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**Winners and Losers:
Changes in Texas University Admissions post-*Hopwood***

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Abstract

This paper evaluates changes in the racial and ethnic composition of admissions at seven Texas universities following the judicial ban on affirmative action imposed by the 1996 *Hopwood* decision. We estimate the extent to which these universities practiced affirmative action before the judicial ban, and evaluate how admission officers at these universities changed the relative weights accorded to various applicant characteristics during the ban. After assessing whether changes in the relative weights favored minority applicants, and we simulate the degree to which these new policies succeeded in maintaining minority admission rates at their pre-*Hopwood* levels. We find that most of the universities complied with the *Hopwood* ruling such that direct advantages given to black and Hispanic applicants disappeared (and, in some cases, became disadvantages). While we find some evidence that universities changed the weights they placed on applicant characteristics aside from race and ethnicity in ways that aided underrepresented minority applicants, these changes in the admissions process were not able to maintain black and Hispanic applicants' share of admitted students. Thus, these alternative admissions systems have not served as an effective proxy for race and ethnicity.

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Winners and Losers: Changes in Texas University Admissions post-*Hopwood*

1. Introduction and Research Questions

In the July, 1996 *Hopwood*¹ decision, the Fifth Circuit Court of Appeals opined that the only legal justification for affirmative action is to rectify the present effects of past discrimination, concluding therefore, that the goal of achieving institutional diversity was not an acceptable rationale for considering race in admissions decisions. The Attorney General of Texas interpreted the *Hopwood* decision as a ban on race-based admissions, financial aid, and recruiting policies at public and private institutions in the state. This ban was in-force for the fall class of 1997, which registered appreciable declines in the representation of minority students at the state's public flagships.

Anticipating further declines in minority enrollment at public universities with selective admission policies, the Texas legislature passed H.B. 588, popularly known as the top 10% law, which guarantees admission to any public university in the state to high school seniors who graduate in the top-10 percent of their class. Passed in May, 1997, the uniform admission law was fully in force for the fall, 1998 admission cohort. The Texas top-10% law also specified 18 factors that universities should consider in admitting students who do not graduate in the top-10% of their high school class, including socioeconomic status, second language ability, and indications that the student overcame adversity.² Some have argued that under an affirmative

¹ *Hopwood v. Texas*, 78 F.3d 932(5th Cir.), cert. denied, 518 U.S. 1033 (1996).

² The characteristics listed in H.B. 588 included the following: "(1) the applicant's academic record; (2) the socioeconomic background of the applicant, including the percentage by which the applicant's family is above or below any recognized measure of poverty, the applicant's household income, and the applicant's parents' level of education; (3) whether the applicant would be the first generation of the applicant's family to attend or graduate from an institution of higher education; (4) whether the applicant has bilingual proficiency; (5) the financial status of the applicant's school district; (6) the performance level of the applicant's school as determined by the school accountability criteria used by the Texas Education Agency; (7) the applicant's responsibilities while attending school, including whether the applicant has been employed, whether the applicant has helped to raise children, or other similar factors; (8) the applicant's region of residence; (9) whether the applicant is a resident of a rural or urban area or a resident of a central city or suburban area in the state; (10) the applicant's performance on standardized tests; (11)

action ban colleges will have an incentive to employ admissions practices that partially ignore an applicant's "quality," thereby placing more emphasis on characteristics that are correlated with race/ethnicity (Chan and Eyster, 2003). Among the criteria explicitly named in H.B. 588 for college admission are several non-traditional factors that could be used as proxies for race/ethnicity in order to achieve institutional diversity.

Similar policy changes in college admissions have occurred in California, Florida, and Washington. Three years after the passage of the California Civil Rights Initiative (Proposition 209) in 1996, which prohibited the explicit use of race, ethnicity, national origin, and sex in university admissions, the University of California Regents approved a policy that guarantees admission to one of the UC campuses to the top-4 percent of graduates in each California high school.³ The University of California System issued additional guidelines for admission: for 25 to 50 percent of the freshmen admissions, decisions could consider "(a) academic accomplishments in light of the applicant's life experiences and special circumstances. These experiences and circumstances may include, but are not limited to, disabilities, low family income, first generation to attend college, need to work, disadvantaged social or educational environment, difficult personal and family situations or circumstances, refugee status, or veteran status" (Univ. of California 1996). Since 1999, the University of California has adopted a series of reforms that increase the consideration of non-academic criteria and expanded its comprehensive review in the admissions process to all students (Chan and Eyster 2003; Univ. of

the applicant's performance on standardized tests in comparison with that of other students from similar socioeconomic backgrounds; (12) whether the applicant attended any school while the school was under a court ordered desegregation plan; (13) the applicant's involvement in community activities; (14) the applicant's extracurricular activities; (15) the applicant's commitment to a particular field of study; (16) the applicant's personal interview; (17) the applicant's admission to a comparable accredited out of state institution; and (18) any other consideration the institution considers necessary to accomplish the institution's stated mission."

³ California's automatic admission guarantee *only* kicks in if the student was not ranked high enough on a statewide index (based on standardized test scores, grades and class rank, among other factors) to guarantee admission to the UC system.

California 2001a, 2001b). For example, in 2001, the class rank criterion was amended by the UC Regents to offer students who were not in the top-4 percent, but were in the top-12.5 percent of their high school class, admission to one of the UC-campuses if they successfully completed first- and second-year requirements at a community college.

Changes in admission criteria implemented in Florida and Washington also allow for the consideration of non-academic factors. Florida Governor Jeb Bush announced the "One Florida" policy in 1999, which simultaneously eliminated affirmative action in admissions and guaranteed admission to one of the state's public universities to the top-20 percent of graduates in each Florida high school. Subsequently the University of Florida added an essay requirement to their application and in the application solicited information about students' "...extracurricular activities, work history, whether they were raised by a single parent, etc." (Marin and Lee 2003, 33). According to James (James 2002: A1), the University of Florida also gives special consideration to "...students who are poor, attended a low-performing high school, or whose parents didn't attend college."

With a ballot initiative (I-200) similar to California's Proposition 209, in 1998 voters in the state of Washington prohibited the use of race and ethnicity in college admissions. Concerned about the potential drop in minority enrollment as experienced in Texas and California following the ban on affirmative action, admission officers at the University of Washington also modified their admissions policies and recruitment strategies. UW added essays and solicited additional information in their application materials that could be used to signal ethnic group membership (McCormick 2000).

Whether the change from an explicit consideration of race to use of proxy indicators of minority group status can effectively increase minority enrollment, and whether they are as

efficient as traditional affirmative action admissions policies poses an empirical question with clear policy implications. Using unique administrative data from several Texas universities, this paper will answer the following questions. First, to what extent was affirmative action practiced in the admissions policies of Texas universities before the *Hopwood* decision? Second, how did these universities change the weight they placed on various applicant characteristics and did compliance with the *Hopwood* decision reduce or eliminate the direct or indirect weight placed on an applicant's race/ethnicity? Finally, did these universities add weight to characteristics that are correlated with an applicant's race/ethnicity in ways that advantage underrepresented minority applicants? Assuming that the answer to the last question is "yes," we then conduct simulations that estimate the extent to which the policy responses were able to maintain minority students' share of admitted students.

2. Administrative Data

For this analysis, we use administrative records from several Texas universities that differ in the selectivity of their admissions, their public/private status, and the ethno-racial composition of their student body. Importantly, for most of the public institutions, the time span includes years before and after the judicial ban on affirmative action. This is important because the judicial ban applied to all institutions in the 5th Circuit District, but the top 10% policy was limited to public colleges and universities. Our institutional data are from:

- University of Texas at Austin (1990-03)
- Texas A&M University (1992-02)
- Texas Tech University (1991-03)
- University of Texas-Pan American (1995-02)
- University of Texas at San Antonio (1998-04)
- Rice University (2000-04)
- Southern Methodist University (1998-05)⁴

⁴ Admissions data from Texas A&M University at Kingsville (1996-02) and University of Texas at Arlington (1994-02) are also available. However, these universities accept nearly all applicants, and thus are not interesting cases for this analysis.

