

A New Model for the Financing of Higher Education in North Carolina

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Summary: North Carolina has a long history of support for higher education. The state's financial commitment to higher education is among the strongest in the United States. The high degree of subsidization of higher education in North Carolina has some very important effects. First, it transfers wealth from taxpayers in general to those families who take advantage of the low-cost UNC system. Second, it stimulates the demand for entrance into the system. Third, it works to the detriment of the private colleges and universities in the state. This paper will analyze each effect of North Carolina's high subsidization of the University system.

North Carolina has a long history of support for higher education. Founded in 1795, the University of North Carolina is the oldest state-supported university system in the nation. The sixteen campuses of the UNC system currently enroll more than 155,000 students, approximately 87% of whom are North Carolina residents and 13% from other states or foreign countries. (1) A full range of degree programs are offered, from bachelors to Ph.D. and professional degrees. (2) More than 8,600 faculty members are employed in the system and among full-time faculty, more than 95% hold a doctorate or first professional degree. (3)

Moreover, the state's financial commitment to higher education is among the strongest in the United States. As of 1997, North Carolina ranked seventh nationally in appropriations for higher education as a percentage of state tax revenues allocated to higher education. (See Table 1.) Considering appropriations per student enrolled in state universities, North Carolina was higher than any other state after adjusting for purchasing power, with appropriations at 135% of the national average. (See Table 2.)

The corollary to a high degree of governmental support for higher education is, however, a low degree of voluntary, individual support. North Carolina has a tradition of charging very low tuition for in-state residents who wish to attend one of the schools in the UNC system. Tuition and fees charged to students covers only 20% of the cost of providing educational services. The national median is 33%. In neighboring Virginia, tuition covers 42% of the cost; in Ohio

and Michigan, 43%; in Pennsylvania, 47%. The state that subsidizes higher education the least is Vermont, with tuition covering 78% of the cost. In only six states is higher education subsidized to a greater extent than in North Carolina. (See Table 3)

Thus, North Carolina subsidizes higher education for state residents more heavily than in virtually every other state. The basis for the state's policy of low, heavily subsidized tuition is a provision in the state Constitution which reads

The General Assembly shall provide that the benefit of the University of North Carolina and other public institutions of higher education, as far as practicable, be extended to the people of the State free of expense. (4)

Neither the North Carolina Supreme Court nor any other appellate court has ever stated exactly what this vague language means. The level of tuition charged in the UNC system is above zero and indeed a statute specifically prohibits the UNC Board of Governors from charging zero tuition. (5) Apparently, it does not violate the constitution to charge the current tuition amounts, which were raised an average of 4.9% in 1999. If there is some tuition level at which the Supreme Court would declare to be in violation of the constitutional requirement that citizens enjoy tuition that is "as far as practicable" free, we have no guidance as to what it might be.

Education cannot be a "free" good, of course. The production of any good or service that requires scarce resources can never be free; even if the student pays little or none of the cost, other people must bear the expense. As economists James Buchanan and Nicos Devletoglou state, "(T)he economist faces squarely up to the fact that university education is not a free good. It does not abound in nature, and considerable scarcity value attaches to it." (6) (Emphasis in original.)

Because education is not a free good, all that government can do is to shift its cost from students and their families to other citizens. When a North Carolinian enrolls in one of the UNC schools, he will pay tuition and fees ranging from \$1,542 per year at Fayetteville State University to \$2,427 at the North Carolina School of the Arts. Tuition at the state's two "flagship" universities, North Carolina State and UNC-Chapel Hill are \$2,360 and \$2,297 respectively. (7) However, the tuition payments cover only about one-fifth of the total cost of the university system. (8) There is considerable variation in the extent to which tuition and fees cover costs among the campuses, ranging from a low of 9% at Western Carolina University to a high of 27% at UNC-Wilmington. (9)

The high degree of subsidization of higher education in North Carolina has some very important effects. First, it transfers wealth from taxpayers in general to those families who take advantage of the low-cost UNC system. Second, it stimulates the demand for entrance into the system. Third, it works to the detriment of the private colleges and universities in the state. Each effect will be analyzed in turn.

