Missing in Application: The Texas Top 10% Law and Campus Socioeconomic Diversity

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This paper uses administrative records from the University of Texas at Austin (UT) and Texas A&M University (TAMU) to examine whether the elimination of affirmative action and implementation of the automatic admission guarantee for students who graduated in the top 10% of their class altered the social class composition of applicant pools. Using a tripartite classification scheme that sorts public high schools into affluent, average and poor, we evaluate application rates to the two public flagships. Results show that graduates from affluent schools are significantly more likely to seek admission to one of the public flagships compared with their cohorts who graduated from high schools that served students of low to moderate socioeconomic status. Not only is socioeconomic composition of applicant pools remarkably resistant to change, but the admission guarantee did little to raise flagship application rates from poor high schools. Finally, we show that the admission guarantee had highly uneven impacts at the two public flagships. The increase in rank-eligible applicants to UT was largely driven by students from affluent high schools, and in particular, those who graduated in the top two percentiles of the class rank distribution. By contrast, TAMU witnessed a drop in application rates from top 10% graduates, particularly those who attended poor schools. The conclusion discusses the policy implications of the results, focusing on the need to target recruitment of talented students from resource poor high schools.

Paper presented at the 2008 meetings of the American Educational Research Association, March, New York City. This research was supported by grants from the Ford, Mellon and Hewlett Foundations and NSF (GRANT # SES-0350990). We gratefully acknowledge institutional support from Princeton University's Office of Population Research (NICHD Grant # R24 H0047879). We gratefully acknowledge comments from Sunny X. Niu.

March, 2008

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Introduction

In the wake of the judicial and statutory bans on the use of affirmative action during the mid to late 1990s, researchers directed their attention to the changing ethno-racial diversity of college campuses (Bowen and Bok, 1998; Alon and Tienda, 2005; Brown and Hirschman, 2006). But, even as college campuses became more diverse along race and ethnic lines, a trend clearly evident since the 1960s, socioeconomic diversity, particularly in the composition of college graduates, has not materialized (Douthat, 2005). Yet, with a few recent and notable exceptions (Kahelenberg, 2004; Bowen, Kurzweil and Tobin, 2005), comparatively few studies have examined the socioeconomic composition of college campuses. Similarly, preoccupation with admission and enrollment trends has given short shrift to a key determinant of who shows up on campus, namely, application trends. Even as the number of students seeking college admission surges to an historical high (Finder, 2008; WICHE, 2003), applicants from low income families remain underrepresented. Bowen and associates (2005) claim that even if students from low income families enjoyed the same admission advantages currently received by legacies or other "preference" groups who apply to selective, private institutions, their impact on the admission likelihood of other students would be a meager one percentage point mainly because low income students comprise a relatively tiny share of applicants. This trend is not confined to selective, private institutions, however; Gerald and Haycock (2006) find shrinking socioeconomic diversity at less costly public campuses as well.

In brief, research about equity and access to higher education largely has focused on *institutional admission* decisions and *individual enrollment* decisions; both outcomes,

however, depend crucially on who applies in the first place, which, with a few exceptions (Card and Krueger, 2005; Brown and Hirschman, 2006; Long and Tienda, 2007) has received much less research attention (Cabrera and LaNasa, 2001). Data quality partly explains the dearth of research about college application behavior.¹ That high schools are not scrutinized for low application rates, unlike admission or enrollment rates, may be another reason for the relative lack of interest in college application behavior. Yet, especially when incentives for college attendance are changed, as occurred in Texas following the implementation of the top 10% law, it is conceivable that larger numbers of high school seniors who might otherwise have deferred post-secondary alternatives will seek college admission. Whether the top 10% law actually altered college application behavior among low-income students is an empirical question that bears directly on the growing income polarization of college campuses with selective admissions.

