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Racial, Ethnic and Socioeconomic Disparities in College Destinations, 1982 and 1992

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Sigal Alon

Office of Population Research

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Abstract

This study examines college destinations of high school graduates to determine whether the impact of socioeconomic status on college attendance patterns differs by race and ethnicity and whether these relationships are stable over time. Using the HS&B and NELS:88 surveys, the college destinations of high school graduates in 1982 and 1992 are arrayed by type (less-than-2-yr; 2-yr and 4-yr institutions) and selectivity (ranging from open door to highly selective institutions). Analyses chart persistence and change in the sorting processes that enable some minorities to enroll in highly selective institutions, others to enroll in noncompetitive colleges, and still others to skip college altogether.

Results show that socioeconomic status has a direct and persisting effect on college destination, and it is particularly crucial in providing access to highly selective colleges. Moreover, high-SES white graduates are significantly more likely to attend a selective or highly selective college compared to their minority counterparts whereas the opposite is true for youth hailing from less than affluent families. The conclusion discusses the policy implications of these results.

Introduction

When approximately three in four high school graduates acquire some kind of postsecondary schooling (NCES, 1996a) the type of postsecondary institution they attend becomes more consequential than in the past. In the U.S., as in many other countries, the educational system offers several tracks of postsecondary education—vocational vs. academic programs as well as 2-year colleges granting associate degrees and 4-year institutions granting bachelor's degrees. There is even further differentiation among 4-year colleges, depending on their level of selectivity. Recent studies claim that the type and selectivity of college attended influences long-term life chances because these tracks result in different probabilities of graduation and labor market prospects (NCES, 2000; Breen, R., and Jonsson, J. O. 2000; Arum, R., and Hout, M. 1998; Bowen, W., and Bok, D. 1998; Monk-Turner, E. 1990; Persell, C. et al., 1992; Dougherty, K. 1987; Smart, J. C. 1986; 1988; Rumberger, R. W., and Thomas, S.L. 1993).

The burgeoning literature that scrutinizes the equality of access to different college destinations emphasizes the importance of scholastic achievement but also identifies a myriad of individual, familial, and social factors that influence college choice. Among these, race/ethnicity and socioeconomic standing are the most prominent factors that shape college attendance patterns (Mare, R. 1995; Manski, C., and Wise, D. 1983; Ellwood, D. and Kane, T., 2000; Hauser, R. 1993; Hearn, J. 1991; Davies, S., and Guppy, N. 1997). Ascertaining whether ethno-racial and SES groups are equally able to attend college is not straightforward because black and Hispanic youth are more likely to have fewer scholastic achievements and also more likely to hail from lower socioeconomic

backgrounds than whites. Moreover, even within socioeconomic strata, there is racial and ethnic variation in college destinations (Hout, M. 2000; Lloyd, K., Tienda M., and Zajacova, A. 2001; Davies, S., and Guppy, N. 1997; Alexander, K., Holupka, S., and Pallas, A.1987). That said, most research and policy initiatives split this bundle of characteristics and address either race/ethnicity or socioeconomic influence on college destination separately. This practice undermines our ability to devise adequate policy initiatives to address inequality in educational opportunity.

This paper investigates whether the impact of socioeconomic status on college attendance patterns, net of achievements, is similar for black, white, Hispanic and Asian high school graduates of 1982 and 1992. Using the HS&B and NELS:88 surveys, the college destinations of high school graduates in 1982 and 1992 are arrayed by institutional type (less-than-2-yr; 2-yr and 4-yr) and selectivity (from open door to highly selective). Subsequently I consider whether the sorting processes that enable some minorities to enroll in highly selective institutions, others to enroll in noncompetitive colleges, and still others to skip college altogether, change over time.

The empirical analysis begins with an overview of recent trends in ethno-racial postsecondary schooling attendance patterns followed by a review of the influence of socioeconomic resources on college destinations. This is a backdrop for an integrated approach that addressed the differential impact of socioeconomic status on college destinations among groups and over time. The refinements in this study, disentangling both ascribed traits and college destinations, allow me to posit cogent hypotheses regarding inequality in college destinations. After a detailed description of the data and methods, I model college destinations of the four ethnic and racial groups and gauge how

socioeconomic status shapes their attendance patterns during two decades—the 1980s and 1990s.

Trends in Ethno-Racial Postsecondary Schooling Attendance Patterns

Despite prodigious policy efforts to broaden educational opportunity, there remain marked and persistent racial and ethnic differences in educational attainment (Mare, R. 1995). According to the U.S. Bureau of the Census in 2000 there were no racial/ethnic gaps in elementary school enrollment rates and modest differences in high school enrollment rates.[1] Racial and ethnic gaps in college enrollment are considerable, as 65 percent of Asians, 49 percent of whites, 36 percent of blacks, and 28 percent of Hispanics, ages 18 to 19, were enrolled in a postsecondary institution (CPS, October 2000 (PPL-148)). These striking disparities in college enrollment rates conceal large variation in the college destinations of Hispanics, blacks, Asians, and whites. For example, in 2000, 75 percent of white undergraduate students aged 18-24 attended a 4-year college compared to 74 percent of Asian students, 70 percent of blacks, and 60 percent of Hispanic students (CPS, October 2000).

Scrutinizing college enrollment rates during the period of my investigation—1980s and 1990s—divulges greater disparities in group access to postsecondary education. In 1982, 27 percent of whites ages 18 to 24 were enrolled in college compared to 20 percent of blacks and 17 percent of Hispanics (U.S. Census Bureau, 2001: Table A-

[1] In 2000, 98 percent of whites and 97 percent of Hispanics, blacks and Asians age 7 to 9 were enrolled in elementary school. During the same time, 93 percent of Asians, 92 percent of whites, 89 percent of blacks, and 84 percent of Hispanics age 16 to 17 were enrolled in high school (CPS, October 2000 (PPL-148)).

5). [2] By 1992, the enrollment rates of whites rose to about 35 percent, while blacks' increased to 25 percent, but Hispanics' enrollment rate rose to a mere 21 percent. Data on Asians is only available from 1994, when their enrollment rate was 63 percent, though that number dropped to 55 percent in 1999. An examination of college destinations reveals larger group differences. For example, in 1982 over half (54 percent) of Hispanic college students were enrolled in two-year colleges compared to only 37 percent of their non-Hispanic white counterparts and 36 percent of blacks (NCES, 1997: table 8-3 based on October CPS). Those figures remained relatively unchanged over time. The national data for 1992 depicts 54 percent of Hispanics (compared to 36 percent of whites and blacks) enrolled in 2-year institutions.

Two-year colleges provide relatively inexpensive, local access to higher education, but they lag behind four-year public and private institutions in terms of resources and other vital student supports. Because the transition from two- to four-year institutions is difficult, many students requiring extra financial or academic support do not continue on to 4-year colleges (Lee, V., and Frank, K.1990). Students who begin their higher education at a 2-year college are far less likely to earn a bachelor's degree than their counterparts who begin at a 4-year college, irrespective baccalaureate aspirations (NCES, 1996a; Dougherty, K. 1987). Consequently, the community college experience may perpetuate, rather than ameliorate, social stratification in higher education (Lee, V., and Frank, K.1990; Dougherty, K. 1987; Brint, S., and Karabel, J. 1989). While the distinction between 2- and 4-year colleges is noteworthy, it does not capture the additional source of inequality embedded in the selectivity of college

[2] In this review I focus on 1982 and 1992 because these are the years the HS&B and NELS:88 youth graduated from high school, respectively.

attended. This is because selective colleges, especially highly selective institutions, limit the number of students they admit, even as the pool of qualified applicants continues to grow every year. Within 4-year colleges the selectivity of the institution attended has profound consequences not only on the quality of education obtained, but also the resources available for students, the likelihood of graduation, and future economic prospects and life chances (NCES, 2000). There is ample evidence from the 1960s-1990s regarding persisting inequality in college selectivity. Despite considerable efforts to increase minority representation in selective and highly selective institutions, Hispanic and black youth remain underrepresented (Persell, C. et al, 1992; Davies, S., and Guppy, N. 1997; Hearn, J. 1984; 1990; 1991).

These large racial disparities in college destinations undergird the race-sensitive admission policies of selective institutions since the 1960s. During the 1980s and early 1990s important court rulings achieved milestones in the fight for equal access to higher education for minorities, and concurrently pressure for public colleges to become racially integrated reemerged (Baker, T., and Velez, W. 1996). In 1992, the Supreme Court decided in *United States v. Fordice*, 505 U.S. 717 (1992) that state courts would be granted the power to redress policies and practices that had limited the proportion of blacks in many educational institutions (Orfield, G. 1993). This decision joined the *Regents of the University of California v. Bakke*, 438 U.S. 265 (1978) judgment supporting policies that consider race and national origin in admission decisions. In practice, race-sensitive admission policies, dubbed Affirmative Action, provide preferential admission to academically borderline Hispanic and black youth, giving them an advantage over whites and Asians. Those policies did not change during the period of

my investigation. However, in the mid-1990s, as a backlash to the upsurge in the minority population share in several states and the popularity of race-sensitive policies, there was a shift in public opinion and in court rulings, altering the context for equalizing educational opportunity. The State Universities of Texas, California and Florida have abandoned race as a criterion for evaluating candidates for college admission, and developed criteria that emphasize class rank. Although these "percent plans" are expected to promote minorities' access to higher education, their success will hinge partly on how socioeconomic standing influences access to postsecondary education.