Cross-Subsidization. North Carolina students who attend any of the UNC campuses receive a very large subsidy. Tuition and fees paid, as we have seen, cover on the average only about 20% of the cost of providing the educational services. For Fiscal year 1997-98, total university expenditures came to \$1.72

billion. The funds to pay for those expenditures came from tuition and fees (\$341 million -- 20%); other receipts (\$90 million -- 5%); and state appropriations (\$1.28 billion -- 75%). (10) However, not all of the state appropriation pertains to on-campus instruction. Subtracting the amounts for extension programs and organized research (\$60 million), the state's expenditures for on-campus instruction were \$1.22 billion.

Of the 155,000 students enrolled, 21,000 were from out of state, and out-of-state tuition levels are set high enough to cover virtually all of the cost of attendance. (11) Therefore, dividing the state's expenditures into the in-state enrollment figure, the annual subsidy per North Carolina student is \$9,100. A student who completes a bachelor's degree in four years has received a subsidy from the state of more than \$36,000.

The beneficiaries of those subsidies come from all points on the economic spectrum, but are largely students from families with incomes significantly higher than the state average. According to the United States Department of Housing and Urban Development, the estimated median family income in North Carolina in 1998 was \$42,200. (12) The median family income for students in the UNC system, however, is \$54, 260. (13) And the average family income of students in the UNC system is higher still -- approximately \$66,000. (14)

Many of the beneficiaries of the state's policy of maintaining very low tuition levels are well above average in income. It is evident that there is a reverse "Robin Hood" effect here, whereby relatively low-income workers whose children do not attend college must pay taxes to help foot the bill for children of well-to-do professional and managerial families who enroll in the UNC system. The North Carolina data reinforce the point made by Professor Gareth Williams that, "The aggregate effect of subsidizing higher education...is often to transfer resources from relatively poorer families to richer families." (15)

Many of the students who benefit from the state's subsidization of their college education come from homes that are wealthier than average, sometimes far wealthier. That fact does not necessarily demonstrate that the entire system, when one considers all taxes paid and benefits received, is regressive. But whether the impact of the system is on net, regressive, progressive or neutral is beside the point. Fairness is not a matter of broad averages. Even if it were true that the overall impact of the UNC system is progressive, (which seems unlikely), that would be of no comfort to a factory worker who has paid taxes to support the UNC system for years, but whose children entered the work force or a trade school rather than going to college.

With regard to education, public policy should not aim to be "progressive" or "regressive." It should aim to make the best use of resources and to treat individuals equitably. As economist Alan Reynolds asks, "If the largest and most measurable benefits of a college education accrue to the individual recipient, why should other people subsidize this particular investment as much as they do, much less even more?" (16) Stated differently, why should a textile mill worker in Gastonia pay taxes to help send the sons and daughters of executives in Research Triangle Park to UNC-Chapel Hill?

Higher education subsidies are often justified on the grounds that they will supposedly "pay off" for the state in terms of future tax receipts. It is most unlikely, however, that the taxes of an individual who had earned a degree in one of the UNC universities would fully repay the state for the benefit bestowed. Assume that an individual earns a degree of a UNC school, finds employment, and remains in the state over a 50 year working career. To have a net present value of \$36,000, the cost of the degree to the state, the individual would have to make a stream of tax payments to the state of \$2,284 per year (income, sales, and other taxes), assuming a discount rate of 6%. (17) Since the proportion of the state budget that goes for higher education is one-eighth, this means that the total tax payments the individual would make to the state would have to be \$18,272 per year. Although taxes vary greatly from person to person, someone would have to have a taxable income of approximately \$175,000 annually to pay so much to the state, putting him in the top 1% of all taxpayers. (18)

Only on very high income individuals who work for their entire careers in the state do future tax payments cover the present cost of the educational subsidy. Given the high mobility of such people, the number of students who pay the state back through their taxes must be very small. The conclusion is inescapable that most UNC students receive their education largely at the expense of other, and generally poorer people.

The Problem of Marginal Students

A second problem caused by the state's low-tuition policy is that it lures into the university system many students who ill-prepared for and have little interest in college-level studies.

