

CHAPTER 4

GEORGIA'S HOPE SCHOLARSHIP AND MINORITY AND LOW-INCOME STUDENTS: PROGRAM EFFECTS AND PROPOSED REFORMS



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Introduction

This chapter examines Georgia's HOPE (Helping Outstanding Students Educationally) Program and its effects on underrepresented minorities and low-income students, building on our earlier work (Cornwell & Mustard, 2002). Our previous study concluded that, in the first five years of the program since its founding in 1993, HOPE raised the enrollment rate (the ratio of first-time freshmen to recent high-school graduates) in Georgia colleges eight percent relative to the average enrollment rate in other member states of the Southern Regional Education Board (SREB). This gain was realized primarily at four-year institutions, a pattern that held for both Whites and Blacks, although the percentage increase for Blacks was higher. The relatively large increase for Blacks is explained in large part by the presence of several relatively large Historically-Black Colleges and Universities (HBCUs) in Georgia.

We also argued that the lottery financing causes the program's costs to be disproportionately borne by lower-income and Black families who spend a larger share of their incomes on lottery play than more affluent and White families. Also, because high school academic achievement and family income are positively correlated, the HOPE Scholarship tends to benefit students from middle- and upper-income households.

Here, we introduce new findings on how scholarship receipt varies by race. We review and update our study of HOPE's effect on enrollment and analyze how retention rules influence course-taking behavior in college. In addition, we give an extended account of HOPE's legislative history and assess the numerous recent proposals to reform the program. The reform proposals are motivated by a concern that the ever-increasing popularity of the scholarship will soon cause demand to outstrip lottery revenues. Many of the proposals, like adding a minimum-SAT requirement, will have disparate impacts by race. Although few of the proposals have been enacted to date, continued pressure on the funding source will certainly lead to their reconsideration in the future.

Since its inception in 1993, the HOPE program has distributed over 2.0 billion dollars to about 625,000 students. Its impact extends far beyond the borders of the state, however, as HOPE has been the model in the rapid increase in state-sponsored merit scholarships during the last ten years. Cornwell, Leidner, and Mustard (2004) indicate that in the past fifteen years, nearly 30 state-sponsored merit scholarships have been started, 14 of which are explicitly "HOPE-like," with multi-year coverage, no limit on the number of qualifiers, and awards distributed as entitlements for those who meet specified criteria.

Georgia's HOPE Program

We first outline the history of Georgia's HOPE Program and its basic features. HOPE is the brainchild of Zell Miller, who was elected Georgia's 79th governor in 1990. Miller came from a low-income family and attended the University of Georgia on the GI Bill. His stated goal in introducing HOPE was to enable Georgians to further their education the way he had done. Miller's philosophical basis for the program was that of a broad-based merit scholarship, similar to the GI Bill. "You give something, you get something—that's the premise of HOPE," he said (Seligman, Milford, O'Looney, & Ledbetter, 2004, p.1). High school students must "give"

achievement in the form of a “B” average in exchange for free tuition and fees in college as long as they maintain a “B” average.¹

Miller proposed funding HOPE from a state lottery, which at that time was constitutionally prohibited. However, in November 1992, Georgia voters passed the lottery amendment by less than 100,000 votes (1,146,340 to 1,050,674), clearing the last significant political hurdle for HOPE to be implemented. The initial legislation indicated that 51 percent of lottery revenues should be returned to players in winnings, 7 percent should cover administrative costs, 7 percent should be allocated for advertising and in-store promotion, and the remaining 35 percent should be spent on education. The education expenditures would be divided among four new educational programs—HOPE, universal pre-kindergarten programs, technology, and buildings and infrastructure. As we discuss below, the explosive growth in HOPE awards has essentially reduced lottery funding of technology, building, and infrastructure to zero.

The HOPE program distributes two types of awards—the merit-based scholarship and a non-merit-based grant. To qualify for the scholarship, which can be applied to 103 public and private colleges and universities in Georgia, high-school students must graduate with a “B” average. The scholarship pays all tuition and fees, and \$300 of book expenses to Georgia citizens who attend degree-granting public institutions. For the 2003-2004 academic year the value of the award was about \$4,400 at the state’s flagship institutions.² The value of the award for HOPE Scholars in private, degree-granting institutions was originally set at \$1000, but was raised to \$3000 by 1996. Once in college, students need to maintain a “B” average with a minimum number of credits to retain the award. The award had an initial household income cap of \$66,000 and included a Pell offset, which reduced the HOPE payment dollar-for-dollar for any federal Pell Grant aid received by the student. The income cap was raised to \$100,000 in 1994 and removed entirely in 1995.

In contrast, the HOPE Grant is essentially an entitlement with no merit requirements. It applies only to non-degree programs at two-year and technical schools. The grant covers tuition and mandatory fees, and students may receive it for all coursework required for a certificate or diploma. Thus, the incentives related to scholarship eligibility and retention do not apply to grant recipients.

Table 4-1 provides a breakdown of program disbursements in terms of the number of awards and dollars of aid from 1993-2002.³ Degree-granting institutions accounted for 55 percent of all awards and 78 percent of total aid during this period, with four-year colleges and universities representing 44 and 60 percent of these totals, respectively. Thus, the lion’s share of program resources is devoted to the merit-based scholarship—in particular, to high-school

¹ Some contend that his HOPE proposal was an appeal to middle-class voters in his 1994 re-election campaign. In early 1993, Miller angered many rural Whites, who with Blacks comprised his core constituency in the 1990 election, by suggesting that Georgia remove the Confederate emblem from its state flag. “So Miller changed his political strategy, abandoning his coalition of blacks and poor rural Whites in favor of a new alliance between blacks and middle-class, traditionally Republican White suburbanites. ... [H]e curried favor among middle-class voters with the HOPE Scholarship, one of the education initiatives funded by the new state lottery” (Zengerle, 2001).

² For example, the tuition and fees were \$3,208 and \$870 at the University of Georgia during the 2003-2004 academic year. While tuition and fee charges vary widely at the state’s public institutions, the book allowance is the same, \$300 per year, at each.