These administrative records, which contain a wealth of information about the applicant pool, have been transformed to machine readable format, standardized as appropriate, and verified for consistency. While specific data elements vary across the universities, the records for all of the universities include test scores (e.g., SAT/ACT), class rank percentile, and high school identifiers, which allow us to append high school characteristics from the U.S. Department of Education’s Common Core of Data. Of the four institutions for which we have records both before and after the admission policy changes, Barron’s Profiles of American Colleges (1996) classifies UT-Austin as Very Competitive, Texas A&M as Highly Competitive, Texas Tech as Competitive, and UT-Pan American as Noncompetitive. In the years for which we have admissions data, the average SAT/ACT score of admitted students ranged from 1,192 and 1,165 for UT-Austin and Texas A&M, respectively, to 1,071 for Texas Tech and 830 for UT-Pan American.⁵ The selectivity classification of the three institutions for which our data are limited to the post-affirmative action period span a similar selectivity range: Rice has an average SAT of 1,447 and is classified as Most Competitive; SMU qualifies as Very Competitive with an average SAT of 959; and UT-San Antonio, which registered an average SAT of 959 during this period, qualifies as Competitive. Unfortunately, the data generally do not include information about student’s high school coursework and the student’s admission essays. We take special note of these data limitations in interpreting the results.

3. Methods

Using a probit regression, the following equation is estimated for student i applying to college j in year t :

$$(1) \quad \Pr(\text{Admitted}_{ijt}=1) = \Phi(\beta_0 + \mathbf{U}_i\boldsymbol{\beta}_{jt} + \mathbf{X}_i\boldsymbol{\theta}_{jt} + \varepsilon_{ijt})$$

⁵ The College Board "re-centered" SAT scores upwards in 1996. These averages have not been corrected for this re-centering. This correction will be made in the next version of this paper.

where U is a vector of race and ethnicity indicator variables and X is a vector of other applicant characteristics including measures of high school quality.

Equation 1 is estimated separately for each college in each year. β_{jt} represents the added advantage (if any) given to racial and ethnic group applicants at college j in year t , controlling for other applicant characteristics. This method of identifying the degree of affirmative action in admissions has been used previously in several prior studies including Kane (1998a), Long (2004), and Espenshade, Chung, and Walling (2004). Because these studies were based on cohorts of applicants in years prior to the elimination of affirmative action, their results can only suggest how such a policy change would affect admissions decisions. Notably, prior studies could not simulate whether and how universities might shift the weights placed on other applicant attributes. Estimating Equation 1 across successive cohorts of institution-specific applicants enables us to evaluate these policy responses directly. Specifically, three hypotheses are tested:

- 1) $\beta_{jt} > 0$ for black, Hispanic, and Native American applicants in the years prior to the *Hopwood* decision (i.e., the colleges practiced affirmative action in their admissions decisions.)
- 2) In the years prior to the *Hopwood* decision, β_{jt} is larger for the more selective colleges.
- 3) $\beta_{jt} = 0$ in the years after the *Hopwood* decision (i.e., the colleges did not practice affirmative action in their admissions decisions).⁶

Second, we test whether the universities changed the weights placed on applicant characteristics in such a way as to favor underrepresented minority applicants. To conduct this

⁶ Note that lack of data on student's high school coursework and admissions essays could bias the estimates of β_{jt} if coursework and essay quality is correlated with the student's race/ethnicity. As such, we will take care in interpreting the coefficients. Additionally, separate sources of data such as the Texas Higher Education Opportunity Project longitudinal student survey data and the National Educational Longitudinal Study will be used to evaluate the extent of bias caused by these omissions.

test, we simulate the admissions decisions that would have occurred in the absence of the *Hopwood* decision and the top-10% policy. This counterfactual estimation begins with by estimating Equation 1 using all applicants from the years 1996 and earlier.⁷ We then apply the resulting parameter estimates to each applicant and estimate their admission probabilities. A simulated class of admitted students is constructed by assuming that the university would accept the students with the highest probabilities of being accepted.⁸ We assume that university j would accept Z_{jt} students in year t , where Z_{jt} is set equal to the actual number of students accepted by university j in year t .⁹ We then compare the composition of the simulated class to the students actually accepted to infer the net effect of the *Hopwood* decision, the top-10% policy, and any other changes to the university's admissions system.

Next, we estimate the "automatic effects" of the *Hopwood* decision and the top-10% policy by holding the pre-*Hopwood* admission weights constant, but setting the race-ethnicity coefficients to zero and admitting all in-state applicants who are in the top-10% of their high school class. By comparing the resulting composition of the admitted class from this alternative counterfactual to the students who were actually accepted, we can infer the net effects of the university shifting the weights placed on applicant characteristics. These simulations permit us to evaluate the effectiveness of the changing admission policies in restoring minority applicants' share of the admitted class that would have existed in the absence of *Hopwood* and the top-10% policy.

⁷ We add the year of application as a control variable to the specification in Equation 1.

⁸ This procedure assumes that the university scores applicants based on $\beta_0 + U_i\beta_i + X_i\theta_i$, and accepts the students with the highest scores.

⁹ This procedure implicitly assumes that the universities would opt to accept the same number of students under this counterfactual as they actually accepted. This assumption may not be correct if the yield rate (i.e., the share of admitted students who enroll) would be substantially altered by the change in the composition of admitted students.

4. Applicant Characteristics

Before turning to the results, this section discusses various details of the data and the definitions used for several applicant characteristics. In the admissions probit regressions, we use each piece of information that is available for at least 20% of the applicants to university j in year t .

Race and ethnicity variables are taken as labeled by the universities. Students with missing race/ethnicity are grouped with "white" students, which renders our estimates of policy effects conservative. The percentage of students with missing race/ethnicity is generally small—under 3 percent for most institutions—but approaches 15 percent for applicants to Southern Methodist University. Students of "Other" race/ethnicity are generally treated as a separate group.¹⁰

We construct variables for parent's highest education using reported levels of education for the applicant's mother and father. Parent's income at UT-Austin in 1997 is constructed using the applicant's mother's and father's incomes, reported in ranges of \$20,000. To construct this combined income, we assume that each parent's income is set at the mid-point of his or her range and then we sum these values.¹¹

We convert ACT test scores into their equivalent SAT test score values using a conversion table provided by the College Board (Dorans, 2002). This conversion is valid for SAT scores after the College Board "re-centered" scores upwards in 1996. For the years before 1996, we convert ACT scores into SAT-equivalent points by using a regression of SAT on ACT

¹⁰ There are no students listed as "Other" race/ethnicity at UT-Austin or UT-San Antonio; the 35 applicants (0.03%) classified as "Other" at Texas Tech are treated as "white" students.

¹¹ After 1997, UT-Austin reports the "father's" income -- although this appears to be the parent's combined income, and we have labeled it as such in the tables.

and ACT-squared for the students who took both tests. This conversion is forced to lie within the interval of 400 to 1600 points, which is the allowed range on the SAT test.¹²

District per pupil expenditure, which is obtained from the National Center for Education Statistics' Common Core of Data, is calculated as a ratio of "total current expenditures for elementary education" and "fall membership." The expenditures include instruction and support services, but do not include capital outlays (construction), payments to state and local governments, interest on debt, community services, and adult education. Expenditures are converted into 2005 dollars using the Consumer Price Index for all urban consumers. This measure is only available for students attending public high schools.¹³

"Feeder" high schools are defined as the top 20 high schools based on the absolute number of students admitted to UT-Austin and Texas A&M in the year 2000, which yields a combined pool of 28 campuses due to considerable overlap between the sets (Tienda and Niu, 2006). "LOS" high schools are defined as those high schools that were ever targeted by the University of Texas for the Longhorn Opportunity Scholarships for students who qualify for the admission guarantee. "These schools were included based on criteria that takes into account their students' historical under-representation, measured in terms of a significantly lower than average percentage of college entrance exams sent to The University by students from this particular school, and an average parental income of less than \$35,000" (UT-Austin, Office of Student Financial Services, 2005). "Century" high schools are the LOS counterparts at Texas

¹² The applicant files for Texas Tech only include one SAT or ACT score for each applicant (i.e., there is only one score available for students who took both tests). Thus, for Texas Tech, we use the regression results based on applicants to UT-Austin to convert ACT scores into their SAT equivalents.