Fundamental economic theory explains why that is so. Prices for goods or resources limit the demand to those few buyers for whom the benefits expected from the good or resource are great enough to balance the price. At high prices, most prospective buyers decide that the benefit to be had is not sufficient to justify the cost. As prices come down, however, more and more individuals decide that the benefit they expect is worth the expense and therefore more will want to purchase it. In other words, there is an inverse relationship between the price of a good or service and the demand for it. This is known to economists as the Law of Demand. (19)

To give an example, suppose that the price of gasoline were four times what it is currently -- about \$5 per gallon. The amount of gasoline consumption would decrease dramatically, and most of the remaining consumption would be for very important driving such as moving goods to markets, getting people to work, the needs of police, fire, and emergency vehicles, etc. If the price then fell back to current levels, we would expect to see gasoline consumption increase, with usage increases becoming greater and greater among pleasure uses such as sightseeing and boating. And if the price continued to fall, consumption would continue to increase (although not necessarily at the same rate), with people using gasoline for more frivolous uses that would have been uneconomical at higher prices.

The same principle applies to the price of educational services. If they are very expensive, only a few people will purchase them, and those who do will tend to

be the people who place the highest value on them. As education becomes less and less costly, more people will choose to buy, but the purchasers will increasingly be people who place relatively little value on it. As the price falls toward zero, the last purchasers would be people who expected to gain little from it but enter into the transaction because the perceived cost is lower still. The lower the price, the greater the number of ill-motivated and unprepared students we will have. Milton Friedman, the 1976 Nobel Prize winner in Economics, observes

Low tuition fees mean that while city or state colleges and universities attract many serious students interested in getting an education, they also attract many young men and women who come because the fees are low, residential housing and food are subsidized, and above all, many other young people are there. For them, college is a pleasant interlude between high school and going to work. (20)

Attracting students into college who are not serious about the pursuit of knowledge wastes educational resources and has detrimental effects on academic standards, thus reducing the benefits from college for students who are prepared for and interested in college studies.

College Isn't For Everyone

Many young people want to attend college because of the widespread assumption that a college degree is a necessary and virtually a sufficient condition for higher earnings later on. There is evidence to show that on the average, individuals who have earned college degrees have significantly higher earnings than do individuals who have not. (21) But merely because the earnings of college graduates are higher on average does not mean that every college graduate enjoys an earnings benefit. In fact, there is a growing phenomenon of college graduates having to take what have traditionally been regarded as "high school" jobs and for them, the time and money spent on college is, if not entirely wasted, at least a sub-optimal use of it.

In their book *Who's Not Working and Why*, economists Frederic Pryor and David Schaffer (22) examine labor market trends and find that the great earnings gap between those with a college degree and those with only a high school degree is deceptive. The high earnings for the college educated is due in large part to the very high earnings of graduates who possess the cognitive skills that are much in demand. Those with college degrees who failed to acquire or develop the skills that are in high demand experience downward occupational mobility and wind up competing for lesser jobs. Pryor and Schaffer write, "An increasing share of university-educated workers are taking jobs where the average educational level has been much lower....From 1971 through 1987 a rising share of male and female university-educated workers of all ages took such high school jobs." (23) The problem is not that there are too many highly skilled graduates for the economy to absorb: "Indeed, there appears to be a shortage of university graduates with a functional literacy corresponding to what employers seek." (24) The problem, rather, is that increasing numbers of people with college degrees only have the competence to do jobs that are at a high school level. The authors conclude that "The low functional literacy of many university graduates represents a serious indictment against the standards of the U.S. higher educational system." (25)

Higher education cannot bear the full responsibility for declining academic achievement, however. Many observers of the U.S. educational system argue that there has been a precipitous decline in the ability of our K-12 system to prepare students for college. (26) Assigning responsibility for the nation's educational malaise is not the point here, though. With a population of high school graduates containing fewer and fewer students who are capable of and interested in higher level studies, it is inevitable that many students who are lured into the UNC system will either drop out (27), or graduate without acquiring the level of cognitive skills that would enable them to compete for the top tier of jobs. Undoubtedly the state and nation benefit from higher education, but we have gone past the point of diminishing returns and now heavily subsidize years in college for many students who derive very little benefit from it.