Therefore, this paper evaluates changes in the socioeconomic composition of applicant pools to the University of Texas at Austin (UT) and Texas A&M University (TAMU), the two public flagships with the most selective admissions. The admission guarantee for top ranked students potentially influences the applicant pool by altering students' college choice sets and/or their propensity to seek admission in the first place (Long and Tienda, 2007). Three circumstances justify our focus on Texas's two public flagships. One is that the student body of the nation's top public universities is becoming wealthier even as the successive cohorts of high school graduates are becoming more diverse (Gerald and Haycock, 2006); another is that public institutions, unlike their

¹ Even though several national surveys contain information about college application, these data are fraught with errors. For discussion of application data in NELS and HS&B, see Alon and Tienda, 2005. Many studies use information about where students send SAT and ACT scores as a proxy for application behavior, but not all institutions require these exams.

private counterparts, have a social responsibility to serve all of their state's constituents. A third reason is that the top 10% law may have altered college application behavior among students from poor schools by removing the SAT filter for students qualified for automatic admission.

Before describing the data and research approach, we briefly review evidence about class variation of college-bound students and discuss the unique promise of the Texas top 10% law for broadening postsecondary opportunities for low income students. After elaborating procedures for stratifying high schools based on their economic status, we examine variation in ethno-racial composition and mean standardized test scores by high school strata. Finally we evaluate application rates to UT and TAMU by high school type and class rank to address whether the top 10% law, which eliminates the SAT filter, has increased the representation of students from poor high schools among applicant pools. The final section discusses policy implications.

Background and Policy Context

To date, most research about equity and access to higher education has focused on how admission criteria used by selective colleges and universities, particularly preferences accorded to minority, legacy, and development applicants, influences enrollment behavior, retention rates, academic performance, and graduation rates. Since the 1978 *Bakke* decision² outlawed the use of race and ethnic quotas in admission decisions, post secondary institutions have been subjected to heavy scrutiny both by opponents of affirmative action seeking to ensure compliance with the decision and researchers interested in documenting the consequences of the decision. Opposition to race and ethnic admission preferences re-escalated during the mid-1990s, when a spate of

² University of California Regents v. Bakke, 438 U.S. 265 (1978).

judicial bans and public referenda banned the use of race and ethnicity in college admissions, including the 1996 *Hopwood* decision in Texas.³

In response to *Hopwood*, the Texas legislature passed HB588, popularly known as the top 10% law, which guarantees admission to any Texas public college or university for all Texas high school seniors who graduate in the top 10% of their class. Although the top 10% law is generally framed as a race-neutral alternative to affirmative action, its chief sponsors actually envisioned its potential to broaden college access among socioeconomic, geographic as well as ethno-racial segments of the population. Architects of the top 10% law reasoned that "by establishing an admissions scheme that ... equalized the status of all Texas high schools— conferring the same benefits on top [10% graduates] from rural, suburban and urban high schools—the [law] had the potential to increase the number of students matriculating at state universities from these underrepresented regions and schools" (Holley and Spencer, 1999: 9).

According to Cabrera and La Nasa (2001), economically disadvantaged students face three hurdles to college attendance: achieving the credentials that qualify them for admission; actually graduating from high school; and applying for admission. By focusing on students who overcome the first two hurdles, namely high school graduates who qualify for automatic admission under the top 10% regime, our analyses build on a best-case scenario to evaluate social class variation in college application behavior. Cabrera and La Nasa emphasize that the application process itself can be overwhelming for low-income students, particularly first generation college students for whom costs and financial aid loom large in their decisionmaking. Using a nationally representative survey of high school graduates, they find that only 21 percent of high school seniors from the lowest SES quartile seek admission to a four-year

³ Hopwwod v Texas, 78 F.3d 932 (5th Cir. 1996), cert. denied, 518 U.S. 1033 (1996)

institution, compared with nearly three-fourths of seniors from the highest SES quartile (2001:138).

The most frequent argument against low income students hinges on their lower average performance on standardized tests (College Board, 1987-2003). Because students who attend poor, segregated schools average lower mean test scores than graduates from competitive, affluent high schools, by eliminating the ACT/SAT test score filter from the admissions process for students who graduate in the top 10% of their high school class, HB 588 qualifies a much broader socioeconomic spectrum of Texas high school graduates for admission to selective postsecondary institutions. For the top-10% law to increase the representation of low-income students at any institution, but particularly at the most selective campuses, requires that they apply in the first place.