The Influence of Socioeconomic Resources on College Destinations

There is considerable disagreement about whether socioeconomic status has a direct and lasting impact on enrollment and access to selective postsecondary schooling. Alexander, K., Holupka S., and Pallas, A. (1987) argue that social background has little bearing on college attendance patterns once they control for academic ability. Hearn, J. (1988) reports that socioeconomic status and ascriptive factors have only minor effects on college destination. However, several studies suggest that socioeconomic status, family structure, and parental education, are decisive in producing differences in educational outcomes (Mare, R. 1995; Hauser, R. 1993; Sewel, W., and Hauser, R. 1975; Mare, R., and Winship, C. 1988; Kao, G., and Tienda, M. 1995; Kao, G. et.al., 1996; Conley, D. 2001; Ellwood, D., and Kane, T. 2000). Moreover, ample evidence supports the assertion that socioeconomic status is a key determinant not only of college enrollment, but also of college destination (Karabel, J., and Astin, A.W. 1975; Hearn, J. 1984; 1990; 1991;

Kingston, P. W., and Lewis, L.S. 1990; Davies, S., and Guppy, N. 1997; Baker, T., and Velez, W. 1996; Persell,C. et al, 1992). [3]

For example, in 1996 only 14 percent of students from low-income families were enrolled in private, not-for-profit 4-year colleges compared to 25 percent of high-income students. Conversely, 43 percent of low-income students were enrolled in public 2-year colleges compared to 34 percent of affluent students (NCES, 1999 p.7). Furthermore, the likelihood of being prepared to enter a 4-year institution and fulfilling the necessary academic requirements toward enrollment increase with income, but even college-qualified low income high school graduates are less likely to enroll in a 4-year college compared to their better-off peers. High school seniors who scored in the highest quartile on standardized tests and whose families were also in the highest socioeconomic quartile were considerably more likely to attend a 4-year college than equally high achievers from the lowest SES quartile (86 and 58 percent, respectively). Of those students who were *accepted* at a 4-year institution in 1992, only 83 percent of low-income students, compared to 92 percent of their high-income counterparts, actually enrolled (NCES, 1999 pp.9-10). Moreover, students from lower socioeconomic backgrounds are less likely to attend more selective colleges, regardless of ability (Hearn, J. 1991; Davies, S., and Guppy, N.1997).

[3] However, further investigation should address the group-specific equivalency of socioeconomic status. It is unclear whether youth from comparable socioeconomic strata actually experience the same conditions and resources. The conventional measure of SES accounts for parental occupation, education and family income, but does not measure family wealth. This may hamper our interpretation because, as Conley (2001) aptly argues, parental wealth has a significant impact on the pursuit of postsecondary schooling and on obtaining a bachelor's degree. Other factors that can influence college destinations that are left unaccountable by controlling only for SES include immigration status, English proficiency, household size, Internet use, etc.

The direct effect of socioeconomic standing on access to postsecondary tracks—not the indirect one that shapes ability and prior scholastic achievements—can be explained by limited resources: money and knowledge, both of which are necessary to obtain a quality education. Irrespective of group membership, disadvantaged youth lack the financial ability to pay the costs of a selective college and lack knowledge about the educational marketplace to gain access to the most selective institutions. However, since for most youth college is their last encounter with the education system and the investment with the greatest impact on future economic and social prospects, the access to colleges and universities holds great promise for minimizing social and economic inequalities.

To situate questions about the impact of socioeconomic status on college destinations in the 1980s and 1990s, it is useful to consider the general conditions in those decades that may extend or curtail socioeconomic inequalities in higher education. Most germane to my discussion regarding college destinations is the change in financial aid policies. To eliminate the tie between privilege and access to quality education, federal financial aid programs, which are color-blind, aim to make college affordable for low-income students. Federal aid to students was drastically reduced during the 1980s (Baker, T., and Velez, W. 1996). During the Reagan administration, financial aid to needy students provided by the 1965 Higher Education Act was not increased to meet the rising costs of higher education or to offset the effects of inflation. Moreover, during this period students were offered more loans than grants. These changes in financial aid precipitated a marked decline in the enrollment rates of low-income students, particularly

blacks and Hispanics (Stampen, J. O., and Fenske, R. H. 1988; Orfield, G., Paul, F. 1987; Cortese, A. 1985; Hauser, R. 1993).

With the change in administration, the Higher Education Act was revitalized, creating flexibility in students' repayment options for college loans. Nonetheless, while student financial aid in the 1990s increased the affordability of college for academically eligible students, many students were left with unmet needs. Between 1986 and 1996 the price of college attendance escalated (even allowing for inflation) faster than family income (NCES, 1999, p. 13; The College Board, 2000). The recent College Board report on trends in college pricing concludes that since 1980–1981, both public and private four-year college tuitions increased on average more than 115 percent over inflation. While initially all grants of The Basic Educational Opportunity Grant Program, initiated in 1973, went to low-income students, subsequent awards were extended to middle and higher income students (Manski, C., and Wise, D. 1983). Moreover, for the most sought after students, college discretionary aid offers are not based solely on need, since institutions use financial subsidies to entice highly sought after applicants. As such, these monies have a minimal effect on college attendance rates of low-income students (Manski, C., and Wise, D. 1983). Despite changes in financial aid policy since the 1980s The College Board report (2000, pp. 3) aptly summarize the current state of affairs regarding the affordability of postsecondary education: "Combined with generally stagnant family income over the past 20 year, however, trends in college tuition present serious problems for low-and moderate-income families. While average, inflation-adjusted tuition has more than doubled at both public and private four-year institutions, median family income has risen only 20 percent since 1981. Student aid, meanwhile, has

increased in total value, but not enough to keep pace with the rise in tuition, and most of the growth in aid has been in the form of student borrowing".

Therefore, family socioeconomic resources are still essential for college attendance, and are crucial for determining college destination. For these reasons, it is uncertain how socioeconomic status interacts with minority group status in determining postsecondary attendance patterns. Following a discussion of the overlap between socioeconomic resources and group membership, I outline the approach taken in this paper to address the differential impact of socioeconomic status on college destination among groups and over time.

Ethno-Racial Disparities in the Impact of Socioeconomic Status – An Integrated Approach

Beyond the obvious disparities in college enrollment between children from low and high SES families, there exist large differences in college attendance among children within the same level of socioeconomic resources. Lloyd, K. et al. (2001) report that in 1994 77 percent of Asian youth from low SES backgrounds enrolled in college, compared to 40 percent of blacks and Hispanics and 30 percents of whites. Alexander, K., Pallas, A., and Holupka, S. (1987) find racial and ethnic differences in college attendance within SES levels, even net of academic characteristics, as minorities have higher attendance rates than whites, especially among the lower and middle SES levels. Alexander, K., Holupka, S., and Pallas, A. (1987) argue that black students are less affected by socioeconomic factors than either whites or Hispanics in their probability of enrollment in 4-year colleges. Davies, S., and Guppy, N. (1997) report that black students

from low socioeconomic backgrounds are more likely to enter selective institutions than their non-black statistical counterparts. These findings suggest that minorities, especially blacks, receive higher postsecondary education returns to their socioeconomic resources compared to whites. Presumably, the postsecondary education system is involved in "differential asset conversion" because it converts assets in ways that differ for various groups (Persell et al., 1992). However, an analysis by Persell and associates analysis suggests the opposite conclusion. They argue that advantaged groups obtain superior rates of converting many assets into higher educational attainment, or need fewer desirable assets to obtain similar outcomes, compared to disadvantaged groups. Following this logic we would expect that whites would have higher returns to their socioeconomic standing. That is, within level of socioeconomic status they will have a higher probability of enrollment in 4-year colleges or more selective postsecondary institutions compared to blacks and Hispanics of similar means.

These inferences are based on methodologies that potentially undermine their credibility because virtually all studies of institutional selectivity limit their analyses to youth who attend college (Alexander, K., Holupka, S., and Pallas, A. 1987; Hearn, J. 1988; Hearn, J. 1991; Hearn, J. 1984), and even more specifically to those who attend 4-year colleges (Davies, S., and Guppy, N. 1997; Persell, C. et al, 1992). This approach introduces selection bias because youth who enroll in vocational training, open-door institutions, or who do not pursue postsecondary schooling altogether are excluded from the analysis. This practice distorts our understanding of the equality of educational opportunity. My approach overcomes this limitation of prior research by relying on an inclusive measurement of postsecondary education that simultaneously considers

probability of enrollment and type/selectivity of college. Concurrently measuring enrollment and college destination is especially critical for addressing the educational experiences of blacks and Hispanics, as these groups are more likely than whites and Asians to discontinue education after high school and to be preferentially admitted to selective postsecondary institutions. My analysis focuses both on the college bound population by discerning 2- from 4-year and nonselective from selective and highly selective colleges, and on destinations such as vocational training and open door institutions, which are popular destinations for minority youth. My approach also circumvents the common use of cumulative measures of institutional selectivity that assume that the impact of background characteristics is uniform throughout the selectivity spectrum (See Hearn, J. 1984; 1990; 1991; Davies, S., and Guppy, N. 1997). Instead, I consider whether the magnitude and the direction of influence of ascribed characteristics vary depending upon institutional selectivity level. Conceivably, highly selective colleges are more likely than selective and nonselective schools to consider ascribed traits, such as race and ethnicity, in their admission processes because they are more conscious of affirmative action policies, possess adequate resources to address such initiatives, and are mostly private institutions with greater sovereignty over their admissions criteria.