³ “Awards” do not equal “recipients” because a single recipient receives an award each year she qualifies and, in the case of the grant, she can receive multiple awards within the same year, depending on the nature of the vocational training program.

graduates matriculating at four-year schools. The other 45 percent of awards flowed to technical schools in the form of grants, but these institutions receive a relatively small proportion of total aid due to their low tuition.

Table 4-1: Numbers of HOPE Awards & Dollars of Aid, by Institution Type, 1993-2002

Institution Type	Number of Awards (% of Total)	Aid in Millions of Dollars (% of Total)
4-Year Schools	526,033	942.00
Public	389,452 (32.0)	840.09 (53.7)
Private ^a	136,581 (11.2)	101.91 (6.5)
2-Year Schools	144,061	279.43
Public	109,362 (9.0)	237.48 (15.2)
Private ^a	34,699 (2.8)	41.95 (2.7)
Technical Schools ^b	547,078 (44.9)	342.86 (21.9)
HOPE Program Total	1,217,172	1564.3

Notes: ^a Private two-year and four-year schools were eligible to participate only from 1996.

^b Of the 34 HOPE-eligible technical schools, 13 offer Associate's Degrees, and therefore can award both the scholarship and grant.

Source: Cornwell & Mustard (2003, Fall)

Until the eligibility criteria for the scholarship were stiffened in 2000,⁴ the share of HOPE funds allocated to the scholarship component of the program grew steadily. Between 1993 and 1999, the number of HOPE-eligible high-school graduates rose over 50 percent, from 29,840 to 45,149, and the proportion of high-school graduates satisfying the merit requirements increased from 48 percent to almost 65 percent. Even after the rule change in 2000, the fraction of high-school graduates qualifying for the scholarship has approached 60 percent.

The age, scale and scope of Georgia's HOPE program make it an attractive laboratory for examining the effects of state-sponsored merit scholarships. In the next three sections, we discuss our findings concerning the role of race and school quality in determining HOPE eligibility, HOPE's effect on college enrollments, and the scholarship's influence on academic choices in college.

⁴ Scholarship requirements changed for high-school classes that graduated in 2000 and later. Previously, the GPA requirement was defined in terms of college preparatory courses. Now, to receive HOPE, high-school students must have a "B" average in the strictly academic courses that make up the "core curriculum."

Scholarship Receipt and Race

To what extent is HOPE eligibility affected by the racial composition and quality of high schools? To answer this question we analyze Georgia Department of Education (2002) data from all 337 Georgia public high schools on the 2002 graduating class. We limit our attention to White and Black students, because these two groups comprise over 93 percent of the 2002 graduating class. In contrast, Asians and Hispanics together accounted for less than 5 percent. The results of two regressions—a baseline model that includes only racial composition variables and fuller specification that adds a variety of other controls—are reported in Appendix 4-A1.

The estimates from the simple model suggest that a one percentage-point increase in the fraction of Black students is associated with a reduction in the share of HOPE-eligible students by 0.18 percentage points, which is statistically significant at the 0.01 level. In contrast, larger shares of Asian students are associated with larger fractions of students who are HOPE eligible. For an additional one percent of Asian student enrollment, the HOPE receipt rate is 0.76 percentage points higher. The fractions of Hispanic and Native American students have no statistically significant effect on the percentage of the class that is HOPE eligible.

The second column adds variables that control for the quality of schools (teacher experience and percent of teachers with at least a BA degree), peers (SAT scores, AP tests taken, AP pass rate, and high-school completion rate), and family background (proxied by the percentage of the student body receiving a free or reduced-price lunch). When these variables are introduced the effect of race is eliminated—none of the race variables is statistically significant. However, the quality of schools, peers, and family background are very important. All but three of the other control variables (average math SAT score, average years of teacher experience, and the fraction of teachers with more than a BA degree) are statistically significant. Two characteristics reduce the fraction of a high-school class with HOPE eligibility. An increase of 100 students in the graduating class reduces the fraction of students who receive HOPE by 2.6 percent and a one-percentage point increase in the fraction of students eligible for free or reduced lunch results in a 0.11 percentage point drop. An increase of 100 in the average verbal SAT score raises the fraction of HOPE-eligible students by 11.8 percentage points, while a one-percentage point increase in the high-school completion rate (the fraction of 9th graders that complete 12th grade) expands HOPE eligibility by 0.31 of a percentage point. Both of the Advanced Placement (AP) test variables are associated with higher fractions of HOPE-eligible students. Increasing AP tests taken by 100 and the AP pass rate by one-percentage point increases HOPE-eligible students by 2.8 and 0.07 of a percent, respectively. Interestingly, neither teacher experience nor teacher education has a statistically significant affect on HOPE eligibility.

To summarize, on average high schools with a greater share of Blacks receive fewer HOPE Scholarships while institutions with a larger share of Asians receive more awards. These differences in award receipt are due, in part, to differences in preparation that may be generated by differences in families, peers, and quality of schools. Unfortunately these differences in preparation are often long-term, building up over the entire first eighteen years of a student's life.

HOPE's Effect on Enrollment in Georgia Colleges by Race

Cornwell, Mustard, and Sridhar (2004) compare college enrollments in Georgia with those in the other member states of the SREB and show that HOPE increased total freshmen enrollment in Georgia colleges and universities by 5.9 percent, with the gains concentrated in

four-year public and private schools. From a policy perspective, if the objective is to retain high-quality students in state for college, then HOPE accomplishes this to some degree. Cornwell, Mustard, and Sridhar (2004) find that HOPE reduced the number of first-time freshmen in four-year schools who recently graduated from high school leaving Georgia by an average of 560 per year between 1993 and 1997, accounting for roughly two-thirds of the total enrollment gain for this group. However, recent-graduate freshmen represent only about 40 percent the total four-year-school enrollment increase.