Few studies have considered whether and how the applicant pool changes in response to incentives and evaluation criteria. Because data to track applicants is not readily available, some studies of changes in the racial/ethnic make-up of applicant pools use the list of colleges and universities to which students send their standardized test score reports as a proxy for application behavior, but test score data is a better proxy for relatively high-scoring applicants than for lower-scoring applicants (Card and Krueger, 2005; Long 2004). A study conducted at the University of Washington (Brown and Hirschman, 2006) used actual applicant records to examine changes in the racial/ethnic composition of the UW applicant pool before and after enactment of Initiative 200, a ballot measure that eliminated affirmative action in Washington State did not implement a percentage plan guaranteeing admission, Brown and Hirschman could not assess whether the applicant pool would have changed if a fixed percentage were eligible for automatic admission.

Using administrative data for applicants to seven Texas universities that differ in the selection of their admission criteria, Long and Tienda (2007) evaluated how the volume of applicants and their achievement attributes changed under the top 10% admission regime. Not surprisingly, they show that average SAT/ACT test scores of applicants to less selective institutions rose, as students with high test scores who did not qualify for the admission guarantee were turned away from the public flagships. Concomitantly, the average SAT/ACT scores of UT applicants stagnated because growing numbers of rank-eligible students from economically disadvantaged schools sought admission to the public flagships. Especially for institutions with high admission rates, applicant attributes decisively shape the composition of admission and enrollment pools (Brown and Hirschman, 2006; Long and Tienda, 2007). In the context of a policy that qualifies 10 percent of all high school graduates for automatic admission to the public college of their choice, identifying whether rank-eligible students actually seek admission is as important as tracking changes in applicant pools. Neither Brown and Hirschman (2006) nor Long and Tienda (2007) considered who is "missing in application," however. Accordingly, this study combines administrative data from the Texas Education Agency (TEA) and institutional data on college applicants to UT and TAMU to examine whether and how the social class composition of students seeking admission changed after affirmative action was judicially banned and the top-10% automatic admission law was implemented. We address three broad questions. First, did the law increase the relative number of applicants to UT and TAMU from economically disadvantaged high schools and if so, by how much? Second, did application rates from rank-eligible graduates from poor high schools increase after removal of the test score barrier? Finally, among students qualified for automatic admission, which are "missing in application?" In other words, how successful has the uniform admission regime been

in broadening access to the public flagships for graduates from high schools that serve large numbers of economically disadvantaged students?

Our approach focuses on a pivotal part of the education pipeline, namely the transition from high school to college, which is highly stratified by social class. As the second most populous state, Texas is characterized by a youthful age structure and a dismal high school graduation rate, estimated around 67 for the 2002-03 academic year (Swanson, 2006). As such, our focus on socioeconomic variation in college application behavior is a best case scenario because students must have graduated in order to qualify for the applicant pool. The following section describes the data, operational definitions and methods used to address the three research questions.

Data and Methods

We use publicly available data from the Texas Education Agency (TEA) to stratify regular Texas public high schools for the years 1993-2003 according to the socioeconomic status of the students they serve.⁴ For each public high school, TEA data indicate the total and group-specific number of graduates in each year, as well as mean school SAT scores and the percent of students at each high school that had ever been economically disadvantaged.⁵ College application data is obtained from administrative records for the two Texas public flagship institutions, UT-Austin (1994-2003) and Texas

⁴ We exclude special and alternative schools from consideration on grounds that their students may differ systematically in their college going behavior. We used publicly available data from the National Center for Education Statistics (NCES) is used to determine which high schools to exclude from the analysis.

⁵ The measure of students ever economically disadvantaged was provided in response to a specific request under the freedom of information act.