¹³ These data are only available for the years 1994 through 2002. Earlier and later years (and missing data years) are imputed assuming a linear-time trend for each school district. Extreme values were set equal to missing. These extreme values were less than \$1,500 per pupil and greater than \$35,000 per pupil.

A&M, namely campuses ever targeted for Century Scholarships for applicants who graduate in the top decile of their senior class.

Students with missing values for their SAT/ACT score, high school grade point average, class rank percentile, or district per pupil expenditure are assigned the average value for that characteristic among all applicants to that college, and dummy variable flags indicating missing values are included for each of these characteristics. At Texas A&M, courses taken and participation in various extracurricular activities are taken from student transcripts. If the transcript is unavailable, each of these variables is set equal to zero, and a transcript missing indicator variable is added. Students lacking high school identifiers are assumed not to attend a feeder high school, a LOS or Century high school, or high school in the state of Texas. Missing data for advanced placement (AP) course participation or testing is set equal to zero.

5. Results

Table 1 shows the share of students who were admitted by year. Most of these institutions have had relatively stable levels of selectivity with the notable exceptions of SMU, whose share admitted fell from 91 percent in 1998 to 55 percent by 2005, owing to the rising number of applications. We first discuss results for the four universities that provided pre-*Hopwood* admissions data: UT-Austin, Texas A&M, Texas Tech, and UT-Pan American. As public institutions, all are directly affected by the top-10% policy, which remains in force until repealed by the state legislature. Subsequently, we discuss the admissions regression results for the three universities lacking pre-*Hopwood* data.

5.1 University of Texas at Austin

Tables 2a and 2b report the admissions probit regression results for UT-Austin. To facilitate interpretation, rather than show the parameter estimates for Equation 1, we present

marginal effects for each student attribute for a hypothetical applicant with mean characteristics. The first column of Table 2a presents estimates for all applicants between 1990 and 1996, before the *Hopwood* decision.¹⁴ During these years, the likelihood of admission for black and Hispanic applicants was 12.6 and 13.4 percentage points higher than comparable non-Hispanic white applicants. The admission advantage enjoyed by black and Hispanic applicants was consistently positive and significant for each application cohort before 1996, with only modest fluctuations. Under the affirmative action regime, the admission probability for Asian applicants was often identical to that of comparable white students, but occasionally lower, although the percentage point difference was generally small. Because American Indians comprise a tiny share of UT-Austin's applicants, the point estimate is consequently insignificant.

The bottom row of Table 2, which shows the P-value for the joint test of significance for group status, reveals that, jointly, race and ethnicity was a highly significant determinant of an applicant's likelihood of admission. These results are consistent with our expectation that UT-Austin practiced affirmative action for black and Hispanic applicants in the years prior to the *Hopwood* decision (THECB, 1998).¹⁵

To comply with the judicial ban imposed by the *Hopwood* decision, UT-Austin immediately eliminated the admission advantages given to black and Hispanic applicants. Between 1997 and 1999, the marginal effect on the likelihood of being admitted ranged from -1.6 to 3.1 percentage points for black applicants and from -0.3 to -2.6 percentage points for comparable Hispanics. During the next three years, the marginal admission effects for black and Hispanic applicants crept upwards to a range of 1.1 to 2.1 percent and were statistically

¹⁴ Note that the year indicates the fall of the student's freshman year.

¹⁵ The Texas Higher Education Coordinating Board (THECB) acknowledged that affirmative action was mainly used by the public flagships.

significant. It is *very* important to underscore that these results *do not* necessarily imply that UT-Austin was using the applicant's race or ethnicity in making their admissions decisions. Rather, UT-Austin may have changed the weights they placed on other applicant characteristics that are not available to us (e.g., essays or high school coursework), used the observed applicant characteristics in ways that favor black and Hispanic students¹⁶, or considered information not observable in the admission data, such as essay scores. Moreover, it is important to note that the apparent advantages given to minority applicants in the years 1990-96 were not maintained in the post-*Hopwood* years.

Finally, in the year 2003, the treatment of black and Hispanic youth strongly diverge, with black applicants receiving a significant positive boost of 9.6 percentage points and Hispanic applicants receiving an insignificant 1.3 percentage point reduction in their likelihood of admission. In the immediate aftermath of the *Grutter* decision, UT-Austin announced plans to re-introduce the use of race and ethnicity in their admissions decisions for the fall, 2004 applicants (UT Austin, 2003a; 2003b), but subsequently agreed to delay the change until fall, 2005 as required by law (UT Austin, 2003c).¹⁷

Although informative, the marginal effects can not answer whether UT-Austin admission officers change the weights accorded to observed applicant characteristics in ways that favored minority applicants. A few results are suggestive, however. First, the positive weight placed on an applicant's SAT/ACT test score declined post-*Hopwood*, which is partly by design because this exam is not considered for applicants granted automatic admission even though it is required

¹⁶ For example, UT-Austin's scoring of applicants may have included non-linear terms (such as the square of the SAT/ACT score) or interaction terms (such as class rank percentile * feeder high school). If these non-linear and interaction terms are correlated with race/ethnicity, it could explain the residual relationship between the applicant's race/ethnicity and their likelihood of admission shown in Table 2.

¹⁷ The Texas education code requires that an institution publish in its admission catalogue a description of the factors considered in admission a year prior to their implementation.

for an application to be complete. However, when we restrict the sample to students not in the top-10% of their high school class, we still find a declining marginal effect of SAT/ACT scores on the likelihood of admission.¹⁸ Second, the admission advantages enjoyed by applicants from high school with high per-pupil district spending disappeared in most of the post-*Hopwood* years. Black and Hispanic students comprise relatively small shares of the student bodies at these affluent schools (Tienda and Niu, 2006). Finally, attending a high school that was targeted for the Longhorn Opportunity Scholarships lowered applicants' likelihoods of admission in the years 1990-1996, but raised their likelihood of admission in several of the post-*Hopwood* years. This is because direct outreach to the high school administrators by UT officials increased awareness of the admission guarantee and increased the likelihood that rank eligible students applied (Niu, Sullivan and Tienda, 2006).

Because the weights assigned to several individual attributes appear to have changed, in order to estimate the combined net impact we turn to a simulation exercise, reported in Table 3. The first panel shows the shares of students who were admitted by sex and race-ethnicity (with American Indian and International shares not shown) along with the mean SAT/ACT of admitted students. The second-panel reports a counterfactual simulated by applying the parameter estimates shown in the first column of Table 2a to the applicants in each year. This simulation takes the applicant pool as a given,¹⁹ and estimates the composition of the class assuming that the pre-*Hopwood* admissions system had been maintained. The composition of the admitted class is simulated by computing the hypothetical probability of admission (as shown in Equation 1) and

¹⁸ Results available on request.

¹⁹ It is highly unlikely that the compositions of UT-Austin's applicant pools were not affected by the *Hopwood* decision and the Top-10% policy. In a separate paper, we are evaluating how these policy changes affected the applicant pools at the various universities.

"accepting" Z_t number of students with the highest probabilities of admission. Z_t is set equal to the number of students who were actually admitted by UT-Austin in year t .

Panel three of Table 3 shows the net effect of *Hopwood* and the top-10% policy, which is the difference between the students actually admitted and the counterfactual. The last row of this panel reveals that the net effect of changes in admission criteria was to shift the composition of UT-Austin's admitted students towards females, whites, and Asian-Americans, and away from blacks and Hispanics. For blacks and Hispanics, the net effect of these policy changes lowered their combined share of admitted students from 20.6% to 18.4%. Figure 1 graphs these net policy impacts. The point estimates indicate that the changed admission regime (as applied at UT-Austin) *lowered* the SAT/ACT score of admitted students by 14 points, on average. Although this reduction is statistically significant, it is relatively small. More importantly, this result might be surprising to those who expect the elimination of affirmative action at selective institutions to substantially *raise* the average ability level of admitted students.