Although it is widely assumed that the economy's demand for workers with high school educations will decrease, in fact, the U.S. Department of Labor's Bureau of Labor Statistics (BLS) predicts that the need for such workers will remain strong and that some of the occupations with the largest anticipated increases are ones for which a college degree has not traditionally been necessary. For the decade 1996-2006, the BLS projects that retail sales persons, cashiers, truck drivers, office clerks and personal care aides will be among the occupations with the largest growth. (28) To continue to push for greater college attendance when the labor force can absorb many graduates only in lower-skilled occupations is a poor use of scarce taxpayer dollars. (29)

The Impact on Academic Standards

Not only is it economically inefficient to spend higher education resources on the education of students who will not benefit from it, but the infusion of students who are neither well equipped for college studies nor much interested in them has had a deleterious effect on teaching and educational standards. Professor Paul Trout finds that increasing percentages of American college students are "disengaged." He describes them as follows:

they do not read the assigned books, they avoid participating in class discussions, they expect high grades for mediocre work, they ask for fewer assignments, they resent attendance requirements, they complain about course workloads, they do not like "tough" or demanding professors, they do not adequately prepare for class and tests, they are impatient with deliberative analysis, they regard intellectual pursuits as "boring," they resent the intrusion of course requirements on their time, they are apathetic or defeatist in the face of challenge, and they are largely indifferent to anything resembling an intellectual life. (30)

In earlier times, the relatively small number of "disengaged" students who entered college dropped out or flunked out without having any impact on academic standards. Today, however, we have such large numbers of "disengaged" students who are in college just to get a degree with as little effort as possible that they are dragging down the quality of instruction and academic standards. Professor Trout continues, Once colleges and universities accept cohorts of disengaged high-school students, they are obliged to manage the problem in much the same way as high schools did: fewer demanding courses,

lighter workloads, easier assignments and tests, and more high grades (to satisfy students, improve course evaluations, and hide the decline of standards from the public). (31)

The push for greater and greater "access" to higher education through low tuition and financial aid has had the effect of dragging down the value of higher education for students generally. Professor Thomas Sowell noted this trend more than thirty years ago, writing, "The waste in 'mass education' is not merely the time, money, and effort thrown away on people who don't care. The waste includes the people who do care and who have the ability, but who wither in an educational system geared to the lowest common denominator." (32) More recently, in his book *Generation X Goes to College*, Peter Sacks explains how the quest for favorable student evaluations leads professors to make their courses less rigorous but more entertaining and substituting exacting standards with an indifference that won't cause any students to become upset. (33)

Dr. Peter Wood, Associate Provost of Boston University, sums up the effect of following an "easy access" policy in higher education, saying that it, "lures students who lack adequate preparation, academic ability, or serious intellectual aspiration into academic programs that are inappropriate for them. It seduces colleges and universities into lowering their academic standards." (34) Evidence of that national trend can be seen in North Carolina. The late Michael Hooker, chancellor at UNC-Chapel Hill, decried the decline of intellectualism on the campus compared to his student days in the 1960s (35) and the proliferation of popular but academically vacuous courses such as "History of Rock Music" at Chapel Hill (36) illustrate the weakening of the curriculum in the UNC system. A series of articles in the Pope Center's *Clarion* has explored the weakening of the curriculum in several disciplines at UNC-CH. (37)

The Impact on Private Colleges and Universities

Higher education is a competitive market. Besides the 16 campuses of the University of North Carolina and 58 state-supported community and technical colleges, the state also is home to 35 independent colleges and universities and 3 junior colleges. Competing against governmentally subsidized rivals is always difficult, whether the market is eggs, electricity, or education. Where government funds cover most of the cost of providing a good or service, the subsidized entity can and usually will charge less than the full cost of its operations. This gives them an enormous advantage in attracting customers (in this case, students) vis-a-vis non-subsidized entities that must charge enough to cover most or all of their costs. (38)

Even after the slight tuition increase for 1999, students in the UNC system pay tuition ranging from \$1,542 at Fayetteville State to \$2,360 at North Carolina State. In contrast, tuition in the state's private schools range from \$6,315 at Barber-Scotia College to more than \$23,000 at Duke University. (39) Tuition at four-year private colleges and universities averages \$11,410. It does not cost state schools any less to employ faculty members, provide facilities, and do the other things that go into the making of a college, but students far less to attend them.

