomous choice of individuals" (p. 31). Deneen also characterizes liberalism as a form of anti-culture. Liberalism calls for the conquest of nature and our traditional relation to it, renders citizens radically disconnected from the past and future, and promotes the problematic sense that where one lives is always open to question and change (pp. 65–66). With characteristic eloquence, Deneen observes:

> A political philosophy that was launched to foster greater equity, defend a pluralist tapestry of different cultures and beliefs, protect human dignity, and, of course, expand liberty, in practice generates titanic inequality, enforces uniformity and homogeneity, fosters material and spiritual degradation, and undermines freedom. (p. 3)

Whether Deneen achieves his hoped-for takedown of liberalism depends, of course, on what he takes liberalism to be. But we do not get a full and perspicuous characterization. What, exactly, is he critiquing? Deneen proceeds as if the target is liberalism as such; however, liberalisms form a large and diverse set. Diverse liberal theorists arguably do share a commitment to the twin notions that (a) freedom is normatively fundamental in a sociopolitical system, and (b) restrictions on freedom require moral justification (see Gaus, Courtland, and Schmidtz, "Liberalism," *Stanford Encyclopedia of Philosophy*, revised 2018). But after that, the field divides among, for instance, negative-, positive-, and republican-liberty liberals. Different liberal theories will thus be differentially susceptible to Deneen's many criticisms, leaving readers to wonder at various points whether, and if so exactly how, they are susceptible. In addition, Deneen contrasts liberalism with (a) communism and fascism rather than (b) conservatism and socialism. These are distinct distinctions. It would be helpful to know exactly why (a) is the right comparison class for Deneen's theoretical critique of liberalism. For liberalism, conservatism, and socialism are "three enduring political theories and arguably the three most important of the past two hundred years" (Gaus, *Political Concepts and Political Theories*, Oxford: Westview Press, 2000, p. 47).

Deneen claims to target the liberalism of political philosophers. Yet Rawls and Nozick—who, with Hayek, are perhaps the ablest defenders of liberalism since Mill—go essentially undiscussed. By contrast, Hobbes, a major political theorist but a proto-liberal at most, receives substantial discussion. Deneen's text also includes less discussion than one might expect of leading liberal theorists today, such as Douglas Rasmussen and Douglas Den Uyl, who directly address Deneen's concerns about the relationship between liberal political life and the cultivation of virtue (see, e.g., Rasmussen and Den Uyl, *Norms of Liberty: A Perfectionist Basis for Non-Perfectionist Politics*, University Park, PA: Pennsylvania State University, 2005, pp. 50–62 and passim).

Of course, a short book that spans eras and disciplines cannot include all that deserves to be included. But I would have liked to have seen more explicit and thorough engagement with, in particular, the central liberal view that it is either not moral or not feasible for governments to coerce people to become more virtuous.

Deneen discusses a fairly wide range of historical liberal theorists. I found the discussion of Tocqueville on the cultivation of democratic virtues particularly illuminating (e.g., pp. 173–77). Certain inadequacies again set back the account, however. Consider

Locke's morally and socially rich state of nature, where the laws of nature always apply and social life is full of associations, norms, and institutions. This, we are told, is a "nonrelational" state in which, morally, "everything that can be willed by an individual can be done" (p. 48; see also p. 185 on "the architects of liberalism"). This is no true version of Locke, perhaps the founder of liberalism, much less the best available for productive dialectical engagement. Similarly, take the sample claim that liberals desire "ever-accelerating economic growth and pervasive consumption" (p. 40). Here, as usual, defenders of liberalism do not speak with one voice. As for "ever-accelerating economic growth," Deneen argues as if he were unaware that important liberals (e.g., Mill) claim that a nongrowth or stationary state might be desirable since it might mitigate materialism, inequality, and virtue-undermining competition. And regarding "pervasive consumption," every serious liberal theorist (e.g., Adam Smith) recognizes, commonsensically, that consumption can sometimes be bad for people and, indeed, too pervasive. Liberal theorists typically deny that even if S somehow fully satisfied S's actual preferences qua consumer, this would suffice for S to be *eudaimon*. People rightly care about more than consumption. Deneen also criticizes Hayek's support of a socioeconomic system that seems to yield deep inequality (p. 139). But here Deneen fails to consider Hayek's well-known call for "the assurance of a certain minimum income for everyone, or a sort of floor below which nobody need fall even when he is unable to provide for himself" (*Law, Legislation, and Liberty: The Political Order of a Free People* (vol. 3), Chicago: University of Chicago Press, 1979, p. 55). Hayek did care more about understanding how a society can meet the needs of its worst-off members than how it can eliminate inequalities. A universal basic income, however, would presumably go a long way toward reducing socioeconomic inequality.