To evaluate whether UT-Austin shifted the weights placed on various characteristics in a way that aid minority applicants, we compute an alternative counterfactual, shown in the fourth-panel of Table 3, which simulates what would have happened at UT-Austin if there were no attempts to re-weight applicant characteristics. This alternate counterfactual holds the 1990-96 admission weights constant, but sets the race-ethnicity coefficients to zero and admits all in-state, top-10% applicants, essentially simulating the combined effects of *Hopwood* and the top-10% policy.²⁰ The fifth panel of Table 3 reports deviations between the characteristics of the students actually accepted and a scenario where other applicant attributes were evaluated using pre-*Hopwood* weights. UT-Austin's response reduced white applicants' share of admitted students,

²⁰ Both regimes prohibited the explicit consideration of race and although UT Austin announced its plans to begin considering race after 2003, in fact, this policy change could not be implemented until 2005 (UT-Austin, 2003c).

and raised the shares of black, Hispanic, Asian-American, and female applicants among the admit pool. These responses also lowered the average SAT/ACT score of admitted applicants by 14 points – that is, the 14 point reduction that appeared to have resulted from *Hopwood* and the top-10% policy was entirely due to changes in the weights placed on other applicant characteristics by admission officers. Despite this re-weighting of applicant characteristics in a legally compliant manner, the university was unable to maintain the same share of black and Hispanic students they would have admitted under a regime that allowed explicit consideration of race.

5.2 *Texas A&M University*

Table 4 reports the admission regression results for Texas A&M, which gave similar boosts to black and Hispanic applicants as UT-Austin in the pre-*Hopwood* years. From 1992 to 1996, a black or Hispanic applicant's admission probability was about 14.5 percentage points higher than a comparable non-Hispanic white applicant at Texas A&M. There was substantial annual variation, however, during this period. Preference for black and Hispanic applicants jumped from 8-10 percentage points in 1992 to 16-18 percentage points in 1995. Preferences for underrepresented minority applicants dropped precipitously in 1996--1.2 percentage points for black and 3.0 percentage points for Hispanic applicants—suggesting that Texas A&M may have responded in advance to the anticipated *Hopwood* ruling.²¹ In the post-*Hopwood* years, black and Hispanic applicants were significantly *less* likely to be accepted than comparable white youth. The disadvantage for black applicants ranged from 2.0 to 12.4 percentage points, while the disadvantage for Hispanic applicants ranged from 0.8 to 9.3 percentage points.

²¹ The first decision in the case, by Judge Sparks of the Federal district court in Austin, Texas, was released on August 19, 1994 (Kain and O'Brien, 2004). See also Finnell (1998) [Need to confirm citations]

Asian American applicants' admission probability was indistinguishable from comparable white applicants between 1992 and 1995. Thereafter, from 1996 through 2002, Asian American applicants were significantly less likely to be accepted than otherwise comparable white applicants. The magnitude of this disadvantage ranged from 3.2 to 14.4 percentage points.

As occurred at UT-Austin, throughout the period race and ethnicity was highly influential in determining the likelihood that an applicant to Texas A&M would be admitted, although the winners and losers differed by period and demographic group. By law, the university could not consider these ascribed characteristics in the post-*Hopwood* years, therefore the apparent disadvantages experienced by black, Hispanic, and Asian applicants reflect either weight placed on other applicant characteristics that are not available to us, non-linear or interactive combinations of the observed characteristics that favor white applicants, or changes in the composition of the applicant pool.

Although these results clearly indicate that the university admission officers did not place weights on unobserved applicant characteristics in ways that favored black or Hispanic applicants, they may have changed the weights placed on observed applicant characteristics in a manner that boosted minority students' likelihood of admission. For example, when we restrict the sample to students not in the top-10% of their high school class,²² we observe lower weights for SAT/ACT scores and higher weights for attending a high school that was targeted for the Century Scholarships. The simulation results presented in Table 5 are instructive about the collective effects of these changes in Texas A&M admission regime.²³

²² Results available on request.

²³ Again, it is important to reiterate that this simulation takes the applicant pool as given. Changes in the applicant pool in response to these policies will be added to obtain the full effect of the policy changes.

Panel three of Table 5 reports the combined net effect of *Hopwood* and the top-10% policy on admission probabilities. The shift in admission regimes from affirmative action to the uniform admission for top decile graduates, along with the changes in criteria used by Texas A&M admission officers, raised white students share of admitted students by 3.3 percentage points and lowered black and Hispanics share of admitted students from 18.4 to 14.7%. Figure 2 plots these changes. As a result of these policy and admission system changes, the average SAT/ACT score of Texas A&M's admitted students fell by 19 points.

The last panel of Table 5 simulates how the changing weights placed on A&M applicant characteristics altered the admission pools. This counterfactual reveals that Texas A&M's response had only modest effects on the racial composition of their admitted class, raising black and Hispanic shares by 0.3 and 0.6 percentage points, respectively, and lowering white and Asian shares by 0.3 and 0.7 percentage points, respectively. The collective impact of changes in policy and weights assigned to applicant attributes led to a 23 point decline in the average SAT/ACT score of students admitted to Texas A&M . That is, the overall institutional decline of 19 points is entirely explained by their shifting weights placed on applicant characteristics.

5.3 *Texas Tech Univerity*

Texas Tech did not, apparently, mirror UT-Austin and Texas A&M in giving preferences to black and Hispanic applicants in the years before *Hopwood* (see THECB, 1998). In fact, as shown in Table 6, black applicants in the years 1991 through 1996 were slightly less likely (-2.2 percentage points) to be accepted than comparable white applicants. There was no difference in the admissions probability of Hispanic and comparable white applicants pre-*Hopwood*. Surprisingly, Asian American applicants had the lowest likelihood of admission during this period-- 9.2 percentage points below comparable white applicants.

In the first two years following *Hopwood*, race and ethnicity were jointly insignificant determinants of admission outcomes. But in 1998, not only did admission disadvantages for black applicants re-emerge at Texas Tech, but they were larger than pre-*Hopwood* levels, ranging from 6.9 to 11.9 percentage points through 2003. Hispanic applicants likewise witnessed an admission disadvantage beginning in 2000, which ranged from 3.3 to 5.8 percentage points through 2003. Asian applicants also were 3.3 to 6.7 percentage points less likely to be accepted at Texas Tech than comparable white applicants from 1998 to 2000, and their admission disadvantages reached statistical significance after 2001. Thus, there does not appear to be any evidence that Texas Tech admission officers used unobserved applicant characteristics in ways that boosted the admissions probabilities of black and Hispanic applicants during the post-*Hopwood* years.

There also is little evidence that Texas Tech changed the weights placed on applicant characteristics in a manner that favored minority applicants. Rather, the weights placed on SAT/ACT scores and district expenditures per pupil increased, suggesting that their admission criteria became preferentially selective toward applicants from wealthy districts who also average higher scores on standardized entrance exams. Both of these correlates work against minority applicants (Tienda and Niu, 2006). The third panel of Table 7, which presents the simulation results, shows that collective net effect of *Hopwood*, the top-10% policy, and changes in Texas Tech's admissions system raised the share of white and Asian students admitted by 0.5 and 0.3 percentage points, respectively, and lowered the combined share of black and Hispanic admitted students from 16.5 to 14.9%. Figure 3 plots these changing shares. Furthermore, and in contrast to the experiences of UT-Austin and Texas A&M, the shift in admission regimes

coupled with changes in the institution-specific admission system raised the average SAT/ACT score of students admitted to Texas Tech University by 9 points.