The difficulty in competing with a state university system that derives most of its revenue from the taxpayer has led to a shift away from private colleges. In 1960,

42% of North Carolina students enrolled in private colleges and universities. By 1970, the percentage had fallen to 26%; by 1990, private enrollment had declined to 19%; and by 1998, it had fallen to 16.5% (40). With the state system drawing in so many students, the private colleges and universities have struggled to survive by recruiting more out-of-state students. Whereas in 1960, nearly 70% of the students enrolled in private schools in North Carolina were state residents, by 1998, that percentage had fallen to 51%. (41)

One consequence of the trend toward state-provided higher education and that it places more and more students into the typically large state university campuses. The great majority of the students in the UNC system are at institutions that are large in size. Six of the UNC campuses have more than 10,000 students, enrolling more than 71% of all UNC students and four more are between 5,000 and 10,000 students, enrolling an additional 19% of the total UNC student body. Only five of the UNC campuses are what one might regard as "smaller" schools with enrollments of less than 5,000 students, ranging from 1,900 at Elizabeth City State to 4,000 at Fayetteville State. (42)

The reason why that consequence is unfortunate is that many students fare better academically in smaller schools. David Breneman, Dean of the Curry School of Education at the University of Virginia, has argued that students at smaller schools are more likely to interact with faculty members and become constructively involved in college life. (43) Huge class sections that one often encounters in the large schools are poor learning environments described as "worthless" by one professor at North Carolina State. (44) The vast, bureaucratic, and largely impersonal state university campus is a sub-optimal learning environment for many students, but in order to take advantage of the very low tuition at the UNC schools, North Carolinians are largely forced into them.

Furthermore, there are distinct benefits from private institutions. John Ashcroft and Clark Kerr made a strong argument for the importance of private higher education in their 1990 report, *The Preservation of Excellence in American Education: The Essential Role of Private Colleges and Universities*, writing "Overall, private institutions encourage the continuance and further development of a total system that is more competitive, more diverse, more dynamic, more cost-effective and of higher quality than it would otherwise be." (45) Professor Gary Wolfram similarly argues that, "Private schools, smaller and less encumbered by bureaucracy, are able to respond to changes in market demand more swiftly than public institutions. The private sector, since it cannot rely on tax revenue to survive, is driven to innovate." (46)

The comparative shrinkage of private higher education in North Carolina compared to the expanding state system is not a beneficial trend, either for taxpayers or students.

A Better Higher Education Policy for North Carolina

North Carolina's long-standing policy of very low tuition for the state's university system is one that is not consistent with fairness or sound educational practices. It compels taxpayers in general to subsidize the educational investment of those who go to a state university, many of whom come from families that are above average in income. It channels too many people into higher education who

lack the ability or interest to benefit from college-level studies, and the presence of large numbers of such students has a negative impact on academic standards. Also, the difficulty of competing with a highly subsidized rival has brought about a shift of students from private institutions to public ones, to the detriment of the former. How should state policy change?

Increase Tuition

As we have seen, North Carolina is a state that relies heavily on governmental appropriations and lightly on tuition payments to cover the cost of higher education. The burden of paying for the UNC system falls far more on the taxpayer than it does on the student. Tuition should be raised substantially at the UNC campuses, although not to the same extent at all.

Despite the state constitution's language that higher education is to be provided free of cost to students so far as is practicable, the state already charges tuition rates that are well above zero and have been increased many times, thereby establishing that the constitution's vague language does not establish any ceiling for tuition. The system should raise tuition further and also increase the disparity of tuition levels, just as businesses charge more for products that are in high demand and correspondingly less for products that are less in demand. It makes no more sense for the state to keep the price of attending Chapel Hill or N.C. State to within a few hundred dollars of the price of attending Fayetteville State than it would for General Motors to price a Cadillac Seville within a few hundred dollars of a Chevette.

As has been noted above, tuition payments in North Carolina cover only 20% of the cost of providing educational services to students. The national median is 33% and in sixteen states, including Virginia, South Carolina, Pennsylvania, Ohio and Michigan, it exceeds 40%. (47) North Carolina should increase tuition at least to that level.

It would not make sense, however, to simply double the tuition at each school. The demand for admission to the various universities varies tremendously and the state should price them accordingly. The tuition differential from the least to most costly among the state's private colleges and universities is approximately three times and that market outcome should serve as a guideline for the state university system.

We propose a tuition structure that recognizes three tiers in the UNC system and prices them accordingly. (The tuition levels would be adjusted annually to reflect changes in the value of the dollar.)