Separately analyzing HOPE's effects by race, Cornwell, Mustard, and Sridhar (2004) report that the scholarship increased White enrollment by about 3.6 percent and Black enrollment by about 15 percent. Correspondingly, they find a significant 2.7 percentage-point rise in the Black share of total (White + Black) enrollment in Georgia. Georgia's HBCUs account for much of the increased enrollment of Blacks, as their enrollments rose 23 percent during the same period because of HOPE (Cornwell, Mustard, & Sridhar, 2004). Their presence clearly enhances the scholarship's incentive for Blacks to choose an in-state college. In the first place, Blacks are likely more price sensitive, because the typical Black household (nationally and in Georgia) has less wealth (even holding income constant). To this price sensitivity, the HBCUs add the opportunity of attending a college with a high concentration of similar peers. HOPE's influence on the HBCU enrollments could also reflect rising admission standards at the state's flagship universities. In contrast to the University of Georgia and Georgia Tech, the 2001 *Barron's Guide to Colleges (Profiles of American Colleges, 2001)* rated all but one Georgia HBCU as "less competitive," the fifth highest category (out of six).

Extrapolating from Georgia's experience with HOPE to other states contemplating merit scholarship programs, there are several things to keep in mind. It will be easier to retain academically accomplished high-school graduates if selective colleges are located within the state. Over the last five years, Georgia (with Georgia Tech and the University of Georgia) is one of only four states that have at least two universities in the top 20 of the *U.S. News and World Report* rankings of national public universities (U.S. News & World Report, 2002). In contrast, The University of Massachusetts-Amherst, Massachusetts' flagship public institution, is ranked 48th. In Massachusetts' case, this situation would be mitigated if the scholarship could be used at private schools (as in Georgia), as there are more selective private institutions in the northeast than the southeast.

The retention of Black students will depend on the size of the Black population and number of predominately Black institutions in the state. In 2002, 28.8 percent of Georgia's population was Black, compared to only 6.6 percent in Massachusetts (U.S. Census Bureau, 2004), and Massachusetts has no HBCUs.

HOPE and Academic Behavior of Students in College

Three papers have examined whether HOPE generates differences by race or ethnicity in student outcomes in college. Dee and Jackson (1999) studied the likelihood of HOPE loss among all the HOPE Scholars who enrolled at the Georgia Institute of Technology in 1995, the year the income cap was removed. They concluded that those who enroll in science, computing, and engineering are significantly more likely to lose HOPE. However, there are no racial or ethnic differences in HOPE loss.

A common justification for HOPE is to promote and reward academic achievement. Henry, Rubenstein, and Bugler (forthcoming) contrast the behavior of 1,915 "borderline HOPE

scholars” with a matched group of 1,817 students who graduated in 1995 with the same high-school core-course GPA and matriculated at the same type of postsecondary institution, but who did not receive HOPE. They found that students in the first group had higher college GPAs and probabilities of graduating in four years, and completed more college credits. Further, their results show no statistically significant difference between Black and White HOPE scholars in these outcomes. However, it is difficult to construe the Henry, Rubenstein, and Bugler (forthcoming) findings as scholarship effects because both groups are affected by the program—qualifiers can become non-qualifiers and vice versa.

The last paper, Cornwell, Lee, and Mustard (2004), argues that while the GPA requirements for HOPE eligibility and retention may promote academic achievement, they also encourage other behavioral responses like enrolling in fewer classes per term, withdrawing from classes when performing unsatisfactorily, and choosing less challenging courses. Using data from the longitudinal records of all undergraduates who enrolled at the University of Georgia (UGA) between 1989 and 1997, they estimated the effects of HOPE on course enrollment, withdrawal, and completion. They identify the scholarship’s influence by comparing the behavior of in-state students before and after HOPE was implemented with the behavior of out-of-state students, who are ineligible for the award.

They find that HOPE decreased full-load enrollments and increased course withdrawals among resident freshmen. The combination of these responses is a 9.3 percent lower probability of full-load completion and an almost one-credit reduction in annual course credits completed. Further, the scholarship’s influence on course-taking behavior is concentrated on students whose GPAs place them on or below the scholarship-retention margin and increased as the income cap was lifted and more students received the award.

Appendix 4-A2 reports how HOPE affects course-taking behavior of first-year UGA students by race and ethnicity. All regressions include controls for race, gender, Georgia residency, and high school fixed effects.⁵ Six outcomes are evaluated—the likelihood of enrolling in a full load, withdrawing from a class, and completing a full load, and the number of credit hours enrolled, withdrawn, and completed—and HOPE effects estimated for Asians, Blacks and Hispanics (with Whites being the referent group). There is no evidence that HOPE has influenced the course-taking decisions of Asians; none of the coefficient estimates is statistically significant. For Blacks, however, the data indicate that the scholarship has had some effect along the “extensive margin.” HOPE reduced the likelihood of enrolling in a full load by 7.8 percentage points and completing a full load by 6.8 percentage points, while increasing the likelihood of course withdrawal by 3.7 percentage points. Although the results are qualitatively similar for the “intensive margin,” the evidence is weaker. The strongest finding emerges for withdrawn credits, where Blacks are shown to drop about 0.3 more credits on average than Whites because of HOPE. Overall, Hispanics appear to respond to the scholarship incentives similarly to Blacks, but only one of the estimated HOPE effects is statistically significant—that pertaining to the probability of enrolling in a full load. HOPE reduced the full-load enrollment probability for Hispanics by 8.8 percentage points.

The UGA data show that HOPE’s GPA requirements lead to choices that partially undermine its objective of promoting academic achievement by encouraging greater effort. However, the results show little difference by race and ethnicity. HOPE’s effect on course taking

⁵ In regressions that are not reported we also included controls for measures of pre-college performance like SAT math, SAT verbal, the number of AP credits, and high school grade point average. Including these additional control variables did not affect the qualitative results.

is generally not statistically significant for Asian and Hispanic students. The evidence is mixed for Blacks, which generally exhibited statistically significant effects towards slowing academic progress for the likelihood of enrolling, withdrawing, and completing courses, but no statistically significant effects on variables measuring the number of credit hours.

One of the important policy decisions regarding merit aid is how to structure checkpoints for scholarship renewal in college. This was one of the major rule changes made to Georgia's HOPE in 2004 that will be discussed later in this chapter. Providing more frequent checkpoints or limiting the number of semesters that a student can receive the award may give some students incentives to progress through college more quickly and also result in others losing their scholarships earlier than they otherwise would have.