This paper also goes beyond the conventional focus on comparisons of black/white by considering the differential access to postsecondary schooling and destinations of Hispanic, black, and Asian youth, relative to whites. This comparison is important because of the racial and ethnic diversification of the student population since 1950. By 1980, blacks, Hispanics, Asians, and Native Americans collectively comprised

almost one-fourth of the college-age population. A decade later, the minority share of college-age youth climbed to 30 percent (Lloyd, K. et al., 2001). While researchers pay close attention to Hispanics' and blacks' degree of educational opportunity, Asians' educational careers go largely unexamined, partly because of insufficient data but also because Asians' educational overachievement does not pose a problem to the public policy agenda. However, Karen, D. (1990) suggests that Asians are treated differently from other ethnic minority groups in admission to highly selective colleges. Moreover, the common practice of classifying Asians as non-Hispanic whites may overvalue whites' achievements and thus overestimate the white/Hispanic and white/black gaps.

Finally, this paper expands studies that assess postsecondary attendance trends from the 1960s to the 1980s by comparing two cohorts: high school graduates in 1982 and 1992 (Peng, S. 1977; Clowes, D. A., Hinkle, D., and Smart, J. 1986; Alexander, K., Pallas, A., and Holupka, S. 1987; Hauser, R. 1993). This comparison is important because of the changing ethno-racial composition of the school-age population (Lloyd. K. et al., 2001); changes in the political arena that govern access to financial aid (Reagan vs. Clinton); modifications in admission policies based on court decisions (specifically in the Bakke and Hopewood cases); greater availability of financial aid in the 1990s (Baker, T., and Velez, W.1996); and a decline in blacks' and Hispanics' college attendance by the late 1980s (Karen, D. 1991; Orfield, G., and Paul, F. 1987). The lessons learned from the recent past will partly foretell the impact of the elimination of race-sensitive admission policies in the late 1990s on future access to quality education.

In this overview, the division in the discussion on the differential returns to socioeconomic status to black, white, Hispanic and Asian youth is clear. While some

studies claim that minorities receive higher returns to their socioeconomic resources compared to whites, others argue exactly the opposite. I hypothesize that, (1) for all ethno-racial groups, socioeconomic resources are highly decisive in determining enrollment in 4-year, selective, and highly selective colleges compared to enrollment in vocational programs, 2-year, open door, and nonselective institutions; (2) Equally qualified Hispanics and blacks with *high* socioeconomic status are less likely to enroll in 4-year and selective colleges than in 2-year or non-selective colleges, compared to whites and Asians, because they lack the know-how about the selective educational market and lack an historical advantage deriving from legacy status; and (3) Hispanic and black applicants with *low* socioeconomic status are more likely to enroll in 4-year and selective colleges than in 2-year or non-selective colleges, compared to whites and Asians, because of the joint effect of affirmative action and financial aid policies. Conversely, (4) Asian youth with *low* socioeconomic status are less likely to enroll in 4-year and selective colleges than in 2-year or non-selective colleges, compared to either whites or other minorities because of their relative over-representation at those institutions and because they are not targeted by affirmative action policies. Finally, (5) changes in admission policies and the availability of financial aid between 1982 and 1992 lessens the differential returns over time for social backgrounds along race and ethnic lines.

Data

High school sophomore cohort of the HS&B and the eight-grade cohort of the NELS:88 provide the data for the empirical analyses that follow. The HS&B cohort (n=14,825) graduated from high school in 1982 and the NELS:88 cohort (n=14,916)

graduated in 1992. The detailed education histories provided by both datasets make them ideal for studying both the transition to college and the institutional selectivity of college students. In addition to oversamples of blacks, Hispanics, and Asians, these surveys also include rich information regarding test scores and academic high school performance, as well as standard indicators of family background. College transcripts are available for students who attended postsecondary institutions. Appendix A, section 1, depicts the structure of both datasets, whereas section 2 describes the sample reduction that corresponds to both data sets. The final sample consists of 12,538 HS&B 1982 high school graduates including 8,108 whites, 1,907 blacks, 2,061 Hispanics, and 462 Asians. Of the 12,927 NELS:88 1992 High school graduates, there are 8,817 whites, 1,360 blacks, 1,717 Hispanics, and 1,033 Asians.[4] All analyses are weighted to adjust for oversampling, nonresponse, and attrition. Moreover, all multivariate analyses are adjusted to account for the complex survey design of both data sets, namely stratification and clustering.[5]

College destination is measured in two ways to depict the type and selectivity of the first institution attended while considering the probability of non-enrollment. The *type* of postsecondary education classifies high school graduates by whether the first institution they attend is a 4-year, 2-year, or less than 2-year program, or whether they

[4] This paper assesses the impact of socioeconomic resources on college destination conditional on high school graduation. High school graduation status obviously affects race and ethnic differentials in college destination. Furthermore, socioeconomic standing can and does influence high school academic performance and test taking, but may initially impact students before entry to first grade (Duncan et al., 1998; Entwisle and Alexander, 1993). Duncan et al. (1998) conclude that family economic conditions during early childhood have the greatest impact on achievements, specifically the level of preschool ability, which is associated with low-test scores later in childhood and grade failure. However, it is beyond the scope of this paper to fully untangle the complex relationship between ascription and achievement; rather my goal is more modest, namely to better understand how ascribed attributes govern the access to quality postsecondary education.

[5] Survey estimators that calculate correct standard errors for the weighted multinomial logistic regression coefficients using a Taylor series approximation are reported in all analyses.

decide not to enroll at all. The measure of *selectivity* of an institution is based on the Cooperative Institutional Research Project (CIRP) that utilizes standardized test scores of entering freshmen (HS&B manual, 1980; NCES, 2000). The HS&B includes a four-category version of this measure and classifies institutions as highly selective, selective, non-selective, and open admissions. Because NELS:88 lacks this measure, the Barron's classification of institution competitiveness (The Barron's Profiles of American Colleges, 1982, 1994) was merged to the NELS:88 data and these codes were converted to match the CIRP categories of selectivity.[6]

Descriptive Analysis

The descriptive analysis portrays the 1982 and 1992 high school graduates' postsecondary enrollment and college destination. As shown in Table 1, sixty-four percent of 1982 high school graduates and 76 percent of the class of 1992 attended a postsecondary institution. One-in-three of the students in the 1982 class attended a 4-year institution, and this share rose to approximately 45 percent in 1992.[7] Enrollment in 2-year colleges, including community colleges, rose slightly from 23 percent for the class of 1982 to 27 percent for the class of 1992. Enrollment in less than 2-year institutions, including vocational and technical schools, declined from 8 percent in 1982 to only 3 percent in 1992, corresponding to the general trend of decline in vocational education (Benavot, A. 1983). The upsurge in enrollment rates between 1982 and 1992 is most visible in 4-year college attendance, where these institutions provide a higher quality

[6] Appendix B explains the conversion and details the correspondence between those two measures. Eighty-three percent of the institutions in the NELS:88 were correctly reclassified under the CIRP selectivity scheme. Since the loss in accuracy is minor, a viable comparison of the two cohorts remains possible.
[7] These numbers correspond to published data from the HS&B and the NELS:88 regarding enrollment rates and college destinations (NCES, 1997).

education and more expansive range of academic resources for students. This increase in enrollment in bachelor's degree granting institutions marks an expansion in educational attainment from 1980s to 1990s.

Table 1: Descriptive Statistics of College Destinations of High School Graduates, HS&B and NELS:88

	HS&B[1]	NELS:88[2]
College Enrollment	63,8	75,5
Type of Institution[3]		
No PSE	36,2	25,7
<2 yr/ other	7,7	3,3
2 year	22,6	26,6
4 year	33,5	44,5
Selectivity		
No PSE	36,2	24,5
Open Door/Not rated	29,1	35,1
Non-selective	28,8	26,9
Selective	4,7	11,6
Highly selective	1,2	1,9
Raw n of HS graduates	12538	12927

Notes: 1)Percents are weighted with the third follow-up (1986) weight to obtain projections to the population of high school seniors of 1982.
2)Percents are weighted with the third follow-up (1994) weight to obtain projections to the population of high school seniors of 1992.
3) In the Nels:88 data four percent of enrolled students have missing data on the "Type" variable. Since the current tabulation is calculated on the non-missing observations this gap in percent missing accounts for the difference in the percentage of "No PSE" in the "Type" variable compared to the other 2 variables.