Tier I - UNC, NCSU	\$6,000
Tier II - ECU, UNCC, NCA&T, UNCA, UNCG, UNCW, NCCU, WCU, ASU, NCSA	\$4,000
Tier III - ECSU, FSU, WSSU, UNCP	\$2,000

The proposed system puts the state's two Research I universities at the top of its schedule. The four universities in the lowest tier are those where the student body generally comes from the least affluent families. The grouping suggested is an approximation at pricing the universities according to market demand, but it

should be revised if experience shows that the volume of applications indicates that either higher or lower tuition should be charged. (48)

North Carolina would not be the first state to follow a more market-oriented tuition policy if it were to adopt the proposed tuition scheme. In Virginia, tuition at William and Mary is \$5,032; at the University of Virginia, \$4786; at Norfolk State, \$3,000. In Michigan, tuition at the University of Michigan is \$5,878; at Michigan State, \$4,823; at Grand Valley State, \$3,348. In Vermont, tuition at the University of Vermont is \$7,550; at Castleton State College, \$4,506. In Connecticut, tuition at the University of Connecticut is \$5,242; at Central Connecticut State, \$3,614. (49) Tuition charges for the "flagship" universities in those states is two to three times higher than UNC's, and even the less prestigious campuses charge tuition that is 50% higher than UNC's.

How would such a tuition structure affect enrollments and revenues?

Enrollment

The first thing to observe about the proposed tuition levels is that UNC schools remain a less costly alternative than competing colleges and universities. Despite a near tripling of the cost of attending the Tier I schools, they remain less costly than any of the private colleges and universities in the state. (50) Therefore, it is unlikely that any significant number of students would choose to enroll elsewhere simply on the basis of cost. It is possible, however, that some students would perceive other educational opportunities as a better value with the shrinkage of the cost differential and choose accordingly. For example, at a cost differential of \$4000 between a UNC school and a private college, a student might regard the added cost as unjustifiable, but if the differential were reduced to \$2000, he might conclude that the private college was now preferable.

It is also possible that some students will conclude that the anticipated benefits of studies at a UNC campus are not sufficient to justify the higher cost of admission and decide to pursue other alternatives. It is not possible to know ahead of time to what extent that would occur, but the likelihood is that the number would be small. Although the cost of tuition increases within a range from \$500 to \$3800 per year, students face many costs other than tuition, including room and board, books and supplies, transportation and so on. Those costs typically run in excess of \$5,000 per year. (51) Therefore, the maximum increase in cost would be on the order of 50%, not a doubling or tripling; for students attending Tier II campuses, the increase would be approximately 28% and for students attending Tier III campuses, the increase would be less than 10%. The decline in enrollment due to higher tuition is thus apt to be small.

Given the above considerations, it seems reasonable to conclude that enrollments would decline very slightly. For purposes of analysis, we will assume a loss of 5%, but that is probably too high. University places that would otherwise go unfilled can usually be filled by giving some applicants discounts from the stated tuition figures, just as airlines fill flights by selling remaining seats at lower prices. (52) The actual loss of students would likely be closer to zero than to 5%.

Revenues

The tuition increase would only affect in-state students. Tuition paid by out-of-state students is already high enough to cover most of the cost of their education, and increasing it further would most likely lead many to choose schools outside of the UNC system.

Assuming the proposed tuition increases and multiplying them by 95% of the current in-state enrollments (that is, a 5% student loss), the result is an increase in receipts from students of \$330 million annually, almost doubling the amount currently received and moving North Carolina from the 20% range to nearly 40% with regard to the percentage of the cost of higher education that is paid for by students and their families.

Increase Means-Tested Aid

Although the average family income of students attending UNC schools is significantly above the state average, there are many who come from families that are well below the state average, and even below the poverty line. Financial aid ought to be targeted directly at those students who show academic promise but whose families are not wealthy enough to make a significant contribution toward the cost of higher education.

North Carolina currently has only a miniscule needs-based financial aid program, the North Carolina Student Incentive Grant (NCSIG). With a budget of \$2 million (three-fourths from the state and one-fourth from the federal government), the NCSIG provides grants averaging around \$700 to students in the UNC system, community colleges, and independent colleges and universities.