Deneen hopes that a new, postliberal way of political thinking and life might emerge "out of the fostering of new and better selves, porously invested in the fate of other selves" via "the cultivation of cultures of community, care, self-sacrifice and small-scale democracy" (p. 20). This is an inspiring call for responsive local governance and deeply interdependent communities. Suppose, arguendo, then, that this desirable political state of affairs cannot realistically be achieved under liberalism. Even so, to know whether sociopolitical system A is worth retaining, reforming, or (as Deneen proposes) replacing, we need to know how A *compares* with feasible alternatives B, C, ... N. We also need to know *how* to compare them, a formidable epistemic challenge in its own right. Here the book at best offers vague, thinly sketched solutions to liberalism's alleged woes. Deneen argues that we should acknowledge liberalism's successes, move beyond political ideology, and develop "practices that foster new forms of culture, household economics, and polis life" (p. 183). However, if we are to achieve a "humane postliberal future," these are far

from detailed ways to get from here to there (p. 184). In the absence of a well-worked-out alternative, we cannot be sure that some version of liberalism, warts and all, will not be the best available political system.

Deneen has not shown that liberalism has failed. He has shown, at most, why some versions of liberalism fall short. In this regard, the book seems to do little damage to the most important theories of the last 150 years: those which such a critique manifestly ought to target. We get a critique of theoretically unattractive versions of liberalism rather than the diverse and sophisticated arguments developed by liberals such as Mill, Hayek, Rawls, and Nozick.

A final worrisome feature of the book is that, while it is billed as a takedown of liberalism in theory, it is focused far more on criticizing historical theories and identifying problems with liberal political societies in practice. These are fine aims to pursue, but not central if the point is to demolish liberalism in theory. At the least, the book has a somewhat awkward dialectical strategy: it shifts between theoretical and practical critique, which increases the risk of doing neither very effectively.

Despite its shortcomings, the book does have several positive aspects. As I see them, these include the arguments that some practical forms of liberalism (e.g., overly consumerist ones) ought to be reformed even if, despite Deneen's inclination, not fully replaced; the best kind of human freedom is not freedom to do as one pleases; education is about more than practical training; citizens must remain ever willing to critically reflect on how best to live together as a political community; and social practices within liberal regimes, however they relate to the political liberalism that contemporary theorists discuss, have degraded cultures by, for instance, undermining community. Again, though, many and maybe all of these claims are ones that liberals of various stripes have the theoretical resources to take on board.

In conclusion, Deneen has articulated many problems with what he calls liberalism. In so doing, he has issued a standing invitation to sophisticated liberals to respond.[1]

1. I thank Daniel Cummings for comments and the Eudaimonia Institute at Wake Forest University for supporting my research.

POLITICAL ECONOMY
IN THE CAROLINAS

Political Economy in the Carolinas is a fully refereed interdisciplinary journal broadly focused on government and public policy in North and South Carolina. It is affiliated with Classical Liberals in the Carolinas, a scholarly organization of academics, policy analysts, and business leaders meant to foster research and discussion of classical liberal ideas in formulating public policy in the two states. The analysis and research in published papers can take a broad range of approaches. The editors encourage comparative empirical analysis with other states in the region or nation, historical perspectives, interpretive or theoretical essays, and philosophical essays that might highlight classical liberal ideas in the context of contemporary policy analysis.

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