The selectivity of institution attended is a crucial point in the discussion of educational inequality and affirmative action policies because it represents variation in the quality of postsecondary education. Table 1 shows that the class of 1992 faces greater differentiations in terms of their postsecondary education tracks compared to their 1982 counterparts. The majority of postsecondary students from both cohorts attended an

open-door or a non-selective college or university. Coinciding with the expansion of community colleges during the 1980s and 1990s (Brint, S., and Karabel, J. 1989), the share of high school graduates attending open-door institutions grew from 29 to 35 percent between 1982 and 1992. On the other hand, the share of high school graduates attending selective and highly selective colleges more than doubled, from 6 percent in 1982 to over 14 percent in the 1992. Only 5 percent of the 1982 class of high school graduates attended a selective institution, and roughly 1 percent attended a highly selective college. Similarly, about 12 percent of the 1992 high school graduates attend selective institutions and approximately 2 percent enrolled in the most selective colleges. Interestingly, the percentage change in the number of available slots is higher for selective colleges than it is for highly selective colleges. This result stems partly from the fact that colleges become more selective as demands for slots increase. In addition, the absolute number of slots in selective postsecondary institutions has increased over time. These results suggest that the attention given to admission policies at highly selective institutions (see for example, Bowen, W., and Bok, D. 1998), while important for putting social issues on the public education agenda, ignores the vast majority of students who pursue some form of postsecondary education (98-99 percent).

Figures 1a and 1b consider whether college destinations are equally distributed across racial and ethnic groups by depicting the odds that blacks, Hispanics, and Asians will attend different types and selectivity level of colleges, in comparison to whites. These comparisons are based on survey logistic regression models. The distance of the marker from the horizontal line crossing at one represents the relative distance from whites' odds. Figure 1a, which compares the HS&B and NELS:88 graduates by type of

institution attended shows that racial and ethnic disparities in enrollment narrowed during the 1980s. Hispanic youth who graduated from high school in 1982 were twice as likely as whites not to pursue any type of postsecondary education, whereas their younger counterparts were only 1.4 times more likely to forego education after high school. In contrast, Asian high school graduates were only half as likely as whites to terminate formal education with a high school diploma—a figure that remains relatively unchanged over time. Racial disparities in 4-year college enrollment also narrowed during the 1980s. Hispanic and black high school graduates of 1982 are about 40 and 56 percent as likely as white graduates to attend a 4-year college and about 50 and 75 percent, as likely as whites to do so in 1992 respectively. This equalizing trend is also evident for the Asian/white gap. Asians are 1.8 times as likely as whites to attend a 4-year college in 1982 but only 1.3 times as likely to do so in 1992.

Figure 1a: Odds Ratio of Type of Institution, By Race (Survey Logistic Regression)

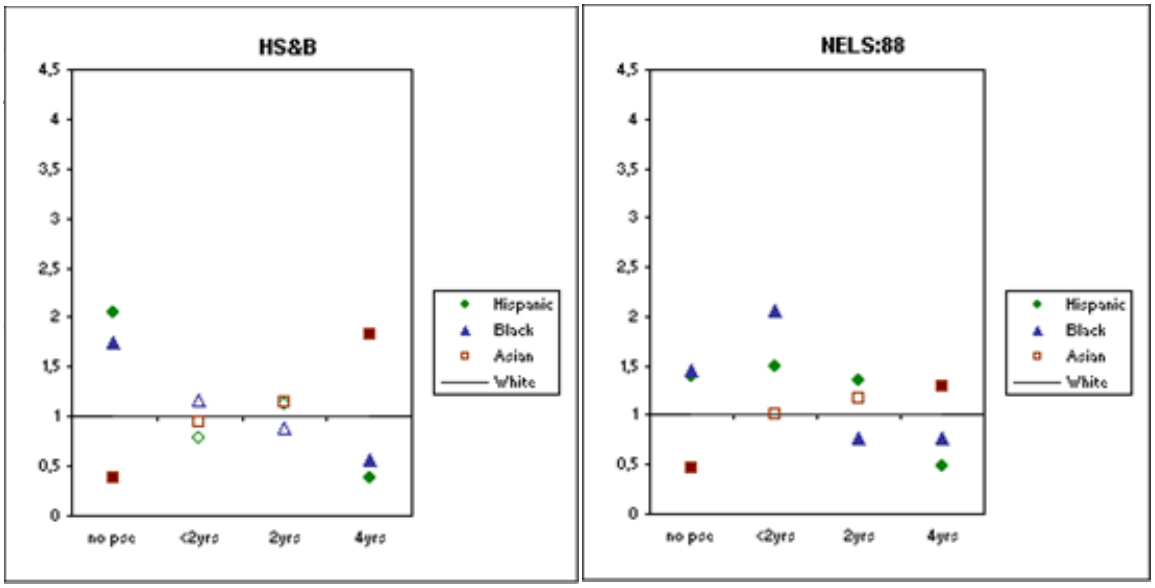
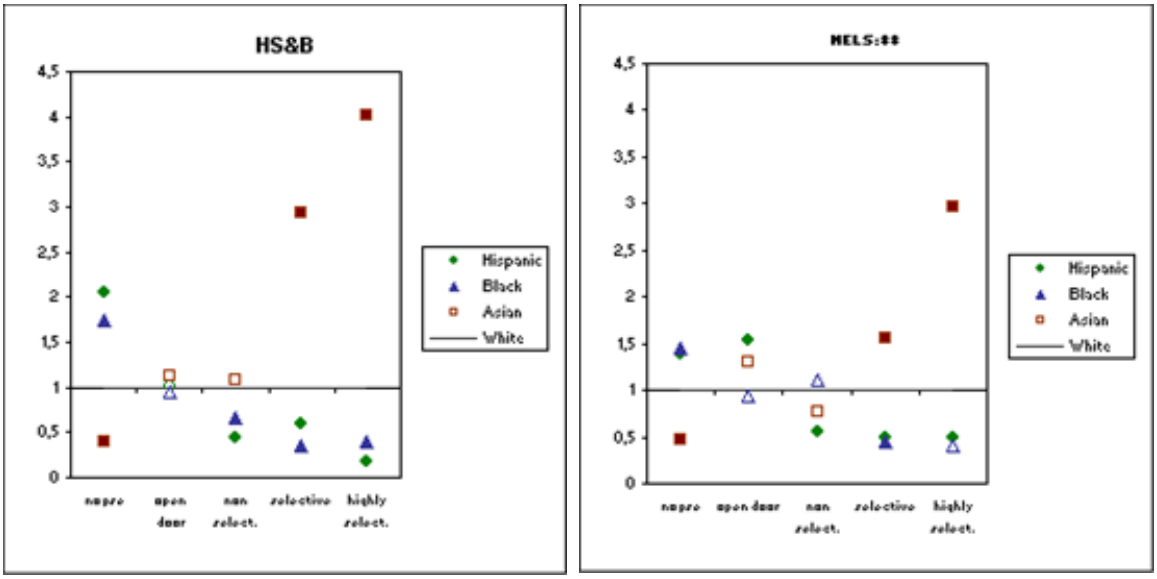


Figure 1b: Odds Ratio of Selectivity of Institution, By Race (Survey Logistic Regression)



Note: In all figures **full** markers are significant at p< .05 level

In contrast to the convergence in the poles of the higher education distribution—not attending any postsecondary institution and attending a 4-year college—race and ethnic disparities in postsecondary schools widen among those enrolled in 2-year and less than 2-year institutions. In 1992, blacks were twice as likely as whites to pursue postsecondary schooling in programs requiring less than 2-years, including vocational programs, whereas in 1982 they experienced a similar propensity compared to whites. The Hispanic/white odds ratio for high school graduates attending less than 2-year postsecondary institutions climbed from 0.8 in 1982 to 1.5 in 1992. Hispanic youth also experienced a higher propensity than whites to attend 2-year colleges in 1992 compared to the 1982.

Figure 1b compares the minority/white odds ratio for the selectivity of institutions attended. For the class of 1982, all racial/ethnic groups were equally likely to attend an

open-door institution. However, Hispanics and blacks were less likely than whites to attend more selective institutions, and their likelihood of college attendance declines as selectivity increases. In fact, Hispanics were only 18 percent as likely as whites to attend a highly selective higher education institution in 1982, while blacks were 40 percent as likely as whites to do so. Asian youth display the opposite behavior, as they were 3 and 4 times as likely as whites to attend selective and highly selective colleges, respectively. Hispanics from the class of 1992 were more likely than whites to attend open-door colleges, including community colleges. However, similar to their older counterparts, Hispanic and black 1992 high school graduates are less than half as likely as whites to attend selective and highly selective colleges (the black/white gap in highly selective colleges attendance does not reach statistical significance). Consistent with their 1982 enrollment pattern, Asians experienced higher odds than whites of attending selective and highly selective institutions a decade later, however the gap between them narrows. Asians in 1992 were 1.5 and 3 times as likely as whites to attend selective and highly selective colleges, respectively, compared to 2.9 and 4.0 in 1982.

These results clearly indicate that community colleges continue to attract a large share of minorities, especially Hispanic youth, thus shaping racial and ethnic tracking in higher education. Yet, despite the sizeable racial and ethnic gaps in postsecondary enrollment among the high school class of 1992 when compared to the class of 1982, there is room for optimism regarding Hispanics' college destinations. In comparison to whites, Hispanics' likelihood of attending highly selective institutions grew from 0.18 in 1982 to 0.48 in 1992. Blacks' likelihood remained stable at 0.40, and Asians' odds ratio declines from 4.0 to 3.0. These results suggest that two forces shape ethnic-racial

disparities in postsecondary attendance: an acute equalizing force in the upper level of the distribution (4-year and selective institutions) but also generally with regards to attendance rates, and a polarization force active in the middle of the selectivity distribution (less than 2-year, 2-year, and open-door institutions). Conceivably the key force that shapes the middle of the distribution, notably the growth of junior colleges, also impacts what we observe in the tails, especially with respect to the increase in enrollment rates.