With the change from a low-tuition system, the state should dramatically increase its means-tested financial assistance. We propose a doubling of the maximum grant from \$1,500 per year to \$3,000 per year and increasing the program's budget to \$40 million. The increased maximum grant and higher budget would be applied only to assist UNC students cope with the higher tuitions in the future.

The combination of increased tuition for most students and increased financial aid for those who would have difficulty in paying more would place more of the burden of paying for higher education where it belongs, i.e., students who will benefit from the education and can afford it, without making the UNC system unaffordable to a large number of students from poorer families.

Increase the Legislative Tuition Grant

North Carolina currently has what amounts to a modest voucher system for higher education in its Legislative Tuition Grant (LTG). Students from the state who choose to attend a private college or university in the state rather than the UNC system are entitled to a state payment to the school of their choice amounting to \$1,750 per year. In 1998-99, 27,742 students took advantage of the LTG. Given that the average cost of attending an independent college or university exceeds \$10,000 per year, this amount is rather small compared to the difference in cost between any of the state universities and an independent school.

Even after increasing tuition to the proposed levels, the taxpayers of the state will still bear a substantial cost for each student enrolled in the UNC system. Furthermore, to the extent that enrollments increase in the future, the taxpayers would have to cover the capital investment needed to accommodate more students -- dormitories, classrooms, laboratories, and so on. Therefore, it would save the taxpayers doubly if we could direct the flow of students away from the UNC system and toward private alternatives.

Increasing the LTG would create a stronger incentive for parents and students to choose one of the state's independent colleges or universities. While there has been only a slight impact on the number of students choosing independent schools associated with past increases, (in 1998, for example, the amount of the LTG went up by \$150, but the number of students availing themselves of it actually fell from 28,816 to 27,742) (53), a substantial increase combined with the higher tuitions proposed above, would probably have a pronounced impact. If a doubling of the LTG to \$3,500 per year led to an increase of 50% in the number of students attending an independent college or university rather than UNC, the apparent cost to the state would be approximately \$98 million, but that figure must be offset by the savings to the UNC system from smaller numbers. If we assume that the "loss" of each student to the private sector saves UNC only half of the annual subsidy, then the savings from increasing the LTG would be approximately \$63 million.

Under these assumptions, the net cost to the state of raising the LTG to give families more options would be \$27 million, an amount far less than the increase in revenues due to the increase in tuition.

Stimulate Family Savings

A college education is an investment in human capital. In the past, North Carolina has heavily subsidized that investment, with state tax dollars covering most of the cost and payments by students and/or their families covering only a small fraction. The low-tuition policy, as argued above, is both inequitable and inefficient, as it compels taxpayers who do not utilize the services of the UNC system to support it, and because it distorts the choice of college attendance by making one option -- the UNC system -- artificially inexpensive.

Acting under federal enabling legislation, North Carolina has established a program for college savings, The College Vision Fund. The program, which opened in June 1998, allows parents and grandparents to make lump sum payments, monthly contributions, or both, to accounts that can be used for the payment of all college-related expenses. The contributions are made with after-tax dollars, but the earnings on the funds are exempt from state taxes. Federal taxes on the earnings are deferred until money is withdrawn to pay for college expenses, and taxes then are calculated on the student's tax rate rather than that of the parent or grandparent.

The College Vision Fund is a good means for safely accumulating funds (the savings are invested by the state treasurer in low-risk securities) with which to pay college expenses (and not limited only to North Carolina colleges and universities), but it is a restricted savings program. The tax benefits only apply if

the funds are used for "qualified higher education expenses." That rules out using the funds for K-12 instruction, vocational training, courses at institutions that are not accredited, don't award credits toward a bachelor's degree, or admit students who do not have high school diplomas. There is, in other words, an asymmetry in the way the state treats people whose children are likely to pursue education beyond high school and those whose children are not. The former, who are generally more affluent, are favored with a tax-advantaged program to help them afford an investment for their children; the latter, generally less affluent, are provided with nothing equivalent to help them afford educational investments for their children.

The same asymmetry is found at the federal level. Under the IRS code, individuals can establish education IRAs with maximum yearly contributions of \$500. Contributions are not deductible, but the earnings accumulate tax-free. The funds, however, can only be used for "qualified higher education expenses." If they have not been so used by the time the child reaches the age of 30, the money must be withdrawn and is subject to income taxation plus a 10 percent penalty.