Program Expansion and Reform

Because HOPE has served as the model for so many state-sponsored merit programs and is older than these programs, understanding Georgia's legislative reforms may provide insight for future reforms in other states. Since 1993 the Georgia legislature has made numerous changes to HOPE. The 1990s exhibited unexpectedly high lottery revenue growth and prosperous state finance. During this time the legislature generally expanded the eligibility and generosity of HOPE and also funded new programs with lottery resources. More recently—when lottery growth slowed and state finances weakened—the legislature pursued a sharply different strategy and typically restricted eligibility and eliminated some programs from lottery funding due to growing concerns about the program's long-term financial stability.

Early Changes

Because lottery revenues initially far outpaced all initial projections, the legislature broadened the eligibility and generosity of the scholarship. The household income cap was increased from \$66,000 to \$100,000 in 1994, and entirely eliminated in 1995. Also in 1995, HOPE increased its allocation to private institution college students from \$1,000 to \$1,500, which was raised to \$3,000 the following year. In 1996 and 1997, legislation was passed that increased the eligibility of nontraditional students, and in 1998, home school students were allowed to qualify retroactively for their freshmen years if they met the collegiate grade point criterion.

During this prosperous period the legislature also voted to use the lottery to fund other scholarships. Examples include the Public Safety Memorial Grant (1994), the Georgia Military College Scholarship (1995),⁶ the PROMISE Teacher Scholarship,⁷ the HOPE Teacher Scholarship (1996),⁸ and the Scholarship for Engineering Education (SEE) (1998).⁹ Two features distinguish these “add-on” programs from HOPE. One is the increased use of service-cancelable

⁶ In return for the scholarship, recipients must serve for two years following graduation in the Georgia National Guard.

⁷ Students who received the PROMISE Teacher Scholarships agreed to teach after graduation in a Georgia public school up to a maximum of four years.

⁸ The HOPE Teacher Scholarship provides forgivable loans to recipients who teach in a Georgia public school in critical shortage fields.

⁹ The SEE provided service-cancelable loans for a maximum of \$17,500 for a student's program of study and required students to work in an engineering-related field in Georgia after graduation.

loans instead of direct payments. The second is a requirement to work or serve in Georgia after graduation.

Eliminating the Pell Offset and Assistance to Low-Income Students

The last significant legislative expansion of HOPE was the removal of the Pell offset, which applies to students who graduated from high school in 2001. One of the most significant criticisms of the original HOPE Program was that if a student was eligible for both a Pell Grant and HOPE, the student's HOPE scholarship was reduced dollar-for-dollar by the value of the Pell Grant. Consequently, low-income students who received the Pell Grant prior to HOPE received very few additional resources from HOPE.

The effects of removing the Pell offset differed significantly by the type of institution attended. Table 4-2 reports financial aid receipt by class of institution for first-year students in the fall of 2001. It provides the number and fraction of Pell recipients and shows a number of interesting things. First, there are very few low-income students enrolled in the three research universities (row 1, columns 2 and 4). Less than 16 percent of entering students in this institutional category qualified for Pell. Only 0.39 percent qualified for Pell and not HOPE (column 2) and 15.29 percent qualified for both Pell and HOPE (column 4). These entries for Pell qualification are the lowest for any of the five institution classes. Second, although not separately reported in the table, low-income students comprise an even smaller share at the two flagship institutions (Georgia and Georgia Tech), where only slightly more than 10 percent of their students qualified for Pell. Third, the last column shows those who receive both Pell and HOPE and are most affected by the removal of the Pell offset, which affected about 18.5 percent of the 27,210 first-time freshmen in the fall of 2001.

Although those affected by the removal of the Pell offset represented almost one-fifth of all first-year students in 2001, it is surprising that the numbers are very similar to those of the year before the offset. In 2000, 4,749 (18.1 percent) of the incoming first-year students received both Pell and HOPE, compared to 5,029 (18.5 percent) in 2001, the first year after the offset was removed. This has led some to question whether the removal of the Pell Grant offset increased enrollment by decreasing the cost of postsecondary education for students who qualify for the Pell Grant. Seligman, Milford, O'Looney, and Ledbetter (2004) show that the total number of students and Pell Grant-eligible students registered in technical colleges increased between 2000 and 2003. However, Pell/HOPE grantees as a percentage of all technical college students changed little. They contend that a substantial link between the increased benefits for Pell/HOPE recipients and increased technical college enrollments may be because the removal of the offset was not advertised widely. They also cite college administrators who reported that most new applicants for financial aid were not aware of changes in financial aid policies like the Pell Grant offset removal.

Table 4-2: Financial Aid for First-Time Freshmen, Fall 2001

Class of Institution	(1)	(2)		(3)		(4)	
	First-Time Freshmen from Georgia	No HOPE/Pell No.	%	HOPE/No Pell No.	%	HOPE and Pell No.	%
Research Universities	6,836	27	0.39	5,617	82.17	1,045	15.29
Regional Universities	3,880	116	2.99	2,547	65.64	820	21.13
State Universities	8,067	454	5.63	4,915	60.93	1,728	21.42
State Colleges	1,069	140	13.10	501	46.87	196	18.33
Two-Year Colleges	7,358	1,023	13.90	2,855	38.80	1,240	16.85
System Total	27,210	1,760	6.47	16,435	60.40	5,029	18.48

Note: First-Time Freshmen from Georgia is defined as the subset of first-time freshmen who graduated from Georgia High School since 1993 plus freshmen receiving HOPE according to Georgia Student Finance Commission records.

Source: Data are from the Georgia Department of Education (2002).

The state estimated that removing the Pell Grant offset would require approximately \$23 million in additional funds to provide Pell grantees with HOPE Scholarships. However, that grew quickly so that in 2002, \$87.8 million in HOPE Scholarships was awarded to 56,879 students who qualified for a Pell Grant (Seligman, Milford, O'Looney, & Ledbetter, 2004). By 2002, approximately 30 percent of HOPE scholarships and a little over 27 percent of HOPE dollars were awarded to students who met the federal definition for receipt of a Pell Grant.