While instructive about the possibility that college destinations are not equally distributed across racial and ethnic groups, these descriptive results are more suggestive than conclusive. The observed differences in college destinations could simply reflect group differences in social background or educational attainment rather than sheer racial/ethnic inequality. Because minority group membership is tightly coupled with social and economic characteristics that exacerbate educational disparities, the multivariate analysis is designed to single out the influence of family background in determining college destinations, net of prior scholastic achievements and high school characteristics.

Multivariate Analysis

To examine the impact of ascription, namely race/ethnicity and socioeconomic background on college destination, several multinomial logistic regressions are estimated. This analysis includes youth characteristics correlated with educational outcomes, arranged in three main categories: *family background*, including race and ethnicity,

family socioeconomic status measured in 12th grade, and family structure in base year;[8] *school characteristics*, including type of school (public vs. private and Catholic) in base year and the extent of racial segregation in 9th/ 8th grade;[9] and *school performance*, including SAT score and class rank—the two most important determinants of college admissions that are recorded in national surveys.

Table 2 reports descriptive statistics for all variables used in the multivariate models for each of the groups compared. Hispanics and blacks had considerably lower socioeconomic standing compared to Asians and whites, as they were more than twice as likely as whites to come from families in the lowest SES quartile. Most black youth did not live in intact families. Minority youth were more likely than whites to attend public high schools that are less effective than private and Catholic schools in promoting academic achievement and access to selective colleges (Persell, C. et al., 1992). Black and Hispanic high school students were also more likely to hail from schools with high concentrations of minorities, a characteristic highly related with achievement on standardized tests. Attending a black segregated school lowers reading and mathematics achievement, whereas attending a white segregated school has the opposite effect on students' performance (Roscigno, V. 1998). Hispanics and blacks were under-represented in the top 10 percent of their class, while Asians are considerably over-represented. Additionally, Hispanics and blacks consistently scored lower on the SAT than either white or Asian youth.

Because group membership is correlated with socioeconomic standing and educational achievements in high school, assessing the influence of ascribed attributes on

[8] 10th and 8th grades, for the HS&B and NELS:88, respectively.
[9] For the HS&B I use the percent of blacks and Hispanics in 9th grade. The NELS:88 makes available the percentages of minorities in 8th grade.

Table 2: Descriptive Statistics for Educational and Family Backgroud of High School Graduates, by Race, HS&B and NELS:88

	HS&B					NELS:88				
Variable	**Total**	**White**	**Black**	**Hispanic**	**Asian**	**Total**	**White**	**Black**	**Hispanic**	**Asian**
Family Background										
In Highest SES Quartile	26,1	30,1	8,7	12,2	30,7	31,4	35,3	15,8	14,8	38,5
In Lowest SES Quartile	23,8	17,8	48,2	48,0	16,0	18,1	12,6	35,1	43,8	17,7
Intact Family	71,2	75,4	45,3	69,6	74,5	70,2	73,4	45,3	68,7	82,3
School Characteristics										
Public school	89,9	88,6	96,4	91,9	91,2	85,4	84,8	90,5	86,8	79,4
Racial Segregation										
Above 50% are Hispanic (9th gr)	11,0	8,3	9,9	45,1	23,0					
Above 50% are Blacks (9th gr)	23,2	16,7	68,5	28,6	21,1					
Above 50% are minorities (8th gr)						16,9	5,0	59,7	62,1	29,1
High School Performance										
In Top Ten Percent of Class	11,6	12,7	6,1	5,5	22,1	11,2	11,6	6,4	9,7	18,8
SAT Combined	910,7	934,0	730,2	797,8	949,1	895,3	916,9	745,5	777,3	948,4
	(194,4)	(187,0)	(155,9)	(167,8)	(216,8)	(203,5)	(194,8)	(170,4)	(194,2)	(241,6)

College Destination										
Type of Institution										
No PSE	36,2	33,4	46,6	50,9	16,3	25,7	24,7	31,3	31,7	14,5
<2 yr/ other	7,7	7,6	8,8	6,1	7,3	3,3	2,9	5,1	3,8	3,1
2 year	22,6	22,7	20,6	25,0	25,2	26,6	25,9	22,8	34,6	29,5
4 year	33,5	36,3	24,1	18,0	51,2	44,5	46,5	40,8	29,9	53,0
Selectivity										
No PSE	36,2	33,4	46,6	50,9	16,3	24,5	23,7	29,6	29,7	13,6
Open Door/Not rated	29,1	29,2	28,2	29,4	31,9	35,1	33,7	33,5	45,3	39,6
Non-selective	28,8	30,9	22,9	16,3	32,7	26,9	27,9	30,0	17,6	22,9
Selective	4,7	5,1	1,8	3,1	13,7	11,6	12,7	6,1	6,6	18,4
Highly selective	1,2	1,3	0,5	0,3	5,4	1,9	1,9	0,8	0,9	5,5
Raw n of HS graduates	12538	8108	1907	2061	462	12927	8817	1360	1717	1033

college destinations requires a multivariate analysis that disaggregates the direct and indirect effects of each factor on college enrollment. The multivariate analysis allows for a more precise assessment of whether and how race and ethnicity and family background, net of school characteristics and prior educational achievement, influence young adults' college destinations. Specifically, the effects of ascribed attributes are evaluated based on the type and selectivity of college destination. Finally, the returns to socioeconomic status are tested for uniformity across groups and time.

Results

Type of College

Table 3 reports multinomial logistic regression models that predict the type of postsecondary institution attended by 1982 and 1992 high school graduates, respectively. Matriculants in 2-year institutions serve as the reference group. Independent variables are grouped into four categories: racial/ethnic status, family background, school characteristics, and prior scholastic performance.[10]

Results for the HS&B cohort indicate that Hispanic high school graduates are more likely to start their postsecondary education in a 2-year college, relative to less than 2-year institutions, than are non-Hispanic whites. Hispanics' odds of starting their higher education by attending less than 2-year institutions, relative to attending 2-year institutions, are 67 percent of those of comparable whites (net of background and school experience). - However, Hispanics and whites were equally likely to attend a 4-year enrollment in 2-year college, other things equal. In 1992, Hispanic high school graduates

[10] Flags for missing values are included in all models, but are not reported in results presented here. These flags capture any bias introduced by the non-random distribution of missing values, thus purging substantively important coefficients of potential bias.

college, but also equally likely not to attend a postsecondary program at all, relative to were more likely to attend 2-year institutions than to attend no postsecondary program at all, compared to whites. The point estimates for the NELS:88 cohort presented in table 3 indicate that Hispanic youth's odds of not attending any postsecondary schooling were only 65 percent of the odds for whites, relative to attending 2-year colleges. Yet again, Hispanic youth were as likely as their white counterparts to attend 4-year relative to 2-year schools.

In both years blacks were more likely than whites to attend 4-year colleges compared to 2-year programs, other things equal. In addition, Asian youth from both cohorts support descriptive data regarding their high propensity to acquire higher education. The odds of Asian youth not attending, relative to attending 2-year college, were about 40 percent of those for comparable white graduates. Asians were also more likely than whites to attend 4-year relative to 2-year colleges, although this effect reaches statistical significance only for the 1982 graduates. This result supports the descriptive tabulations that show a shrinking Asian advantage compared to whites in their enrollment rates in 4-year institutions during the 1980s.

For both cohorts socioeconomic status is a strong determinant of postsecondary institution type. High SES high school graduates were twice as likely to attend a 4-year relative to a 2-year college compared to youth from the middle SES quartiles, other factors (including prior scholastic achievement) equal. At the same time, youth from the upper SES quartile were only half as likely as middle SES youth to forego any

Table 3: Multinomial odds ratios of type of first institution enrolled, HS&B and NELS:88
2 yrs institution is the comparison group (Asymptotic standard errors)

	HS&B			NELS:88		
	no pse	**<2yrs**	**4yrs**	**No pse**	**<2yrs**	**4yrs**
Race						
Hispanic	0,884	0,666*	0,853	0,650**	0,738	0,857
	(0,110)	(0,123)	(0,110)	(0,089)	(0,145)	(0,113)
Black	0,925	1,043	1,627**	1,028	1,432	2,079**
	(0,108)	(0,177)	(0,196)	(0,151)	(0,377)	(0,279)
Asian	0,359**	0,856	1,594*	0,418**	0,819	1,178
	(0,074)	(0,243)	(0,312)	(0,082)	(0,346)	(0,184)
Family Background						
In Highest SES Quartile	0,573**	0,698**	2,022**	0,496**	0,774	1,882**
	(0,059)	(0,094)	(0,180)	(0,060)	(0,278)	(0,182)
In Lowest SES Quartile	1,705**	1,205	0,792*	1,662**	1,595**	0,857
	(0,151)	(0,153)	(0,084)	(0,167)	(0,297)	(0,096)
Intact Family	0,984	0,916	1,092	0,973	0,805	1,260**
	(0,078)	(0,109)	(0,091)	(0,088)	(0,159)	(0,110)
F(df, df)	35.12 (54,852)			27.92 (48,935)		
N	12 522			12 344		

** p< .01 level * p< .05 level

All equations control for school characteristics (type of school and racial segregation), and high school performance such as class rank and SAT scores.