A&M University (1994-2002).⁶ For applicants to each institution, the administrative records include measures of class rank, senior class size, SAT score, and an identifier of the high school attended. Applicant class rank for UT-Austin and Texas A&M University is calculated using class rank and senior class size.⁷ For perspective, we selectively compare application data from two very selective private institutions located in Texas, Rice University (2002) and Southern Methodist University (2002).⁸

High School Socioeconomic Strata

Because administrative records lack direct information about the socioeconomic attributes of applicants, we proxy this measure using information about the percent of students ever economically disadvantaged at each high school.⁹ Specifically, for each year in the observation period we classify regular Texas high schools into three broad strata. High schools in the lowest quartile based on the percent of students that were ever economically disadvantaged are designated *affluent*; those in the highest quartile based on the percent of students were ever economically disadvantaged are designated *affluent*; those in the highest quartile based on the percent of students were ever economically disadvantaged are designated *affluent*; those in the highest quartile based and high schools in the middle quartiles are classified as *average*. Because the statewide share of economically disadvantaged students rose over time, we calculated the quartile cut-points for each year. It warrants emphasizing that high school socioeconomic

⁶ These data were collected by the Texas Higher Education Opportunity Project (THEOP). See <u>http://www.texastop10.princeton.edu</u> for further information.

⁷ For UT-Austin, 2.8% of applicants' records lack precise class rank measures, but instead include an indicator of class rank within ranges. We smoothed these applicants into appropriate class rank ranges and would like to thank Mark Long for generously sharing his STATA code to accomplish this (details are available from the authors).

⁸ Temporal coverage for these institutions is more restricted and because they were not bound by the top 10% law, class rank information is not systematically collected.

⁹ This measure of economic disadvantage, which is based on students who qualify for free and reduced lunches, includes those who fall below the official poverty line as well as the near poor. Many students qualified for subsidized lunch refuse to register in order to avoid stigma renders cross-section measures of lunch, therefore year-specific measures understate the number of economically needy students.

composition is a conservative proxy for social class because wealthier students from each stratum are more likely than their less well off counterparts to seek college admission.

Table 1 reports the time-varying cut-points that distinguish affluent schools from average schools and average schools from poor high schools. Affluent high schools have been getting more heterogeneous over the time period. In 1993, affluent high schools had between 0 and 17.4 percent of students who were ever economically disadvantaged. By 2003, affluent schools had been 0 and 23.8 percent of students who were ever economically disadvantaged. Poor high schools have become more homogeneous over time. In 1993, the percent of students ever economically disadvantaged from 41 to 100 percent for poor high schools, but this share rose over the period owing to the poorest and minority districts, which fomented rapid growth in economic segregation among Texas high schools (Swanson, 2006). By 2003, at least 53 percent of their student population had ever been economically disadvantaged.

Table 1.	Percent economically disadvantaged students, from TEA
	Cutpoints used to determine affluent/average/poor high
	schools

Year	Affluent	Poor
1993	17.4	41.3
1994	18.3	42.8
1995	19.1	43.5
1996	19.2	43.7
1997	19.8	45.9
1998	19.8	47.1
1999	20.8	47.0
2000	20.5	47.7
2001	20.4	49.0
2002	21.9	51.0
2003	23.8	53.1

In general, affluent high schools are larger than either poor or average high schools. Between 1993 and 2003 the mean number of graduates from affluent schools rose from 235 to over 300; by contrast, poor schools averaged 124 graduates in 1993 compared with 205 a decade later (see Figure 1). Average high schools are smaller still, with the mean graduating class size rising from a 112 to 166 over the observation period. Although the mean number of graduates trended upward for all three school types, the increase was particularly sharp for the affluent schools.





Growth in the number and size of Texas high schools implies higher demand for college slots, despite elevated drop-out rates. The number of Texas public high school graduates rose 56 percent between 1993 and 2003, from about 143 to 223 thousand, yet the relative shares from affluent, average and poor schools remained remarkably stable.

The share of all graduates from poor schools ticked up slightly—from 21 to 24 percent while the affluent share dropped three percentage points, from 40 to 36 percent of all graduates. Of course, not all high school graduates aspire to post-secondary education, which depends not only on the prevailing admission regime and the capacity of the postsecondary system to meet demand, but also on students' academic achievement and college readiness.