To what extent do merit-aid programs affect the college attendance of low-income students? First, a common criticism of merit aid is that it reduces a state's commitment to need-based assistance, thus compromising the ability of needy students to succeed in college. In Georgia's case, in the year prior to HOPE, the state provided \$4.9 million of strictly need-based grants, and \$26.0 million of total aid (National Association of State Scholarship and Grant Programs 1993, Table 1, p. 40). By 2002-2003 Georgia's total aid had grown to \$397 million annually while its need-based grants declined to \$1.5 million (National Association of State Student Grant and Aid Programs, 2003, Table 3, p. 8). By 1997-1998, Georgia provided more aid per full-time undergraduate and had a larger fraction of undergraduates who received aid than any other state in the nation (National Association of State Student Grant and Aid Programs, 1998, Tables 12-13). So in a state like Georgia that never had a strong commitment to need-based aid and where substantially increasing need-based assistance is unlikely to be politically feasible, a large-scale merit-aid program may significantly increase the total funding available to low-income students. The same may not be true, however, in a state that has had a long history of strong support for need-based aid.

Singell, Waddell, and Curs (2004) examined this relationship between need and merit aid for low-income students. They used panel data on Pell awards with institutional data from the National Center of Educational Statistics and concluded that large increases in Georgia's merit aid improved college access of needy students relative to those of other southern states. The results indicated that most institution-specific increases in the enrollment of students with Pell

Grants are in two-year and less-selective four-year institutions and that Pell students are not crowded out of more selective institutions.

Furthermore, although not strictly need-based, much of Georgia's HOPE program was targeted to low-income students through the HOPE Grant. In 2003-2004 the grant alone allocated \$103.7 million. Although we are unaware of data that directly link the HOPE Grant to the household income of its recipients, anecdotal evidence indicates that a large fraction of this aid is used by people who would have qualified for need-based grants. Also, since students were permitted to stack HOPE and Pell, Georgia schools with large Black enrollment have a larger fraction of students with HOPE who are Pell eligible than do institutions with large White enrollments. Furthermore, the fraction of students in HBCUs who receive Pell and HOPE is even larger, at over 65 percent (Cornwell, Mustard, & Sridhar 2004).

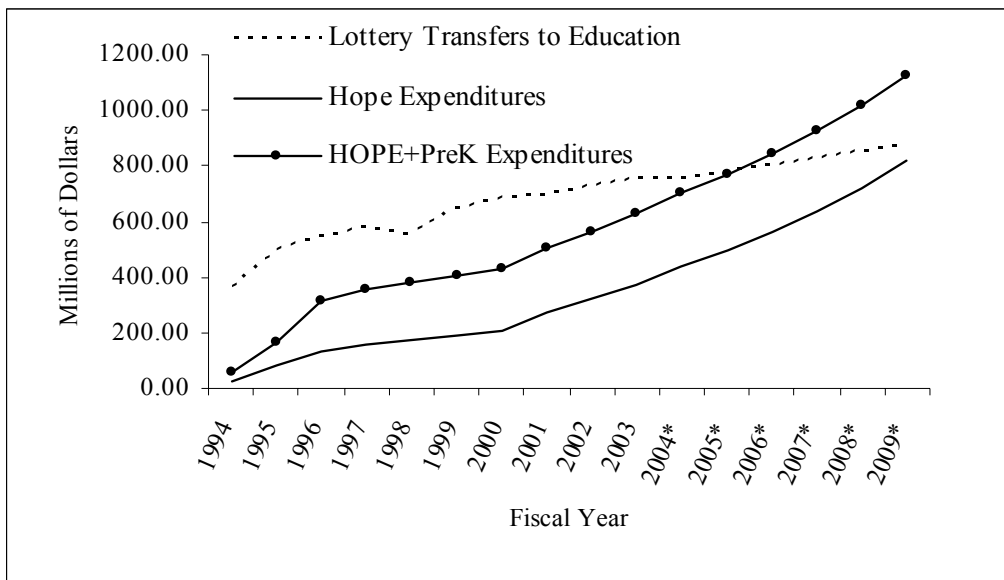
Whether a state's merit scholarship program delivers more aid to needy students may depend importantly on the state's commitment to need-based assistance. In 2002-2003, Massachusetts distributed \$86.7 million in need-based grants, which comprised nearly all of its \$87.7 million allocation to college students (National Association of State Student Grant and Aid Programs, 2003, Table 3, p. 8). When a state steadfastly provides need-based funding there is a greater likelihood for its total aid to needy students to decrease with the advent of a large merit program, as noted above.

Limiting the HOPE Program

Recently Georgia realized that the demand for educational expenditures was likely to exceed the ability of the lottery to pay for them. Figure 4-1, which compares the growth in the lottery transfers to education with the expenditures for the HOPE and pre-K programs, illustrates the fundamental change in the ability of the lottery to fund all of its educational commitments. The dotted line shows that lottery transfers to education grew rapidly since the lottery's inception. In its first year the lottery recorded \$1.12 billion in revenue and transferred \$363 million to education. Georgia's lottery has been one of the most successful in the nation as its revenues grew over 200 percent in its first ten years and was the first state lottery to increase revenue for its first seven years.

However, this unprecedented lottery success was insufficient to meet the even faster growth in educational expenditures. Figure 4-1 also plots HOPE expenditures and the sum of HOPE and pre-K expenditures. Although the Georgia lottery was one of the most successful lotteries in the nation and grew much faster than anticipated, educational expenditures driven primarily by the growth of HOPE grew even faster. The sum of HOPE and pre-K expenses was projected to soon exceed the lottery allocations to education. Although there is currently a reserve fund for financial emergencies, the projections indicate that the reserves would extend the day of reckoning for only about two years.

Figure 4-1: Lottery Allocations to Education vs. Educational Expenditures, FY 1994-2009



Notes: 1994 fiscal year runs from July 1, 1993 - June 30, 1994. The values for 2004 and following are projections. The lottery projections listed here include a 3.2 percent growth rate, which was the most favorable growth rate the Commission considered. The educational projections were based on the number of students who are expected to utilize the resources.