Flags for missing values are included in all models.

Postsecondary education, relative to enrolling in a 2-year college. For both cohorts, the odds of low SES youth not attending any postsecondary program relative to enrolling in a 2-year college were about 70 percent higher than the odds of comparable youth of average SES. Low SES youth are also less likely than middle SES youth to attend a 4-year college, relative to attending a 2-year, although the point estimates for the 1992 cohort do not reach statistical significance. This may reflect the inadequacy of financial aids to correspond to college costs for needy students during the early 1980s and suggests that the efforts of universities to attract disadvantaged youth during the 1990s by increasing the availability of financial aid did paid off.

Socioeconomic gaps in attendance patterns are clearly evident at the other tail of college destinations, specifically regarding non-attendance and vocational and technical program attendance. The odds of low SES, 1992 high school graduates enrolling in postsecondary programs that last less than 2-years were 60 percent higher than their counterparts from the middle SES quartiles. On the whole, these results indicate a direct and lasting impact of social background in shaping postsecondary schooling attendance patterns. Comparison of the two cohorts suggests that social policies can weaken the association between SES and college destinations. Nonetheless, because these socioeconomic advantages and constraints may operate differently across groups and because preferential admissions policies have been targeted at historically under-represented groups, it is necessary to consider whether college "returns" to SES differ along racial and ethnic lines.

Racial and Ethnic Disparities in Type of College

In this section the returns to socioeconomic status are tested for uniformity across groups and over time.[11] In the interest of parsimony, the presentation is limited to the effect of SES on the likelihood of attending a 4-year college, relative to the likelihood of attending a 2-year college, because affirmative action policies largely affect enrollment in 4-year colleges. Figure 2 (panel A) presents the group-specific SES odds ratios of attending a 4-year college. These values depict racial and ethnic differences in the ability of 1982 high school graduates to translate parents' resources into college choices.[12] Asians, blacks, and whites generally succeed in mobilizing family resources toward attending a 4-year college, net of scholastic achievements, while Hispanics fail to do so. For 1982 Hispanic high school graduates, family background did not influence the type of institution they attend, as youth from all SES quartiles are equally likely to attend a 4-year college relative to a 2-year college, other things equal. This trend coincides with Hauser's (1993) finding regarding Hispanics' inability to translate social background into college enrollment.[13] Because family background is persistently cited as one of the major predictors of educational attainment, this aspect of Hispanic attributes has considerable consequences for their educational prospects.

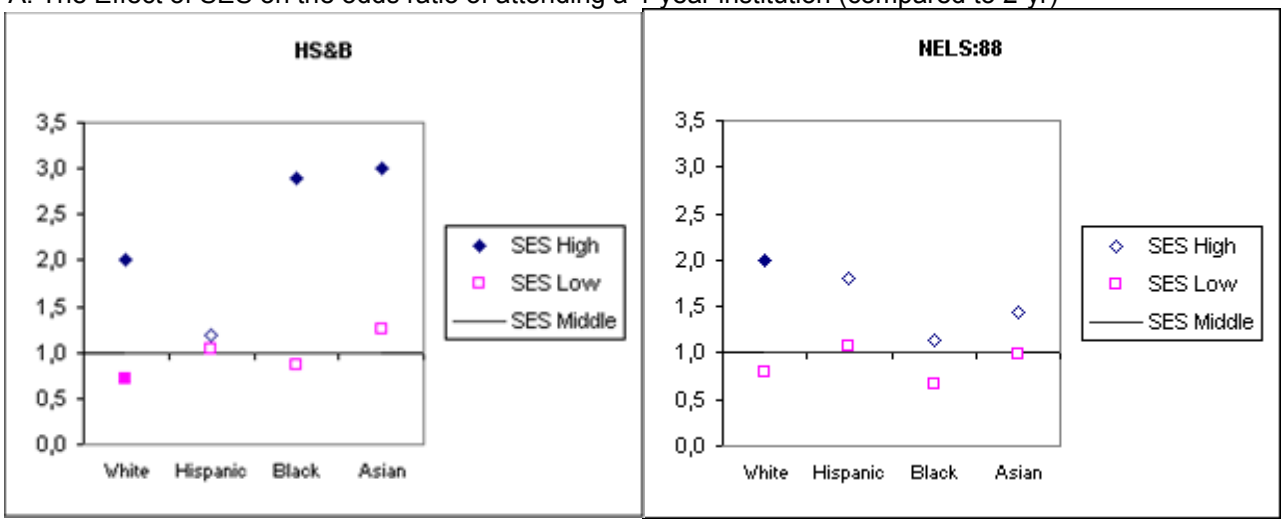
[11] A pooled model that includes interaction terms (socioeconomic-race/ethnicity specific) was also fitted to the data. Since this model produced similar results to those obtained from group-specific equations I prefer the latter approach to account for group differences in the effect of socioeconomic status. The pooled model is available from the author.

[12] A few technical notes regarding these graphs are warranted. Because the graphs depict multinomial logistic regression odds ratios for specific covariates, the distance of the estimate (the marker in the graph) from the line crossing at one represents the magnitude of the effect. For dummy covariates, the line crossing at one designates the comparison group. For example, for the SES covariates, the distance of the markers from the line crossing at one represents the odds of that SES quartile relative to the odds of the two middle quartiles; all markers above the line represent higher odds in comparison to the reference group, whereas all markers under the crossing line designate lower odds. In all graphs, full markers denote significant odds ratio. The full multinomial logistic models are available from the author.

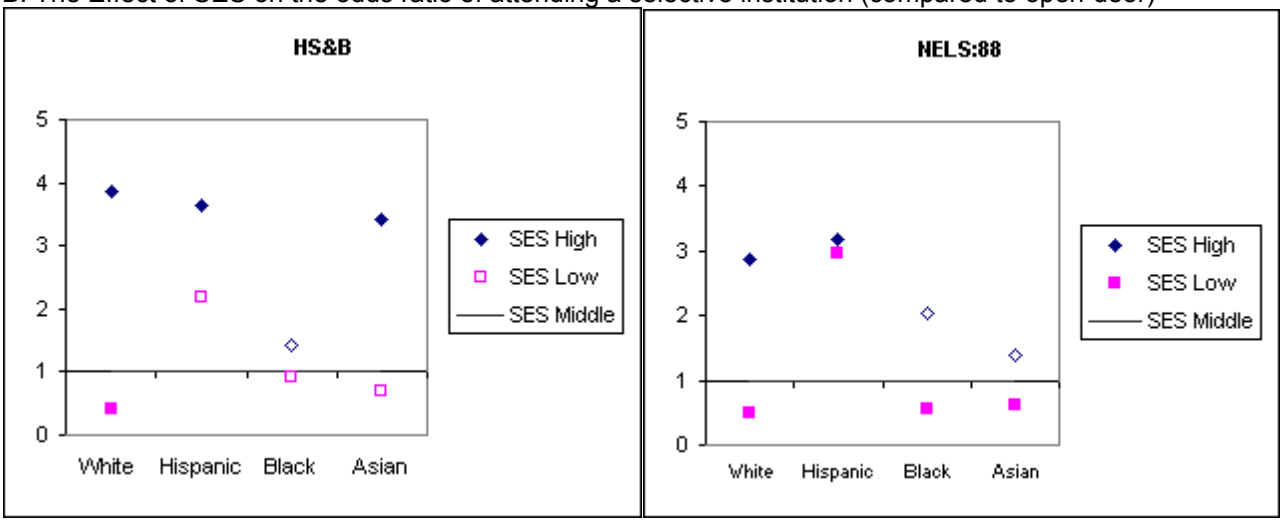
[13] It is notable that Hauser's specification does not control for academic performance.

Figure 2: Group-specific multinomial odds ratio of College Destination

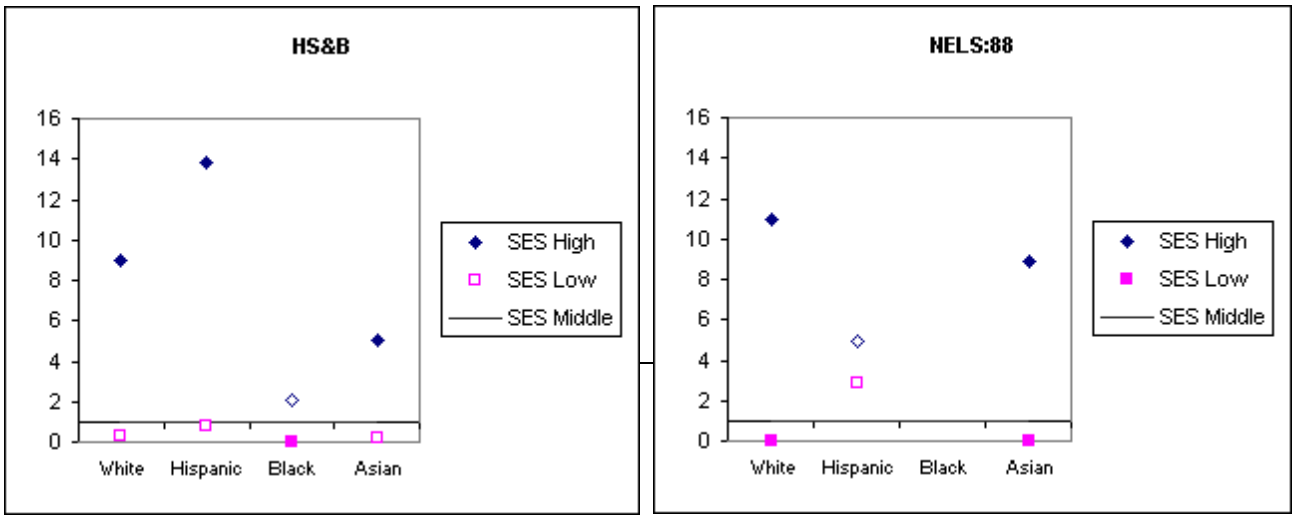
A: The Effect of SES on the odds ratio of attending a 4-year institution (compared to 2-yr)