The association between social class and minority group status is clearly evident in Texas public high schools, which include some of the most segregated in the nation (Tienda and Niu, 2006). Rapid growth and diversification of Texas high schools has produced more black and Hispanic diploma recipients, despite disturbingly high drop out rates (Swanson, 2006). Between 1994 and 2004 the number of high school graduates in Texas grew by 50 percent and became much more diverse along ethnic and racial lines. Tienda and Sullivan (2008) report that Hispanics comprised roughly 29 percent of Texas high school graduates in 1994 compared to 35 percent by 2004. During this period, white students' cohort share of diploma recipients fell from 56 percent to 48 percent, while those of black and Asian graduates inched up by one percent point each.

Nonetheless, minority graduates are disproportionately educated in poor schools, while white students comprise the lion's share of graduates from affluent schools. Compared with poor public high schools, affluent high schools serve a relatively homogeneous population, with 78 to 82 percent of all graduates classified as white. Although the Hispanic share of affluent school students drifted upward after 1998, they represented only 12 percent of all graduates, which is twice the share of black graduates from these schools. Asians comprise a tiny share of Texas high school graduates roughly four percent—but most graduate from affluent high schools.





Hispanics are the largest group among graduates from poor high schools, where their share rose from 52 to 62 percent of graduates between 1993 and 2003. During this period, the share of white graduates dropped precipitously, from 35 to 20 percentage points, while black representation among high school graduates from poor schools rose 5 percentage points. In other words, among students who meet the first hurdle for college admission, namely, high school graduation, the shares of minority diploma recipients from poor high schools rose while their representation among graduates from affluent high schools either stagnated or increased modesty. This change in the ethno-racial composition of high school graduates has direct implications for college application behavior.

Social class is a powerful driver of access to college because the more affluent command resources to produce both academic and nonacademic accomplishments valued by selective institutions. Extracurricular activities, service trips and sports enhance the attractiveness of applicant files (Stevens, 2008), but the core of admissibility hinges on academic merit, which largely is assessed by high school grades and standardized test scores. Although media pundits frequently conflate performance on standardized test scores with academic ability (Sacks, 2007), most selective institutions consider both grades and test scores in calibrating applicants' academic merit. Since the early 1980s, however, grades have become less weighty in admissions decisions, despite ample empirical evidence that they are better predictors of college success (Alon and Tienda, 2007; Bowen and Bok, 1998). Consequently, the SAT and ACT have become a filter for college access, particularly for low income students whose parents lack the resources to support extra test preparation.

As Figure 4 shows, graduates from affluent Texas schools achieve SAT scores that are significantly higher than of students who attend poor or average high schools. The mean SAT score achieved by affluent school students ticked upward between 1996 and 2003, but the 35 point drop witnessed by graduates from poor schools widened the test score gap by socioeconomic status.¹⁰ In 1996, students from affluent schools enjoyed a 122 point SAT advantage over their counterparts from poor schools, but their lead rose to 169 points by 2003. By eliminating the SAT filter for students who graduate in the top decile of their high school class, the Texas top 10% law in principle broadens college access to students from poor schools. Whether the change in admission policy triggered a change in application behavior of students who graduated from poor high schools is an empirical question addressed in the next section.

College Application Rates

Computation of high school-specific application rates for particular institutions requires institutional data about the number of applicants from a specific high school in a particular year and the size of that school's graduation cohort in that year. Our institutional applicant files include high school identifiers for individual records, which we divide by TEA counts of the number of graduates from that school in the same year. We compute both average and rank-specific application rates for the University of Texas at Austin (UT) and Texas A&M University (TAMU).¹¹ Rank-specific rates distinguish between students eligible for the admission guarantee by virtue of having graduated in

¹⁰ We restrict the discussion of test score differences to 1996 through 2003 because the scores reported by TEA prior to 1996 were not recentered and thus are not comparable to those reported from 1996 to the present.