Source: Seligman (2003).

The state started to take steps to restore HOPE's financial stability. First, it reduced, and eventually eliminated, expenditures for two of the four original funding areas—technology and infrastructure. In its first year, the lottery transferred \$363 million for educational purposes. HOPE and pre-K accounted for only \$58 million of the lottery resources while technology and infrastructure comprised the largest share of resources, which continued for the first few years. However, over time the state increased funding for HOPE and pre-K and reduced funding for infrastructure and technology.

The need to increase the financial stability of the program also turned the political debate in favor of those who believed that previous changes were too expansive and weakened the original objective of HOPE to provide aid based on merit. Some maintained that an award earned by about two-thirds of high school graduates had significantly lost its merit component. In an effort to increase the merit standards and restore financial strength the legislature required that after the class of 2000, high-school grade-point average must be calculated only from core college preparatory courses. Because earning an “A” or “B” in a core course is typically thought to be more difficult than earning a high grade in an elective course, this change was anticipated to create significant savings by reducing the number of qualifying high school graduates—perhaps by about 30 percent. Despite the change to core classes, HOPE program enrollments in public colleges increased. For example, total enrollment of HOPE recipients in university system institutions rose from 70,623 in 2000 to 76,436 in 2002, representing a larger increase than in the years prior to the toughening of academic standards (Seligman, Milford, O’Looney, & Ledbetter,

2004). The failure to restore long-term financial stability to the program led the state to establish the HOPE Scholarship Joint Study Commission, which met in 2003 on the 10th anniversary of the program.

2004 Reforms

To address the problem of educational expenditures increasing substantially faster than lottery-generated revenues, the legislature passed Senate Resolution 220 in 2003 to create the Improvement of the HOPE Scholarship Joint Study Commission. The Commission's purpose was to "undertake a study of the conditions, needs, and issues" related to the HOPE scholarship program and "recommend any action or legislation which the commission deems necessary or appropriate to improve the HOPE scholarship program for the future," thereby assuring the "continuing and future availability of sufficient funds for HOPE scholarships," (Seligman, Millford, O'Looney, & Ledbetter, 2004, p. 16). The Commission considered the potential short- and long-term financial impacts of all options. Generally, short-term savings result from changes to the level of benefit, and long-term savings from changes in eligibility requirements.

The Commission started meeting in August 2003 near the 10th anniversary of the first HOPE distributions. The Commission posted on a website (<http://www.cviog.uga.edu/hope/>) all of the testimony it received and reports it issued during its six months of work. In January 2004 it issued its final report (Seligman, Milford, O'Looney, & Ledbetter, 2004). Its broad recommendations were to preserve the merit-based focus of the HOPE Scholarship, ensure compliance with the 3.0 grade-point requirement, improve data collection and management, create a commission to study the pre-kindergarten program, implement a uniform grading system for public K-12 education, discontinue funding for future capital and technology projects, and create contingency plans to guide future allocation decisions in the event of funding difficulty.

During the spring of 2004 the state legislature used the Commission's proposals as the basis of its discussions on HOPE reform. By the end of the spring session the legislature approved the most comprehensive changes to the program since it was established. The highlights of those changes are as follows (Georgia Student Finance Commission, 2004).

1. Mandatory fees. The amount HOPE will pay for mandatory fees is capped at the amount paid at each institution for the 2003-2004 award (though it still will pay full tuition).
2. New checkpoints. Since HOPE's inception, students were evaluated at the 30-semester-hour mark to determine whether they had a 3.0 college GPA. If one earned a 3.0, existing HOPE scholars maintained their awards and students who previously had not qualified earned an award until the 60-semester-hour checkpoint. However, the rules produced some unintended consequences by leading students to enroll in fewer classes and withdraw from more classes to try to maintain their HOPE eligibility (Cornwell, Lee, & Mustard, 2004). To try to keep students from slowing their academic progress the legislature implemented two new types of checkpoints.
 - a. The End-of-Spring Checkpoint applies to all HOPE Scholars except freshmen who enrolled for less than 12 hours for each of their first three terms (see Three-term Checkpoint below). As of 2005, all HOPE Scholarship recipients must have a 3.0 college GPA at the end of each spring to keep their awards—regardless of how many credits they have earned. The HOPE Scholarship can be lost at an End-of-Spring Checkpoint, but cannot be gained until a credit-hour checkpoint (30, 60, or 90).

- b. The Three-term Checkpoint applies only to freshmen who enrolled for less than 12 hours for each of their first three terms. After their first three terms (starting in the spring 2005) HOPE scholars must have a 3.0 cumulative college GPA to maintain their awards. Once the three-term checkpoint has been applied to a student, the End-of-Spring checkpoint must be applied to that student in the future, regardless of the number of hours enrolled each term.
3. Book and fee triggers. Estimates indicated that the elimination of book and fee payments provided the greatest short-term savings. The legislature decided that if certain conditions were met, book and fee payments would be reduced as follows.
 - a. If the lottery's year-end balance is less than the previous year's balance for one year, the book allowance will be reduced to \$150 per academic year. Pell Grant recipients will continue to receive a \$300 annual book allowance.
 - b. If the lottery's year-end balance is less than the previous year's balance for two consecutive years, the book allowance will be eliminated. Pell Grant recipients will continue to receive a \$300 annual book allowance.
 - c. If the lottery's year-end balance is less than the previous year's balance for three years, fees will be eliminated for all students.
4. High school grades. Effective with the high school class of 2007, the high school requirement for the HOPE Scholarship will be a true "B average" of a 3.0 cumulative GPA on a 4.0 scale, rather than an 80 numeric average for all core curriculum courses. Seligman, Milford, O'Looney, and Ledbetter (2004) estimated that this would save \$42.9 million in the first year it is implemented.

To our knowledge, there is no systematic analysis of how minority or low-income students will be affected by the first two rule changes. The change on book allowances that protects Pell grant recipients during times of financial difficulty will certainly assist low-income students. However, the maximum benefit will be a relatively small \$300 per year per person.