B: The Effect of SES on the odds ratio of attending a selective institution (compared to open-door)



C: The Effect of SES on the odds ratio of attending a highly selective institution (compared to open-door)



Note: In all figures **full** markers are significant at p< .05 level.
Because the graphs depict Multinomial Logistic regression odds ratio for specific covariates, the distance of the estimate (the marker in the graph) from the line crossing at one represents the magnitude of the effect. For the dummy covariates, the line marker in the graph) from the line Crossing at one designates the comparison group. For example, for the SES covariates, the distance of the markers from the line Crossing at one represents the odds of that SES quartiles relative to the odds of the middle quartiles. All markers above the line represent higher odds in comparison to the reference group, where all markers under the crossing line designate lower odds. In all graphs, empty markers denote significant odds ratio. The full Multinomial logistic models are available form the author.

By 1992 socioeconomic disparities among minorities narrowed and proved relatively insignificant, save for whites. High SES whites were twice as likely as their middle SES counterparts to attend a 4-year rather than 2-year college. Whites from both cohorts are able to convert their socioeconomic advantage into tangible credentials, namely a bachelor's degree. However, since 4-year colleges vary in their selectivity, these general trends might conceal differences in how ascribed traits shape attendance patterns in highly selective, selective, non-selective, and open door institutions. Assessing the differential impact of race/ethnicity and SES on college destinations pertaining to the selectivity axis may enhance our command of the processes by which family background is converted to a bachelor's degree from a selective college.

[14] Moreover, Hispanic youth disadvantage background impedes their access to quality high school and also curtails their high school achievements.

Selectivity of College

Table 4 reports results for multinomial logistic regression models according to selectivity of postsecondary institution for the 1982 and 1992 high school graduates, respectively. Open-door institutions are the comparison group for this analysis. In 1982, Hispanic high school graduates were 1.7 times as likely as whites to start their postsecondary education at a selective college, relative to an open-door institution, net of and as background and achievements. This advantage diminishes over the decade and by 1992 Hispanic youth were no more likely than their white counterparts to enroll in a selective or highly selective, relative to an open-door, college. Additional analysis for the 1982 cohort, not presented here, reveals that when controlling only for family background and school characteristics, but not for scholastic performance, Hispanic high school graduates are less likely than whites to attend highly selective colleges likely to attend selective colleges, relative to open-door institutions. That Hispanic high school graduates' likelihood of enrolling in selective and highly selective institutions improved after controlling for scholastic achievements reflects their low scholastic achievement. Poor academic performance, in turn, lowers their access to the more selective college destinations and highlight the role of affirmative action policies in expanding educational opportunities for high performing Hispanics. Despite critiques about race-sensitive admission criteria, these findings imply that affirmative action does not open the door to selective postsecondary institutions for Hispanics whose scholastic achievements do not qualify them for admission to selective institutions.[14]

Black high school graduates from both cohorts were more likely than their white counterparts to enroll in non-selective, relative to open-door, colleges everything else

Table 4: Multinomial Odds Ratios of first institution's selectivity, HS&B and NELS:88
Open-Door institution is the comparison group (Asymptotic standard errors)

	HS&B				NELS:88			
	no pse	non selective	selective	highly selective	no pse	non selective	selective	highly selective
Race								
Hispanic	1,005	0,977	1,740 **	0,686	0,653 **	0,790	0,925	1,425
	(0,116)	(0,128)	(0,393)	(0,340)	(0,083)	(0,112)	(0,184)	(0,636)
Black	0,921	1,608 **	1,548	2,111	0,905	1,965 **	1,420	2,558
	(0,097)	(0,181)	(0,363)	(0,893)	(0,125)	(0,266)	(0,285)	(1,396)
Asian	0,372**	1,251	3,589 **	5,843 **	0,413 **	0,918	1,541 *	2,243 **
	(0,075)	(0,205)	(1,397)	(1,937)	(0,078)	(0,176)	(0,339)	(0,693)
Family Background								
In Highest SES Quartile	0,626**	1,881 **	3,685 **	7,523 **	0,485 **	1,522 **	2,689 **	9,173 **
	(0,062)	(0,162)	(0,564)	(2,221)	(0,057)	(0,135)	(0,326)	(3,130)
In Lowest SES Quartile	1,608**	0,765 **	0,669	0,170 *	1,586 **	0,789 *	0,800	1,645
	(0,128)	(0,077)	(0,141)	(0,137)	(0,145)	(0,083)	(0,178)	(1,084)
Intact Family	0,994	1,053	1,321	0,878	0,979	1,189 *	1,300 *	2,106 *
	(0,074)	(0,085)	(0,208)	(0,294)	(0,081)	(0,098)	(0,150)	(0,649)
F (df, df)	661.63(72, 834)				28.8 (64,919)			
N	12 523				12 877			

** p< .01 level * p< .05 level

All equations control for school characteristics (type of school and racial segregation), and high school performance such as class rank and SAT scores.

Flags for missing values are included in all models.

being equal. In part, this finding reflects the fact that about 90 percent of historically black colleges are classified as non-selective institutions.[15] The point estimates for Asians echo the descriptive results, demonstrating that their staggering institutional selectivity advantage narrowed during the decade. Asians from the class of 1982 were 6 times as likely as whites to attend institutions of the highest selectivity level relative to attending open-door colleges, whereas their 1992 counterparts were "only" twice as likely as whites to do so. Similarly, Asians' odds of attending selective, relative to open-door, colleges dropped from 3.6 in 1982 to 1.5 in 1992. Since Asian youth's scholastic achievements did not drop between 1982 and 1992—and there is no reason to assume a decline in their motivation or aspiration to enter selective colleges—these results suggest that institutional factors limited the access of Asian high school graduates to selective and highly selective colleges (see Karen, D. (1990) for description of the admission process in one highly selective college).

Socioeconomic status proved to be an important predictor of college selectivity attendance for both cohorts in the expected direction. High SES youth have increasing odds of attending colleges of increasing quality and also display greatly decreased odds of not enrolling in any form of postsecondary education. Specifically, after controlling for group membership, school characteristics, and prior scholastic achievements, 1982 and 1992 high school graduates from the highest SES quartile were 1.9 and 1.5 times as likely to attend nonselective, relative to open-door, programs compared to graduates from the

Middle SES quartiles, respectively. Moreover, the gap between high and middle SES youth expands with college selectivity. The odds of top tier SES graduates to attend

[15] This conjecture is supported by additional analysis of the institutional HS&B data, which are available from the NCES.

selective colleges reach 3.7 and 2.7 and their odds of attending highly selective colleges surge to 7.5 and 9.2 in 1982 and 1992, respectively. Correspondingly, youth from the lowest SES quartile were more likely to forego any postsecondary program, relative to enrolling in an open-door college, when compared to their middle SES counterparts.

Racial and Ethnic Disparities in College Selectivity

Figure 2 (panel B) displays the group-specific SES odds of attending a *selective* college in 1982 and 1992. In the 1982 chart, socioeconomic status is an important predicator of enrollment in a selective college, for all groups but blacks. Whites, Hispanics, and Asians from the highest SES quartile families were more than 3 times as likely to attend a selective college, relative to an open-door institution, compared to their counterparts from the middle SES quartiles. By 1992, affluent Asians lost their advantage, whereas high SES white and Hispanic youth from the same socioeconomic strata continued to show an advantage in converting their resources. Interestingly, the gap between lower and middle SES youth grew larger during this decade. In 1982 only low SES whites experienced disadvantage in their likelihood of enrolling in selective institutions. By 1992, black and Asian youth hailing from poor families experienced a similar disadvantage to less-than-affluent whites. During this time when low SES whites, blacks, and Asians faced difficulties securing placement in selective colleges, Hispanics within the same SES quartile were 3 times as likely as their middle SES counterparts to enroll in selective institutions. Ostensibly, this reflects a change in the distribution and

eligibility to financial aid that makes selective colleges more affordable to middle SES youth and also captures the consequences of affirmative action that specifically targeted Hispanics.

Figure 2 (panel C) displays the group-specific SES odds of attending a *highly selective* college in 1982 and 1992.[16] Overall, the group-specific patterns of admission to highly selective colleges more closely resemble the patterns depicted for selective colleges than those of admission to any 4-year college. These results reinforce the claim that the group-specific impact of social background depends on school selectivity. This result is also evident from the change of the scales of the three panels in figure 2. As the smallest scale (0 to 3.5) was sufficient to contain the point estimates produced for attending a 4-year college, the highest scale (0 to 16) was needed to accommodate the point estimates produced for the highly selective destination.