¹¹ We can not compute rank-specific application rates for Rice and SMU owing to the lack of comprehensive class rank data, but we are able to compute overall application rates by school socioeconomic strata.

Figure 4.



the top decile of their class and those not eligible for automatic admission. For these calculations we use one-tenth of the high school graduation cohort as the denominator for the top 10% applicants, and 90 percent of the year-specific graduation cohort for non-top 10% applicants.

Even before the top 10 percent law was passed, students who graduated in the top decile of their high school class faced high admission probabilities—in excess of 90 percent conditional on application (Tienda, Niu and Alon, 2008). Three striking findings stand out from Figure 5, which reports application rates at UT and TAMU by high school type and class rank. First, top ranked students are much more likely than their lower ranked counterparts to seek admission to the public flagships, as evident by the higher placement of the top three curves (top decile graduates) relative to the lower three curves (below top 10% graduates). Second, for both class rank strata, graduates from affluent schools seek admission to UT and TAMU at higher rates than their counterparts who attended schools that serve students of average or low socioeconomic means. Third, among students ranked at or below the second decile of their senior class, application rates to both flagships remain below 5 percent for graduates from average or poor high schools. In fact, graduates from affluent high schools ranked below the top decile apply for admission to one of the flagships at a rate almost double that of top decile graduates from poor high schools.

Differential application rates by high school socioeconomic composition are particularly large among top decile graduates, and especially at UT-Austin, where application rates of top decile graduates from affluent schools rose 8 percentage points between 1994 and 2003. UT top 10% applicants from poor high schools, which approached 20 percent in 1993, fell in the period leading to and following the *Hopwood* decision, but have since rebounded to an all-time high of 22 percent. This recovery, however, paled by comparison to the higher application rates from top decile affluent school graduates, which reached 44 percent in 2003. Thus, four years after the admission guarantee was in force, rank-eligible graduates from poor high schools were only half as likely as their affluent counterparts to apply to UT. High-ranked graduates from average public high schools posed relatively little competition for the affluent school students; despite a slight dip in 1997, UT application rates from high schools that serve students of average socioeconomic status hovered around 22 to 24 percent throughout the period—well below the rates of affluent students.

Despite some parallels between UT and TAMU in the application rates by high school strata, there are several noteworthy differences that warrant attention. First is the downward

Figure 5.





trend in TAMU application rates of graduates from average and poor schools, and particularly the latter, which is opposite the experience of UT. Specifically, the application rate of top decile

graduates from poor high schools fell almost eight percentage points while that at UT held steady. Yet, in 1994, TAMU had a slight edge over UT in applications from poor high schools. Second, the application rate of top decile graduates from affluent schools has remained relatively flat over the period, with a slight dip in the wake of the *Hopwood* decision. Finally, after the implementation of the admission guarantee, rank-eligible graduates from average schools also were less likely to seek admission to TAMU in 2002 compared with 1994. As a result of these trends, application rates of top ranked students to UT and TAMU have diverged over time, particularly for graduates from affluent schools.

The divergent experiences of UT and TAMU in attracting applicants eligible for automatic admission are puzzling because overall application rates were higher at TAMU prior to 1998, at which point they converged and subsequently reversed. And, while UT has become saturated with top decile applicants in recent years, this was less the case through 2002 because President Faulkner temporarily increased the size of the freshman class between 2000 and 2002 (Tienda and Sullivan, 2008). Figure 6, which further disaggregates application rates among top decile graduates from affluent, average and poor public high schools, provides insight into the diverging application rates between UT and TAMU after the top 10% law was enacted.

Claims that the admission guarantee triggered an increase in applications from graduates eligible for automatic admission find mixed support, particularly at TAMU. Institutional comparisons by high school strata are particularly revealing because application rates depend the on socioeconomic composition of the student body. The upper left figure shows that the surge in UT's application rate from affluent schools was driven by students who graduated at the very top of their class; applications from affluent school graduates ranked at or below the third percentile actually stagnated. No similar pattern obtains for TAMU; in fact, for all three segments of top

decile graduates, affluent school application rates were slightly lower for 2000-02 compared with 1994-96.