The last change is the most significant because it may substantially reduce the number of high school students who receive HOPE to begin their college careers. Previously, high-school grades were calculated differently across the state, which allowed many students to qualify for HOPE who may not qualify under the new rule. Astonishingly, 6,638 students (32.3 percent of the scholarship recipients from the high school class of 2000) had a high-school GPA that would not have met the new standard (Ledbetter & Seligman, 2003). Table 4-3 gives an example of this situation. Over a quarter of HOPE Scholarship recipients earned between a 2.5 and 2.99 grade point average, 6.3 percent were between 2.0 and 2.49, and 0.25 percent earned 1.5-1.99. A handful of HOPE Scholars actually had GPAs of close to 1.0. These findings generated many concerns about lack of fairness. The legislature's decision on grades makes two important changes.

Table 4-3: Contrasting the Old and New HOPE GPA Eligibility Rules

Class	(1) Old Policy	(2) New Policy
English	79	C (2.0)
Foreign Language	79	C (2.0)
Math	79	C (2.0)
Science	79	C (2.0)
Social Science	84	B (3.0)
Grade Point Average	80	2.20
Overall Letter Grade	B	C
Hope Eligible?	Yes	No

Note: The scale used in Georgia translated scores between 70-79 into a “C,” scores between 80 and 89 into a “B,” and scores above 90 into an “A.”

First, all core courses must count towards the overall grade point average. Previously, if a student received a “D” and retook the course for a “B,” some schools counted only the higher grade for purposes of HOPE determination.

Second, high schools must adhere to a common set of rules to calculate grade point averages. Table 4-3, which provides the grades of a hypothetical high school student, illustrates the differences between the old and new standards. Column 1 shows that under the previous rule a school could calculate the numerical average of grades before converting it into a letter grade. So a student, who earned grades of 79 in four courses and an 84 in a fifth course, had an overall average of 80, which translated into a “B.”¹⁰ Therefore, by allowing the overall average to be calculated before assigning the letter grade, a student could offset four high “C” grades with one medium grade of “B,” and the overall average would still earn a “B.”

The new policy, outlined in Column 2 of Table 4-3, assigns letter grades to each class grade, and then averages the letter grades for an overall grade. Consequently, under the new policy our hypothetical student has an overall grade point average of 2.40, which translates into a grade of “C” and precludes him from earning the Scholarship.

Table 4-4 shows that the new HSGPA eligibility requirement would affect classes of institutions in different manners. Research universities (Georgia Institute of Technology, Georgia State University, and the University of Georgia) would be least affected; only 9.1 percent of their students fall below the cutoff. Even fewer of the students at the two flagship institutions (Georgia and Georgia Tech) scored below the new standard. About 40 percent of the students at regional and state universities and about half of the students in state and two-year colleges would fall below the cutoff.

¹⁰ The scale used in Georgia translated scores between 70-79 into a “C,” scores between 80 and 89 into a “B,” and scores above 90 into an “A.”

Table 4-4: High-School Class of 2000 Students Whose GPA Would Not Meet the New Criterion, by Class of Institution

Class	Number of Students	Percent of Students
<u>Total</u>	6,638	32.3
Research Universities	600	9.1
Regional Universities	1,304	40.1
State Universities	2,630	40.1
State Colleges	352	50.7
Two-year Colleges	3,583	48.9

Source: Ledbetter and Seligman (2003).

Table 4-5, which shows the differences by race, indicates that 44.4 percent of the Black HOPE Scholars had HSGPAs below the line compared to 29.7 percent of Whites and 24.2 percent of students from other races. These statistics show only those whose current grades would not meet the new standards, but they do not mean that future students with these characteristics will not qualify for HOPE. The legislature delayed the implementation of this policy change for a number of years so that students will have ample time to raise their grades to meet the new standards.

Table 4-5: High-School Class of 2000 Students Whose GPA Would Not Meet the New Criterion, by Race

Class	Number of Students	Percent of Students
<u>Total</u>	6,638	32.3
Black	1,747	44.4
White	4,483	29.7
All Other	408	24.2

Source: Ledbetter and Seligman (2003).

Future Program Changes

Although many additional reforms were discussed and not enacted, we highlight one in particular. A minimum SAT score of 1000 to be eligible to receive HOPE was discussed in detail, but did not generate a sufficient number of votes to pass the legislature. Legislators supported the minimum SAT for four primary reasons. One was to decrease eligibility and improve HOPE's financial standing. A second concern was that HOPE has become too watered down through grade inflation and that instituting an external standard would restore the award's integrity. The third reason was that students who score below this are unlikely to do well in college and will likely lose the award in the future. Last, historically Georgia's average SAT

score has been one of the two or three lowest in the nation, and adopting this standard would provide an incentive for students to score higher on the exam, thus improving state rankings. Critics countered in two ways. First, one's performance over an entire high school career is much more indicative of one's true merit, and an award of this magnitude should not depend on a one-day performance. Second, a minimum SAT score would have disproportionately affected minority students.

Ledbetter and Seligman (2003) examined how HOPE scholars who graduated from high school in 2000 would have been affected by such a requirement. Table 4-6, which shows the impact by class of institution, indicates that research universities would be minimally affected, as only 11.3 percent of their incoming Georgia residents scored below the cutoff. In contrast, the SAT requirement would have large effects on the other four types of institutions. About 45 percent of new students from Georgia at both regional and state universities did not score 1000 on the SAT. Almost 60 percent of students at state colleges and nearly two-thirds of students at two-year institutions had SAT scores below this cutoff.

Table 4-6: High-School Class of 2000 Students Whose SAT Scores Would Not Meet the Proposed Criterion, by Class of Institution

Class	Number of Students	Percent of Students
Total	8,105	39.1
Research Universities	748	11.3
Regional Universities	1,451	44.6
State Universities	3,144	47.9
State Colleges	408	58.8
Two-year Colleges	2,354	65.7

Source: Ledbetter and Seligman (2003).

Table 4-7 lists the differences by race. In total, 39.1 percent of high school graduates in 2000 failed to obtain a score of 1000. Black students fell below this standard at over twice the rate of White students (67.6 compared to 32.4 percent). Well over half of the students from other races did not score 1000. Because reducing the number of eligible students provides the most long-term savings on educational expenditures, this proposal will likely resurface if HOPE has future financial challenges.