Results for the "alternative counterfactual," which holds the pre-*Hopwood* weights constant, assigns weights of zero to race and ethnicity, and accepts all students in the top-10% of their high school class, are reported in the fourth panel of Table 7. This procedure essentially eliminates the pre-*Hopwood* admission disadvantage experienced by black and Asian applicants to Texas Tech. Relative to the first counterfactual (that only holds pre-*Hopwood* weights constant), under this scenario, the share of admitted white students falls very slightly from 79.9% to 79.4%. Substantively this implies that in the absence of any shift that Texas Tech admission officers placed on non-racial characteristics, we should have expected a *decline* in white students' share of admitted students.

The last panel of Table 7 reveals that changes in the weights that Texas Tech officials assigned to applicant characteristics worked to the disadvantage of black, Hispanic, and Asian applicants, lowering their shares among the admitted class by 0.6, 1.0, and 0.1 percentage points. Post-*Hopwood*, Texas Tech's admission system raised white student's share of admitted students by a single percentage point, which more than explained their overall increase of 0.5 percentage points in the share of admitted students. Finally, the university's policy response also increased average SAT/ACT scores of admitted students by 8 points.

5.4 *University of Texas – Pan American*

Located in South Texas, near the U.S.-Mexico border, UT–Pan American is a relatively recent addition to the UT system. It differs from the two flagships and Texas Tech in two important respects, namely its noncompetitive admission policy and its disproportionate Hispanic student body. Nevertheless, UT–Pan American gave substantial advantages to minority

applicants in the years before the *Hopwood* decision. Hispanic and Asian applicants were, respectively, 7.8 and 6.2 percentage points more likely to be accepted than comparable white applicants before 1997. Likewise, black and Native American applicants were 2.7 and 4.5 percentage points more likely to be accepted, than similar white applicants in the years before the judicial ban on affirmative action, but these differences are statistically insignificant due to their small sample sizes at UT–Pan American. In the post-*Hopwood* years, however, admission advantages accorded minority applicants are either eliminated or significantly attenuated. For example, in 1999, Hispanic applicants were significantly less likely to be accepted than white applicants (-2.2 percentage points); their admission advantage in 2004 of +4.0 percentage points is roughly half that enjoyed before the ban on explicit consideration of race.

Given the disproportionate number of minority, and particularly Hispanic applicants, these results suggest that admission officers at UT–Pan American may have changed the weights placed on observed applicant characteristics in ways that favor minority applicants. For example, the weights placed on SAT/ACT scores and advanced placement (AP) classes fell post-*Hopwood*. However, the simulation results shown in Table 9 reveal that *Hopwood*, the top-10% policy, and UT–Pan American's changing admission system had very modest effects on the composition of admitted applicants. The third panel of Table 9 shows that these policy changes combined raised white students' share of admitted applicants by a modest 0.8 percentage points, and lowered the Hispanic share by a comparable amount (0.9 percentage points). Figure 4 plots these changes in shares.

The fifth panel of Table 9 shows that changes in the admission system used at UT–Pan American produced very modest changes on the student pool, effects, lowering white students' share of admitted applicants by 0.2 percentage points and raising Hispanic students' share by the

corresponding amount. Thus, the combined effects of *Hopwood* and the top-10% policy mildly favored white applicants, whose advantage was only partly offset by changes in UT–Pan American's admission system. Surprisingly, the average SAT/ACT score of admitted applicants fell by 13 points as a result of changes in UT–Pan American's admission system. Although roughly comparable to the drop at UT-Austin, this represents a larger relative change because of the lower institutional mean. As important, the drop was not accompanied by a large change in the ethno-racial composition of the admit pool.

5.5 *University of Texas at San Antonio*

That we lack pre-*Hopwood* admissions data for UT-San Antonio, Rice, and SMU precludes the possibility of evaluating their institutional responses to policy changes in admission regimes. Nonetheless, the post- *Hopwood* admissions systems of these three universities yield interesting insights about their current practices.

Table 10 presents the admissions probit regression results for UT-San Antonio. Apparently black and Hispanic applicants have been at an admission disadvantage relative to observably comparable white applicants in every year between 1998 and 2004, except for 2000. Their lower admission probability has ranged from 3.7 to 8.5 percentage points for black applicants, and 1.5 to 3.9 percentage points for Hispanic applicants. Asian applicants also were less likely to be accepted to UT-San Antonio than statistically comparable white applicants in 2003 and 2004, but there were no clear patterns for American Indian applicants. Jointly, race and ethnicity was a statistically significant factor in the admission decisions of applicants in every year except 2000.

These results do not necessarily indicate that admission officers at UT-San Antonio discriminate against minority applicants in rendering their decisions. Rather, they may be use

unobserved characteristics or the observed characteristics in a non-linear or interactive in a way that favors white applicants. Moreover, there is no evidence that UT-San Antonio is using unobserved characteristics to favor minority applicants. Comparisons with the results obtained for Texas Tech (which is slightly more selective) and UT-Pan American (which is slightly less selective), bolster this inference. At Texas Tech, the slight disadvantages observed for black applicants increased post-*Hopwood*, while at UT-Pan American, the advantages enjoyed by Hispanic applicants before the judicial ban on affirmative action disappeared in the post-*Hopwood* years. Thus, these three public institutions, which are *not* considered to be amongst the highly selective institutions where affirmative action is most relevant, have also witnessed declines in the minority share of admitted students. Moreover, changes in weights placed on applicant characteristics aside from race and ethnicity have not offset these effects at Texas Tech and UT-Pan American.

5.5 *Rice University*

We now turn to evaluate the post-*Hopwood* admissions decision of two highly selective private universities in Texas, Rice and SMU. Although the *Hopwood* decision was rendered on the basis of the admissions practices at the University of Texas Law School, Attorney General of Texas, Dan Morales interpreted the ban as applying to financial aid, and recruiting policies at both public *and private* institutions in the state.²⁴ In fact, the year following *Hopwood*, the proportion of black students admitted fell by half and the Hispanic share dropped almost one-third (Steinberg, 2002). Although Rice was bound by the judicial ban until the Supreme Court *Grutter* decision, it was not bound by the provisions of the top 10% law. These two conditions,

²⁴ Finnell (1998), Bucks (2003), Tienda and Nui (2004), Kain and O'Brien (2004).

along with the highly selective criteria used by Rice, lead us to expect different responses to the judicial ban on affirmative action.

Table 11, which presents the results of the admissions probit regressions for Rice, shows that Black and Hispanic applicants were significantly more likely to be accepted than observably comparable white applicants. These admission advantages, which ranged from 29.3 to 41.9 percentage points for black applicants, and 13.6 to 26.3 percentage points for Hispanic applicants, are comparable to those based on data from other similarly selective institutions (e.g., Bowen and Bok, 1998; Long 2004; 2006). American Indian applicants also received an admission advantage, but owing to small sample sizes, the magnitude of the boost is imprecise. Asian American applicants, on the other hand, were significantly less likely, on the order of 6.1 to 8.1 percentage points, to be accepted than observably comparable white applicants in every year for which we have data.

That such large advantages could have resulted from weights placed on unobserved characteristics or non-linear or interactive combinations of the observed applicant characteristics seems unlikely, particularly since the weights accorded to racial and other applicant characteristics remained unchanged after the 2003 *Grutter* decision overturned the *Hopwood* decision. Although it is conceivable that Rice did not respond to the *Hopwood* decision by eliminating the advantage given to minority applicants, defiance of the law could prove costly because the University would risk its federal funding, which in 1996 represented 15 percent of its budget (Steinberg, 2002). As a small institution with highly selective admissions, Rice has avoided formulaic approaches to evaluating student applications which were ruled unconstitutional by the *Gratz* decision, instead favoring a customized approach applicant-specific approached dubbed full-file review. But according to Steinberg (2002), admission officers

essentially replaced the language of affirmative action for highly correlated proxies, and placed considerable weight on essays, which disclose information about students immigrant background, ethnic heritage, social class. Full-file review allows officials to weight personal attributes deemed valuable additions to the make-up of the institutional mix while technically complying with the ban on affirmative action (see Steinberg, 2002).