Figure 6.



Application Rates By High School Type and Class Rank Percent

Top-ranked graduates from affluent schools have many college options, both in and out of state, may partly explain the stagnant UT application rates for students ranked at or below the third percentile; however, this explanation is woefully inadequate for the falling application rates at TAMU. A shift in institutional preferences for rank-eligible graduates from affluent high schools may contribute to falling application rates at TAMU (Long and Tienda, 2007), but neither interpretation clarifies the falling TAMU application rates among top ranked graduates from poor high schools. At UT, the top 10% law seems to have stimulated higher application rates among the top half of rank-eligible graduates from poor schools, but students ranked at or below the 6th percentile were missing in application both before and after admission guarantee was in force. Most likely this reflects the availability of Longhorn scholarships for these students (Domina, 2007). Although TAMU offers Century scholarships to top ranked graduates from poor schools, application rates of every segment of the top decile graduates dropped after the admission guarantee was in force. Combined, the offsetting application trends by high school socioeconomic status imply less diversity and growing advantage for graduates from affluent schools.

In fact, and despite the admission guarantee in effect since 1998, the socioeconomic composition of the applicant pool to UT and TAMU has barely changed. In 1994, graduates from affluent high schools accounted for 64 percent of all applicants to UT; by 2003 this share fell only two percentage points, to 62 percent. During this period, the share of all applicants from poor schools rose two percentage points, from 10 to 12 percent, while the share from average schools remained unchanged (26 percent). An identical trend is evident for top 10% graduates: over half of top-ranked applicants attended affluent high schools in 1994 compared with 52

percent in 2003.¹² AT TAMU, the socioeconomic composition of the applicant pool was equally stable, except that top-ranked graduates from average high schools increased their representation as the share of poor school applicants fell.

The socioeconomic rigidity of the Texas flagship applicant pools is troubling because they mirror the applicant pools at Rice University, and to a lesser extent Southern Methodist University (SMU), the two most prestigious private institutions in Texas. Figure 7, which displays the composition of 2002 applicants according to the socioeconomic composition of high schools attended, reveals that Rice University's applicant pool was comparable to that of UT, with a slightly higher share of applicants from average high schools and slightly fewer from affluent schools.¹³ This similarity is all the more remarkable because 2002-03 tuition and board at Rice topped \$26,000, while that at UT was significantly lower, around \$16,300. SMU's applicant pool was dominated by applicants from affluent high schools, probably a reflection of its location in the Dallas metropolitan area, which draws students from nearby wealthy suburbs. SMU's tuition and board for the 2001-02 academic year topped \$28,000.

Although our classification of school strata renders conservative estimates of class variation in applicant pools, it is noteworthy that Rice receives a slightly lower share of applicants from affluent schools than either public flagship, and a much lower share compared with SMU. Moreover, even if applicants from poor schools are more likely to hail from the upper end of the income distribution, the observed similarities between Rice and both public flagships are striking—all the more because of the large differences in their tuition rates. How is it, then, that high sticker price at Rice attracts a slightly higher share of applicants from poor high schools

¹² These results are available from the authors.

¹³ These distributions are comparable because they are restricted to applicants from public high schools.

compared with lower-cost TAMU? An answer to this question may yield important insights for broadening the socioeconomic diversity of public college campuses.



Figure 7

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Discussion and Conclusions

This paper considers whether the change in Texas's college admission regime altered the social class composition of the applicant pool at UT and TAMU, which is a prerequisite for campus socioeconomic diversity. Because it guarantees admission to students who graduate in the top decile of their high school class, the Texas top 10% law has potential to diversify college campuses along both ethno-racial and socioeconomic lines. Architects of the admission guarantee sought to broaden college access first by eliminating the SAT filter, which has worked against talented poor and minority students, and applying a simple measure of merit, class rank, uniformly across high schools. In this way the law equalizes the status of high schools. Building on this insight, we compute application rates to the two Texas public flagships for high schools that differ in the socioeconomic composition of their graduates.