Although North Carolina cannot counteract the powerful tax incentives and disincentives built into the Internal Revenue Code, the state can do something to encourage more saving for both college and non-college expenses.

Human capital investments should no more be taxed than are investments in physical capital such as machinery. The cost of investments in physical capital are deducted against the revenues those investments produce and educational investments should be treated similarly. The Internal Revenue Code does not, however, allow the deductibility of the costs of education. The programs now in existence that encourage educational savings are limited to undergraduate college expenses. There is no favorable tax treatment for savings toward other educational costs.

The state should legislate to allow citizens to establish North Carolina Educational Savings Accounts, similar to IRAs. Individuals would be able to deposit funds into these accounts and would receive a tax credit against their North Carolina income tax of twenty percent of the amount of the contribution, up to a maximum credit of \$200 per year. There would be no North Carolina tax upon the withdrawal of funds from the account provided that they were used for educational purposes, broadly considered: college tuition or expenses, vocational training, tuition at private K-12 schools, or post-graduate studies.

Unfortunately, such accounts would not be given any favorable treatment under federal tax law as it now stands. North Carolina's congressional delegation should press for changes in the Internal Revenue Code so that broad-based state educational savings programs would also receive favorable federal treatment. Until such time, the state tax credit would be the only advantage; that advantage, however, would give taxpayers a strong and substantial incentive to for save for the future educational needs of their children or grandchildren.

The benefit of encouraging saving in this manner is two-fold. First, it evens out the disparity in treatment between parents whose children go to college and those who do not. For the first time, there would be a state savings program that did not favor the former over the latter.

Second, it enables parents who have lived in North Carolina longer the opportunity to accumulate more wealth in their accounts than those who have lived here for a shorter time period. The reason why that is important is the state's policy of allowing all residents the opportunity to take advantage of the low tuition rates in the UNC system, no matter how long they have lived here. (Even after the tuition increases proposed in this paper, attending a UNC campus would still be significantly less costly than most independent colleges or universities, or state-supported schools in other states.) The same tuition rate applies for all residents, whether they have lived in North Carolina their entire lives, or just a year. Trying to charge different tuitions depending upon the length of time a family had lived here would be impractical, but there is no reason why families that have lived here longer should not benefit from larger accumulations in their savings accounts to be applied toward college tuition or other educational needs of the child.

The loss of revenue to the state from tax credits for savings into NCEAs would obviously depend on the number of people who availed themselves of the option. There is no reason to think, however, that the revenue loss would amount to more than a small percentage of the revenue gain due to higher tuition. If 100,000 such accounts were established and active at any one time, the maximum cost to the treasury would be only \$20 million. It is unlikely that the number of NCEAs would reach that number in the foreseeable future -- after a year and a half in operation, the College Vision Fund has only 700 accounts. (54) Given the large increase in revenues due to higher tuition for most students, the state can easily afford this modest inducement to personal saving to accumulate the funds for education. Furthermore, the monies saved would not disappear, but would be used for other investment purposes before being withdrawn and the business activity thus generated would lead to other tax payments, some of which would go to the North Carolina treasury.

Conclusion

North Carolina has not run its university system in a fashion that is optimal for either state taxpayers or students. Tuition has been held far too low, and notwithstanding the vague injunction in the state constitution to keep the cost of higher education as low as "practicable," a substantial increase would be good policy. It would shift the burden away from the taxpayers, many of whom derive no direct benefit from the UNC system, and onto students and their families, who do.

While increasing tuition for the large majority who can afford to pay more for college education, the state should greatly expand its program of financial assistance for poorer families whose children have the ability and desire to attend one of the UNC schools, but lack the resources. Also, the state should raise the Legislative Tuition Grant to enable more students to enroll in the state's independent colleges and universities. Not only will it reduce the need for the state to spend money on the state system, but the greater variety of educational opportunities that can be found in the private sector -- particularly schools of smaller size -- will be a benefit to many students.

Finally, the state should assist taxpayers with dependent children to save for their future needs -- not limited to college-related expenses -- by allowing them to establish educational savings accounts with contributions encouraged by a substantial tax credit.

The combination of policy changes discussed here would put North Carolina's higher education system on a more rational, self-supporting basis with less of the cost borne by taxpayers and more of the cost borne by the students and families who benefit from it.