5.5 *Southern Methodist University*

Southern Methodist University, a private institution which is comparably selective to UT-Austin and Texas A&M, provides an interesting comparison to Rice. Probit admission estimates results for SMU reported in Table 12 indicate that during the post-*Hopwood* / pre-*Grutter* years (1998-2002), black applicants were at an admission disadvantage relative to comparable white applicants. Their lower admission probability ranged from 2.0 to 9.3 percentage points. After the 2003 *Grutter* decision, which allowed narrowly tailored use of race in college admissions, the admission boost enjoyed by African Americans spiked to 10.8 to 13.9 percentage points above comparable white applicants . While speculative, it seems reasonable to assume that SMU responded to the *Grutter* ruling by re-activating affirmative action for black applicants. However, there is no evidence that SMU practiced affirmative action for Hispanic applicants pre- or post-*Grutter*, as the point estimates for Hispanics are generally insignificant and of mixed signs. Asian American applicants' likelihoods of admission were generally lower than comparable white applicants, and these disadvantages were statistically significant in 1998, 2001, and 2002.

6. **Conclusion**

The *Hopwood* decision and the top-10% policy had sizable effects on the racial and ethnic composition of public universities in Texas. We find evidence that several universities

(UT-Austin, Texas A&M, and UT-Pan American) offered significant advantages to black and Hispanic applicants prior to the *Hopwood* decision. These universities responded to changes in admission policies by shifting the weights they placed on applicant characteristics in ways that boosted the admissions probabilities of black and Hispanic applicants. However, these efforts were not able to undo the effects of the *Hopwood* decision. Public universities were unable (or did not sufficiently attempt) to proxy race and ethnicity using other applicant attributes, nor is it clear whether public universities that did not use full file review could have used proxies in ways that allowed them to maintain campus diversity achieved before the *Hopwood* decision. Simulations produced by Kane (1998b) suggest the folly of using proxies in this manner. In order to maintain the same admissions rates for black and Hispanic applicants, the new admissions rules imply that colleges in the top-quintile of the SAT/ACT distribution would have to include a *lower* chance of admission for students with higher SAT scores! Thus, our findings showing only modest shifts in the weights used by these colleges in their admissions systems are highly plausible.

Finally, we find divergent responses for the private universities we have studied, with Rice University apparently maintaining strong admissions advantages for black and Hispanic students through the use of proxies obtained through full file review, and Southern Methodist University appearing to reinstate affirmative action for black applicants in the post-*Grutter* years. These results suggest that institutional responses are likely to substantially vary.

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Table 1: Share of Applicants Admitted

Institution	Year of Application															Overall	
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004		2005
UT-Austin	70%	73%	69%	69%	72%	71%	66%	78%	66%	63%	75%	75%	76%	53%			69%
Texas A&M			76%	77%	74%	73%	73%	76%	87%	69%	59%	61%	59%				70%
Texas Tech		71%	71%	79%	79%	81%	80%	73%	75%	80%	79%	75%	75%	69%			76%
UT-Pan American						90%	88%	90%	87%	92%	92%	93%	92%				91%
UT-San Antonio									89%	87%	85%	81%	77%	79%	82%		82%
Rice											23%	23%	24%	24%	22%		23%
SMU									91%	88%	83%	76%	67%	62%	63%	55%	70%

Table 2a: UT-Austin -- Admission Probit Regression Results

Dependent Variable	Admission Entry Year									
	1990-96	1990	1991	1992	1993	1994	1995	1996		
Female	0.003	0.009	0.006	0.000	0.018	0.004	0.002	-0.007		
Black	0.129 ***	0.142 ***	0.079 ***	0.131 ***	0.159 ***	0.096 ***	0.111 ***	0.145 ***		
Hispanic	0.135 ***	0.150 ***	0.093 ***	0.143 ***	0.158 ***	0.103 ***	0.128 ***	0.149 ***		
Asian	-0.010 **	-0.019	0.004	0.017	0.005	-0.025 **	-0.015	-0.034 ***		
American Indian	-0.030	-0.034	0.023	-0.059	0.008	-0.021	-0.068	-0.039		
Ethnic=International	0.094 ***	0.117 ***	0.100 ***	0.099 ***	0.082 ***	0.023	0.068 ***	0.143 ***		
U.S. Citizen	0.088 ***	0.072 ***	0.079 ***	0.112 ***	0.125 ***	0.053 ***	0.124 ***	0.073 ***		
Parent's Highest Education = No HS										-0.045
Parent's Highest Education = Some HS										-0.096 **
Parent's Highest Education = HS										0.025
Parent's Highest Education = Some College										-0.006
Parent's Highest Education = Graduate School										-0.008
Parent's Education = Missing										-0.182 ***
Parent's Income is Less Than 20K										
Parent's Income is 20-40K										
Parent's Income is 60-80K										
Parent's Income is GT 80K										
Parent's Income is Missing										
Single Parent										
SAT/ACT (00s)	0.142 ***	0.120 ***	0.114 ***	0.153 ***	0.159 ***	0.130 ***	0.142 ***	0.193 ***		
SAT/ACT = Missing	-0.692 ***	-0.410 ***	-0.408 ***	-0.156 **	-0.805 ***	-0.832 ***	-0.755 ***	-0.748 ***		
Class Rank Percentile (0s)	0.095 ***	0.088 ***	0.077 ***	0.083 ***	0.097 ***	0.092 ***	0.094 ***	0.118 ***		
Class Rank PCT = Missing	-0.214 ***	-0.283 ***	-0.283 ***	-0.251 ***	-0.191 ***	-0.179 ***	-0.104 ***	-0.376 ***		
Top 10%	0.078 ***	0.095 ***	0.061 ***	0.118 ***	0.085 ***	0.023 **	0.049 ***	0.090 ***		
Took AP Test	0.163 ***	0.184 ***	0.135 ***	0.164 ***	0.172 ***	0.129 ***	0.144 ***	0.062 ***		
Passed AP Math Test										0.098 ***
Passed AP Science Test										0.052
Passed AP Foreign Language Test										0.069 *
Passed AP Social Science Test										0.019
Passed AP Other Test										0.031
District Per Pupil Expenditure (\$000s)	0.021 ***	0.020 ***	0.017 ***	0.018 ***	0.012 *	0.016 ***	0.022 ***	0.021 ***		
District Per Pupil Expenditure = Missing	-0.071 ***	-0.044 ***	-0.080 ***	-0.081 ***	-0.097 ***	-0.060 ***	-0.094 ***	0.009		
Feeder HS	0.002	0.018	0.024 ***	0.007	-0.026 **	0.012	-0.029 ***	0.002		
LOS HS	-0.050 ***	-0.027	-0.046 **	-0.065 **	-0.020	-0.044 *	-0.084 ***	-0.036		
Century HS	0.014	-0.003	0.006	0.024	0.019	0.026	0.012	0.017		
Instate HS	0.224 ***	0.233 ***	0.194 ***	0.306 ***	0.316 ***	0.202 ***	0.219 ***	0.097 ***		
Year of Application	-0.033 ***									
Number of Observations	103,543	14,887	14,230	14,106	14,648	14,217	14,831	16,624		
Psuedo-R ²	49.8%	44.3%	48.3%	52.3%	51.8%	53.5%	54.5%	59.1%		
Joint Significance of Race-Ethnicity Variables	0.0% ***	0.0% ***	0.0% ***	0.0% ***	0.0% ***	0.0% ***	0.0% ***	0.0% ***		

***, "**", and "*" indicate two-tailed significance at the 1%, 5%, and 10% levels.

Table displays the marginal effect of each dependent variable for an applicant with mean characteristics. Standard errors (which are omitted here for space concerns) are available upon request.