Even guaranteeing admission for top ranked students and even ignoring standardized test scores for rank-qualified students does little to alter the overall socioeconomic profile of the applicant pool. We show that graduates from affluent schools are significantly more likely to seek admission to one of the public flagships compared with their cohorts who graduated from high schools that served students of low to moderate socioeconomic status. Thus, changes in admission criteria designed to broaden college access for low income students, such as eliminating the SAT filter or guaranteeing admission to top performing students, will not alter the socioeconomic composition of college campuses *unless the applicant pool is changed* (Sacks, 2007; Stevens, 2008). Conditional on application, enrollment prospects of low income students are relatively high (Cabrera and La Nasa, 2001; Bowen, et al., 2001); the challenge,

then, is raising application rates. By focusing on the socioeconomic composition of applicant pools, our findings speak to this glaring omission in the burgeoning literature about college access.

Most studies about the dimensions of inequality at the post-secondary level focused on the admissibility and enrollment behavior of minority students, with particular emphasis on selective and highly selective institutions (Bowen and Bok, 1998; Alon and Tienda, 2005; 2007). In the wake of the 2003 *Grutter* decision, more researchers have addressed the growing socioeconomic disparities on college campuses, particularly, but not exclusively, at selective private institutions.

Recent announcements by several elite institutions that they will offer more generous financial aid packages to low income students stand as a public confession about the shrinking economic diversity at selective colleges and universities.¹⁴ Although a growing number of colleges and universities tout need-blind admissions, actual enrollment trends show that students whose families rank in the lower quartile of the income distribution are all but invisible at the most selective institutions. A widely cited study by Carnavale and Rose (2004) reports that nearly three-fourths of students enrolled at the nation's top 148 colleges come from families with incomes in the highest economic quartile, compared with just three percent from the lowest quartile (Kahlenberg, 2004; Bowen, et al, 2005). Because of their large endowments, the most elite private institutions fare somewhat better at recruiting low-income students; yet, from the mid-1970s to the mid-1990s, students from the lowest income quartile comprised a steady 10

¹⁴ Princeton originally announced its no-loan financial aid package in 2001. In 2004 Harvard announced its program to end billing for families earning under \$40,000, and Yale followed suit in 2005, with an income ceiling of \$45,000. All three universities have since updated these programs (See Lehecka and Delbanco, 2008). Brown publicized plans to expand financial aid and reduce student loan burdens to middle and lower income students in 2008.

percent of enrollees even as the share of students from the upper quartile rose from one-third to about one-half (Delbanco, 2007).

That the vast majority of postsecondary enrollment involves public institutions requires that these institutions bear a major responsibility to serve the educational needs of all state residents, not just the economically advantaged. Unless they can enroll more low income students with college aspirations, the public flagships will foment rather than narrow socioeconomic disparities on college campuses. Our focus on socioeconomic disparities in application rates have important policy implications because they summon intervention strategies designed to influence factors that predispose students to seek admission, which is essential to diversify enrollment cohorts. The college application process not only generates valuable information about postsecondary institutions, but also about sources of financial support, which is particularly important for students from resource poor schools.

According to Gerald and Haycock (2006), collectively the top 50 public flagships enrolled about 1.2 million undergraduate students in 2006, yet less than 25 percent of these students received Pell grants (compared with 35 percent a year prior). As aid packages were directed away from lower- to higher-income students, the representation of economically disadvantaged students fell at 40 of 50 public flagships between 1992 and 2004, including the University of Texas at Austin (Gerald and Haycock, 2006: p. 10 for UT data). On the verified premise that there are many more low income students who can succeed at selective, public institutions than are currently enrolled, these authors recommend (1) aggressive recruitment of talented students from low income schools; (2) guaranteeing financial aid to boost enrollment probabilities; and (3) shifting the composition of aid packages away from loans to need-based grants. This proposed change in financial aid has great potential to reverse trends toward ethnic

and class homogeneity of Texas public institutions, and is all the more important in light of demographic trends that show rapid growth in the number of students attending poor schools.

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