Corresponding to the SES patterns depicted in enrollment into selective institutions, socioeconomic status was an even more crucial determinant of enrollment in a highly selective college for 1982 high school graduates, particularly for white and Hispanic high school graduates, and to a lesser extent, Asians. Whites and Hispanics from the highest SES quartile families were 9 and 14 times, respectively, as likely to attend a highly selective college relative to an open-door institution compared to their counterparts from the middle SES quartiles. As hypothesized, 1992 affluent white and Asian graduates strengthened their enrollment advantage over their middle SES counterparts at highly selective colleges, compared to their 1982 equivalents. Specifically, white and Asian youth hailing from the highest SES quartile were 11 and 9

[16] The results for blacks in the NELS:88 data are not presented because the standard errors could not sustain the small cell sizes attending highly selective colleges.

times, respectively, as likely to attend a highly selective college relative to an open-door institution, compared to their middle SES counterparts. Hispanics on both ends of the SES spectrum were as likely as those hailing from the middle two quartiles to enroll in a highly selective institution, probably because of the greater availability of financial aid during that period. However, middle SES white and Asian students were more successful in differentiating themselves from their lower SES counterparts in 1992.

Discussion

This paper examines whether and how much socioeconomic status determines college destinations of otherwise comparable white, Hispanic, black, and Asian high school graduates and whether this association has changed during the 1980s, when race-sensitive policies were in widespread use following the controversial Bakke decision. The results underscore the merit of evaluating college destinations separately for ethno-racial groups because each has a unique pattern of college attendance that is shaped by historical advantages, cultural orientation, aspirations and motivations. These factors influence the group-specific ability to convert its socioeconomic resources into college credentials. Each group is also influenced differently by admission and financial aid policies, which I consider at length when discussing the policy implications of these results.

The empirical analysis depicts several patterns among group membership, socioeconomic resources, college destinations, and cohort. Socioeconomic status exerts a direct and persisting impact on enrollment and access to selective postsecondary schooling, despite generous financial aid policies that enable needy students to attend

college. Comparing the impact of SES on enrollment in any 4-year college to enrollment in highly selective colleges underlines how SES influences the likelihood of reaching either destination, but especially highly selective colleges. While the impact of high SES on 4-year college enrollment remained constant between 1982 and 1992, its influence on the likelihood of attending selective and highly selective colleges rose over time. This suggests that for the most part highly selective colleges do not compensate for prior social inequalities, despite their incorporation of race and class in admission policies. These results concur with the claim that the educational system reproduces a class system by transforming socioeconomic capital into human, social, and cultural capital (Bowles, S., and Gintis, H. 1976; Bourdieu, P., and Passeron, J.C. 1977). However, these trends conceal optimistic signs stemming from the increase in the ability of low SES students, particularly minority youth, to attend 4-year and highly selective institutions. This implies that efforts to increase college access on one hand and to increase college affordability on the other, do pay off.

That said, socioeconomic disparities do not entirely capture the minority group disadvantages, as racial and ethnic inequality exists even among affluent families. This finding implies that the asset conversion process in selective institutions is not uniform for all groups since minorities receive lower returns, in terms of attending 4-year or selective colleges, for high socioeconomic resources in comparison to whites. This phenomenon probably reflects affluent whites' know-how of the higher education system and a stronger orientation toward college, but also their historical advantage deriving from legacy status. While privileged white youth receive the highest returns to their socioeconomic resources compared to Hispanics and blacks, the reverse is the case for

low SES youth. Although the point estimates differ according to college destination, whites from the lowest SES families are less likely to enroll in college compared to equivalent minorities. For example, in 1982, only for whites does low SES impede their probability of enrolling in a 4-year or selective college compared to their middle SES equivalents. In 1992, all low SES youth, save for Hispanic, had lower probability of enrolling in selective institutions compared to their middle SES statistical and racial counterparts, but these odds are lowest for white youth.

Conclusion and Policy Implications

These results raise intriguing questions regarding the process that undergirds the differential access of racial and ethnic groups with varying socioeconomic resources to 4-year institutions, including selective and highly selective colleges and universities. The key policy issues revolve around guidelines that regulate access to higher education, namely the race-sensitive admission and financial aid policies. Although this paper does not directly scrutinize the impact of those policies, it nevertheless deals with their consequences. The results imply that the *combined* and *differential* impact of those two policy domains might account for the trends and patterns depicted by the results. It is also important to distinguish between youth who are the beneficiaries of one or both policies and youth whose transition to college is not governed by either type of policy.

The increase in financial aid during the 1980s that promoted college affordability both for needy students and for middle class youth (Baker, T., and Velez, W. 1996; Manski, C., and Wise, D. 1983) may account for the diminishing SES gaps in enrollment to 4-year and selective colleges over the decade. During the 1980s high SES blacks and

Asians lose their advantage in enrollment in 4-year college vis-à-vis whites partly because of the improvement in financial aid to middle SES youth. Affluent whites were not subjected to this consequence because they enjoy an historical advantage in college access or, as suggested before, they have additional resources not captured by the conventional SES measure, like wealth, that increases their access to selective colleges. Yet, low SES whites are disadvantaged relative to Hispanics and blacks because they are not targeted by race-sensitive policies.

In addition, the effectiveness of financial aid in fostering college affordability differs for alternative college destinations. Many low SES youth still cannot afford to attend an expensive college, even with financial aid. However, many private colleges offer discretionary aid to supplement federal aid. Yet, as Manski, C., and Wise, D. (1983) claim, colleges use discretionary aid offers to attract over-achievers students and not necessarily needy students. The results presented herein suggest that low income students still have unmet needs when deciding whether to attend an expensive selective or highly selective college because financial aid seldom compensates fully for their low resources. This fact explains why youth from low SES experience difficulty in enrolling in selective and highly selective colleges but less so in 4-yr institutions that are usually public and less expensive.

However, the story for Hispanics is different from all other groups because their likelihood of enrolling in highly selective institutions does not vary by SES. An intriguing question is why black and Hispanics youth do not share similar college destinations and similar returns to their socioeconomic resources if both are subject to similar race-sensitive and financial aid policies. One possible explanation is that selective

and highly selective colleges respond to the demographic change of the population. Therefore, since Hispanics have historically been underrepresented in higher education, schools may target them for admission and aid. Highly selective colleges operate in a zero-sum situation because the number of slots is relatively fixed; yet these institutions also show a stronger inclination to diversify their student body. The empirical results suggest that during the 1980s race-sensitive policies and financial aid were used to increase Hispanic enrollment, possibly at the expense of blacks and Asians. Second, Hispanic youth lack college legacies, socioeconomic resources, and traditionally "Hispanic" colleges that parallel to the traditionally black colleges. Therefore, these group-specific circumstances also account for the Hispanic-black enrollment difference. It is noteworthy that 16 percent of black college bound youth attended Historically Blacks Colleges and Universities in 1982 and in 1992, and that their shares divided uniformly for the SES quartiles.[17] However, it is unclear if HBCUs are the first choice of black students or only a last resort. If the former is true, it is conceivable that a significant share of academically qualified blacks do not apply to highly selective colleges in the first place. In that case, the Hispanic-black comparison of enrollment disparities may overstate the unequal access to highly selective institutions.

A full assessment of how financial aid and admission policies shape race and ethnic differences in college enrollment is beyond the scope of the current paper but it suggests testable hypotheses for future research. Understanding the joint and differential impact of both policies is a major legal and social issue in light of the recent shifts in admission policies during a period of a massive demographic change. The changing

[17] The figure for 1982 is obtained from the author's calculations of the HS&B data and was confirm with published data (NCES (1996b) report on Historically Black Colleges); the 1992 figure is obtained from the NCES report.

landscape of higher education, especially in tolerability toward race-sensitive admission criteria, requires solid understanding of the mechanisms that allow some groups to enroll in selective and highly selective institutions while channeling others into non-selective and open-door institutions. This matter is all the more important as the ethno-racial landscape of the college-age population becomes more diversified.

Since family background is an important force behind college tracking and the perpetuation of racial and ethnic educational inequality, my results suggest that initiatives that focus only on scholastic achievement, be it class rank or test scores, without considering financial aid, will gain limited success in promoting minorities' educational attainment.[18] This, of course, has implications for the success of new percent plans and the ability of public universities to maintain the diversity of their student bodies. Tienda, M. (2001), who compares the racial diversity at the University of Texas at Austin to Texas A&M after the implementation of the ten percent plan in Texas[19] suggests that the increased availability of financial aid is responsible for the effectiveness of those plans. In light of these results new initiatives at highly selective colleges designed to remove financial barriers for disadvantaged students, such as Princeton University's plan to replace all student loans with grants, must set an example for all selective institutions that wish to broaden their economic and racial diversity of students.

[18] Kane (1998) and Karabel (1998) argue that class-based affirmative action will not effectively replace race-sensitive programs in promoting diversity because most young people who will qualify are neither Hispanics nor blacks.

[19] In 1996 the Texas legislature passed House Bill 588, dubbed the Top 10% Law (or Plan), which guarantees that Texas high school graduates who rank in the Top 10 percent of their senior class be admitted to any state institution of higher learning. This eligibility applies to every public high school in the state with at least 10 seniors, and also to private institutions that implement formal ranking schemes.

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