Table 2b: UT-Austin -- Admission Probit Regression Results

Dependent Variable	Admission Entry Year													
	1997	1998	1999	2000	2001	2002	2003							
Female	0.025	***	0.043	***	0.038	***	0.013	***	0.012	***	0.017	***	0.026	***
Black	-0.016		0.031		0.015		0.014	**	0.011	*	0.021	***	0.096	***
Hispanic	-0.003		-0.009		-0.026	*	0.011	**	0.011	**	0.015	***	-0.013	
Asian	0.002		-0.012		0.001		0.024	***	0.014	***	0.021	***	0.009	
American Indian	-0.040		-0.060		-0.074		0.013		-0.019		-0.003		-0.126	
Ethnic=International	-0.029		-0.003		-0.049		-0.068	***	-0.215	***	-0.203	***	-0.211	***
U.S. Citizen	0.058	***	0.149	***	0.087	***	0.013		0.006		0.012		0.027	
Parent's Highest Education = No HS	0.018		0.037		0.007		0.009		0.025	*	0.023	*	0.062	
Parent's Highest Education = Some HS	-0.006		-0.082	*	0.012		0.025	*	-0.013		0.000		0.038	
Parent's Highest Education = HS	-0.029	**	-0.021		0.013		0.011		0.007		-0.006		0.031	
Parent's Highest Education = Some College	-0.012		0.005		-0.014		0.002		0.005		-0.002		0.005	
Parent's Highest Education = Graduate School	0.014	**	0.002		-0.012		0.003		0.002		0.002		0.014	
Parent's Education = Missing	-0.025		-0.086	***	-0.047	*	-0.028	**	-0.034	**	0.001		0.049	
Parent's Income is Less Than 20K	0.012		-0.007		0.005		-0.002		-0.001		0.000		0.018	
Parent's Income is 20-40K	0.000		-0.012		-0.013		-0.008		-0.002		0.003		0.024	
Parent's Income is 60-80K	-0.015		0.006		-0.002		-0.002		-0.003		0.002		-0.020	
Parent's Income is GT 80K	0.013	*	0.003		0.021		0.006		-0.002		-0.005		0.010	
Parent's Income is Missing	0.014	*	0.091	***	0.039	**	0.010		0.002		0.002		0.010	
Single Parent			-0.028	**	-0.015		0.013	***						
SAT/ACT (00s)	0.063	***	0.118	***	0.111	***	0.043	***	0.037	***	0.037	***	0.108	***
SAT/ACT = Missing	-0.809	***	-0.828	***	-0.753	***	-0.442	***	-0.432	***	-0.579	***	-0.383	***
Class Rank Percentile (0s)	0.083	***	0.190	***	0.140	***	0.018	***	0.018	***	0.025	***	0.114	***
Class Rank PCT = Missing	-0.208	***	-0.438	***	-0.336	***	-0.011	*	-0.011	**	-0.030	***	-0.007	
Top 10%	-0.072	***	0.005		0.050	***	0.179	***	0.150	***	0.149	***	0.620	***
Took AP Test	0.087	***	0.197	***	0.296	***	0.119	***	0.116	***	0.071	***	0.280	***
Passed AP Math Test	-0.022		0.071	**	0.048		-0.023		0.032	*	0.051	***	0.226	***
Passed AP Science Test	0.024		0.069		0.099	*	0.018		-0.022		0.009		0.113	***
Passed AP Foreign Language Test	0.017		0.078	**	-0.002		-0.015		-0.002		0.042	***	0.100	***
Passed AP Social Science Test	-0.007		-0.002		-0.026		-0.024		-0.032		0.017		0.058	**
Passed AP Other Test	0.026		0.019		0.028		-0.005		0.006		0.015		0.004	
District Per Pupil Expenditure (\$000s)	0.018	***	0.003		-0.001		-0.001		0.000		-0.002		0.009	**
District Per Pupil Expenditure = Missing	-0.037	***	0.103	***	0.129	***	0.007		-0.007		-0.003		0.051	***
Feeder HS	0.002		0.049	***	0.051	***	0.005		-0.003		0.007	*	0.018	
LOS HS	-0.050	**	0.075	**	0.042		-0.008		0.007		0.014		0.128	***
Century HS	0.025		-0.036		-0.001		0.010		-0.012		0.001		0.037	
Instate HS	0.036	***	0.109	***	0.252	***	0.056	***	0.002		0.029	***	0.003	
Number of Observations	14,571		16,100		17,363		17,425		16,727		18,662		20,502	
Psuedo-R ²	54.0%		53.0%		47.5%		43.8%		49.9%		46.1%		60.2%	
Joint Significance of Race-Ethnicity Variables	47.0%		32.3%		20.1%		0.0%	***	0.2%	***	0.0%	***	0.0%	***

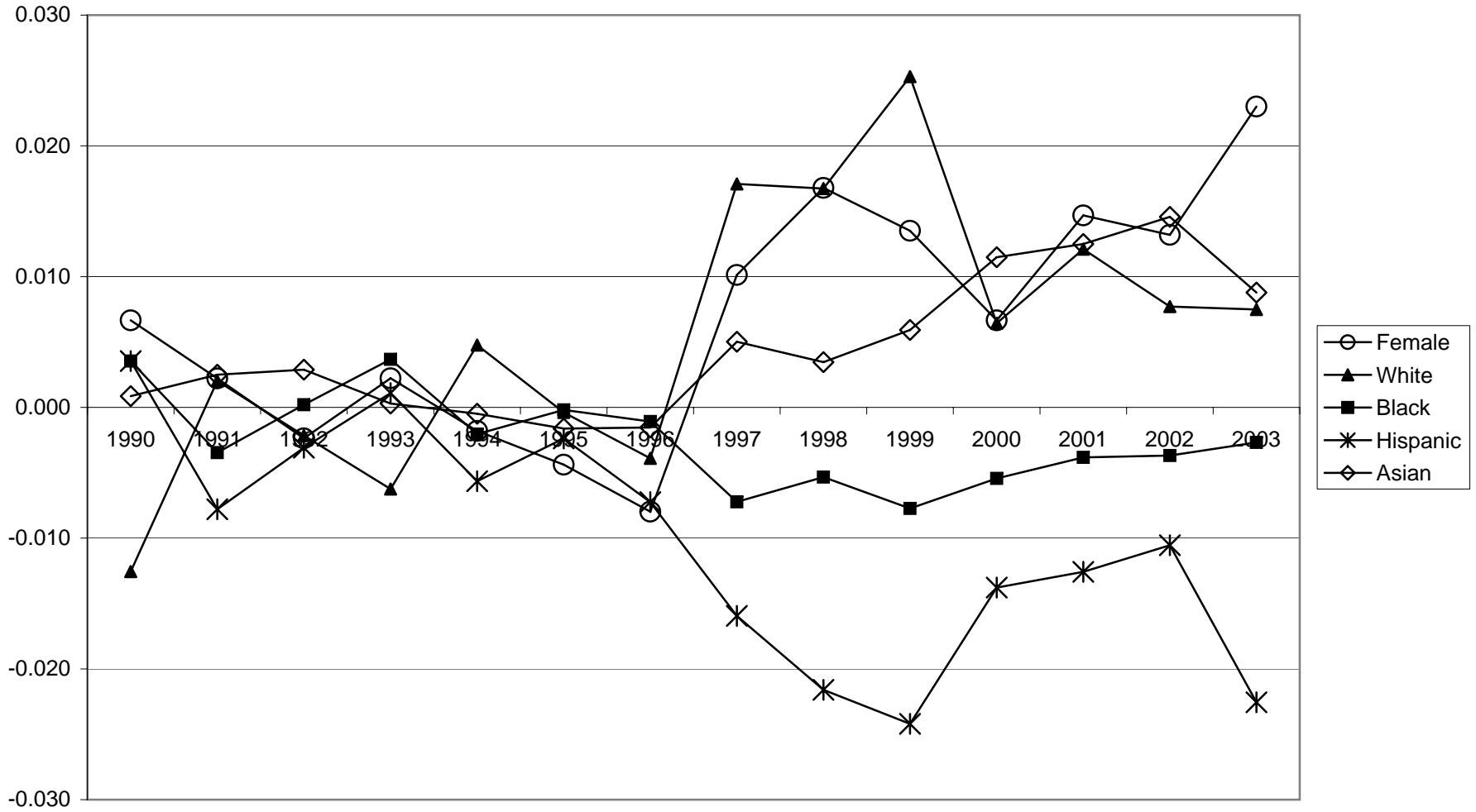
***, "**", and "*" indicate two-tailed significance at the 1%, 5%, and 10% levels.