Table 4-7: High-School Class of 2000 Students Whose SAT Scores Would Not Meet the Proposed Criterion, by Race

Class	Number of Students	Percent of Students
Total	8,105	39.1
Black	2,660	67.6
White	4,483	32.4
All Other	962	57.1

Source: Ledbetter and Seligman (2003).

Conclusion

Since the early 1990s, nearly 30 state-sponsored merit-aid programs have started, about 14 of which are modeled in whole or part after HOPE. Because Georgia's HOPE is one of the oldest and largest such programs, it is important to understand its effects and critically assess current and proposed reforms. This chapter has attempted to do both, focusing on the program's impact on minorities and low-income students. Our conclusions can be summarized as follows.

First, there is no direct effect of racial or ethnic composition of the high school attended on the likelihood of receiving HOPE Scholarships. However, high-school quality measures are extremely important predictors of earning the scholarship. Because the percentage of students who are Asian is positively correlated and the percentage of students who are Black is negatively correlated with these high school quality measures, on average, high schools with larger shares of Asians receive more HOPE Scholarships and high schools with larger shares of Blacks receive less. However, these differences are explained by differences in school quality, peers, and families.

Second, HOPE has caused many of its best and brightest high-school graduates to remain in state for college. However, this effect may be partially due to two factors that may not apply in all states. Georgia's merit aid can be used for private institutions, and Georgia has two outstanding institutions that would be attractive destinations for students who are considering leaving the state for college.

Third, until recently there has been little evidence about how HOPE affects the academic outcomes of college students. The existing research shows little difference by race and ethnicity along these lines. Georgia Tech students in 1995 exhibited no racial or ethnic differences in the propensity to lose HOPE. At the University of Georgia through 1997 there was no difference in HOPE-induced changes in enrollment, withdrawal, and course completion for Asians and Hispanics. The evidence is mixed for Blacks, which generally exhibited statistically significant effects towards slowing academic progress for the likelihood of enrolling, withdrawing, and completing courses, but no statistically significant effects on variables measuring the number of credit hours. However, because the studies that identify HOPE effects on college outcomes by race and ethnicity examine only the two flagship institutions for a limited number of years, we are uncertain as to the extent to which the results generalize to other institutions. Additional research on different institutions and time periods would provide a much more complete picture.

Last, the Georgia legislature has made significant changes to the program rules, which have important implications. Removing the Pell offset showed little increase in funding for low-

income students between the year prior to the removal of offset (2000) and the first year after (2001). This may be attributed to lack of information about the change. However, the 2002 allocations to students who qualified for both Pell and HOPE increased significantly. The next few years will clarify the extent to which this policy change increases aid to low-income students. In 2004, the uncertainty about HOPE's financial viability led the legislature to make wholesale changes to the program. Protecting the book allowance for Pell recipients will provide \$300 per year to low-income students even in the first few years of future funding problems. The change in high school GPA rules is expected to significantly reduce the number of students who initially qualify for the Scholarship. Recent data show that almost one third of students who qualified for HOPE did not meet the new cutoff. This group is disproportionately comprised of Black students and those who do not attend the research institutions. However, these data show those whose current grades would not meet the new standards, which will not be implemented for many years. Therefore, students have ample time to raise their grades to meet the new standards.

Appendix

Table 4-A1: High School Characteristics and HOPE Receipt

Variable	(1) Base Specification		(2) Specification with High School Characteristics	
	Coefficient Estimate	Standard Error	Coefficient Estimate	Standard Error
<u>Race Information</u>				
Percent Black	-0.184 **	0.027	0.037	0.033
Percent Hispanic	-0.322	0.234	-0.096	0.182
Percent Asian	0.761 **	0.193	0.205	0.172
Percent Native American	1.568	2.842	2.558	2.186
<u>High School Characteristics</u>				
Number of graduating students			-0.026 **	0.007
SAT Verbal (Average)			0.118 **	0.037
SAT Math (Average)			-0.038	0.035
Number of AP Tests Taken			0.028 **	0.006
Percent of AP Tests with 3 or Higher			0.071 *	0.031
Percent Completion Rate			0.305 **	0.056
Percent on Free/Reduced Lunch			-0.111 *	0.050
Teacher Experience (Average)			-0.363	0.281
Percent of Teachers with > BA			0.042	0.071
Intercept	58.418 **	1.485	-2.526	12.647
Adjusted R-Square	0.163		0.510	
Sample Size	337		329	

Notes: ** and * designate significant at 0.01 and .10 levels, respectively.

Dependent variable is the percentage of graduating students who receive HOPE.

Source: Data are from the Georgia Department of Education (2002).

Table 4-A2: The Effect of HOPE on Academic Choices at the University of Georgia

Group	(1) Full-load enrollment Number		(2) Withdrawal Number		(3) Full-load completion Number	
	Likelihood	of credits	Likelihood	of credits	Likelihood	of credits
HOPE Effect	-0.024 (0.017)	-0.504* (0.280)	0.051* (0.020)	0.529** (0.151)	-0.052* (0.021)	-1.033** (0.324)
HOPE*Asian	0.016 (0.028)	0.477 (0.487)	-0.045 (0.036)	-0.228 (0.271)	0.039 (0.037)	0.705 (0.573)
HOPE*Black	-0.078** (0.017)	-0.140 (0.242)	0.037* (0.021)	0.286* (0.152)	-0.068** (0.021)	-0.426 (0.291)
HOPE*Hispanic	-0.088* (0.050)	-1.209 (0.817)	-0.054 (0.059)	-0.693 (0.443)	-0.026 (0.060)	-0.516 (0.993)
Observations	31,115	31,115	31,115	31,115	31,115	31,115
R ²	0.095	0.110	0.099	0.103	0.109	0.109

Notes: In each cell the first row is the coefficient estimate and the second row contains the robust standard error. All regressions include controls for race, gender, ethnicity, Georgia residency, and high school fixed effects.

** and * designate significant at 0.01 and .10 levels, respectively.

Source: Data are from the University of Georgia (n.d.).

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