Table displays the marginal effect of each dependent variable for an applicant with mean characteristics. Standard errors (which are omitted)

Table 3: Effect of UT-Austin's Response to Hopwood and the Top-10% Policy

	Actually admitted						Counterfactual: Holding 1990-96 admissions system constant						Net effect of <i>Hopwood</i> and top-10% policy (including UT-Austin's response)					
	Female	White	Black	Hispanic	Asian	SATACT	Female	White	Black	Hispanic	Asian	SATACT	Female	White	Black	Hispanic	Asian	SATACT
1990	0.457	0.667	0.051	0.162	0.099	1,113	0.450	0.679	0.047	0.159	0.098	1,125	0.007	-0.013	0.004	0.004	0.001	-12
1991	0.463	0.668	0.038	0.162	0.109	1,115	0.461	0.666	0.042	0.170	0.106	1,121	0.002	0.002	-0.003	-0.008	0.002	-6
1992	0.468	0.655	0.038	0.166	0.124	1,134	0.471	0.657	0.038	0.169	0.122	1,140	-0.002	-0.002	0.000	-0.003	0.003	-6
1993	0.471	0.638	0.042	0.172	0.129	1,139	0.468	0.645	0.039	0.171	0.129	1,146	0.002	-0.006	0.004	0.001	0.000	-7
1994	0.493	0.641	0.039	0.154	0.146	1,149	0.495	0.636	0.041	0.159	0.146	1,152	-0.002	0.005	-0.002	-0.006	0.000	-3
1995	0.503	0.647	0.038	0.152	0.142	1,164	0.507	0.647	0.038	0.155	0.144	1,167	-0.004	0.000	0.000	-0.002	-0.002	-3
1996	0.497	0.643	0.035	0.146	0.145	1,249	0.505	0.646	0.036	0.153	0.147	1,249	-0.008	-0.004	-0.001	-0.007	-0.002	1
1997	0.521	0.657	0.032	0.124	0.160	1,224	0.511	0.640	0.039	0.140	0.155	1,230	0.010	0.017	-0.007	-0.016	0.005	-6
1998	0.528	0.649	0.031	0.129	0.166	1,231	0.511	0.632	0.036	0.151	0.163	1,244	0.017	0.017	-0.005	-0.022	0.003	-12
1999	0.523	0.627	0.043	0.139	0.167	1,224	0.509	0.602	0.051	0.164	0.161	1,240	0.014	0.025	-0.008	-0.024	0.006	-16
2000	0.513	0.622	0.043	0.139	0.165	1,215	0.506	0.615	0.048	0.152	0.153	1,226	0.007	0.006	-0.005	-0.014	0.011	-10
2001	0.513	0.607	0.037	0.149	0.179	1,222	0.499	0.595	0.041	0.161	0.167	1,232	0.015	0.012	-0.004	-0.013	0.012	-11
2002	0.522	0.606	0.040	0.152	0.173	1,218	0.509	0.598	0.044	0.162	0.159	1,230	0.013	0.008	-0.004	-0.011	0.015	-12
2003	0.547	0.593	0.040	0.159	0.177	1,247	0.524	0.585	0.043	0.182	0.168	1,270	0.023	0.007	-0.003	-0.023	0.009	-23
1998-03 Ave	0.524	0.617	0.039	0.145	0.171	1,226	0.510	0.605	0.044	0.162	0.162	1,240	0.015	0.013	-0.005	-0.018	0.009	-14
Alternative counterfactual: Holding 1990-96 admission formula constant, but setting race-ethnicity coefficients to zero and admitting all in-state top-10% students (i.e., automatic effect of <i>Hopwood</i> and top-10% policy)																		
1997							0.509	0.658	0.030	0.123	0.160	1,233	0.012	-0.001	0.002	0.001	0.000	-9
1998							0.511	0.657	0.028	0.127	0.169	1,246	0.018	-0.008	0.003	0.003	-0.003	-14
1999							0.509	0.623	0.042	0.142	0.168	1,241	0.014	0.005	0.001	-0.002	-0.001	-17
2000							0.505	0.635	0.040	0.133	0.159	1,228	0.008	-0.013	0.003	0.006	0.006	-12
2001							0.500	0.611	0.035	0.141	0.172	1,235	0.014	-0.003	0.002	0.008	0.007	-13
2002							0.509	0.617	0.035	0.143	0.165	1,232	0.014	-0.011	0.006	0.009	0.009	-14
2003							0.537	0.603	0.036	0.163	0.174	1,256	0.010	-0.010	0.004	-0.004	0.003	-10
1998-03 Ave							0.512	0.624	0.036	0.141	0.168	1,240	0.013	-0.007	0.003	0.003	0.003	-14
Effect of non-automatic changes in UT-Austin's admissions formula																		

Figure 1: UT Austin -- Net Effect of *Hopwood* and the Top-10% Policy on the Composition of Admitted Students



Note: differences from zero in the years 1990-1996 reflect prediction errors

Table 4: Texas A&M -- Admission Probit Regression Results

Dependent Variable	Admission Entry Year																							
	1992-96	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002												
Female	0.005	-0.007	-0.004	-0.009	0.011	0.017	**	0.010	0.006	0.024	***	-0.017	*	-0.028	***	-0.030	***							
Black	0.145	***	0.096	***	0.108	***	0.148	***	0.162	***	0.012	-0.063	***	-0.020	**	-0.081	***	0.060	***	-0.061	***	-0.124	***	
Hispanic	0.146	***	0.082	***	0.124	***	0.168	***	0.175	***	0.030	***	-0.012	-0.008	-0.093	***	0.042	***	-0.030	**	-0.083	***		
Asian	-0.036	***	0.020	-0.009	0.005	-0.024	-0.072	***	-0.101	***	-0.032	***	-0.160	***	-0.049	***	-0.137	***	-0.144	***				
American Indian	-0.025	-0.019	-0.074	0.000	0.018	-0.086	-0.022	-0.008	0.044	0.060	0.040	-0.041	***											
Ethnic=Other	-0.036	0.012	-0.025	-0.189	***	-0.012	-0.029	***	-0.072	***	-0.047	***	**	-0.072	***	0.002	-0.111	***						
U.S. Citizen	0.161	***	0.051	**	0.181	***	0.175	***	0.208	***	0.130	***	0.059	***	0.055	***	0.138	***	0.097	***	0.087	***	0.013	
SAT/ACT (00s)	0.100	***	0.112	***	0.086	***	0.116	***	0.119	***	0.065	***	0.053	***	0.029	***	0.059	***	0.084	***	0.079	***	0.074	***
SAT/ACT = Missing	-0.815	***	-0.910	***	-0.912	***	-	-0.846	***	-0.755	***	-0.863	***	-	-0.741	***	-0.624	***	-0.621	***	-0.613	***		
Class Rank Percentile (0s)	0.088	***	0.089	***	0.064	***	0.070	***	0.082	***	0.110	***	0.100	***	0.035	***	0.101	***	0.154	***	0.133	***	0.146	***
Class Rank PCT = Missing	-0.168	***	-0.167	***	-0.176	***	-0.071	***	-0.188	***	-0.276	***	-0.234	***	-0.154	***	-0.413	***	-0.332	***	-0.259	***	-0.286	***
Top 10%	0.106	***	0.060	***	0.124	***	0.127	***	0.099	***	0.077	***	0.095	***	0.031	***	0.234	***	0.303	***	0.298	***	0.290	***
Took AP Test	0.051	***	-0.006	-0.020	0.038	***	0.052	***	0.061	***	0.015	*	0.012	***	0.029	***	0.039	***	0.041	***	0.057	***		
Took 4 Years of HS English	-0.004	-0.003	-0.010	0.013	-0.023	*	0.005	-0.005	-0.003	-0.006	-0.018	0.002	0.008											
Took 2 Years of HS Foreign Language	0.035	***	0.053	***	0.026	*	0.005	0.030	*	0.060	***	0.008	0.009	0.005	0.035	-0.013	0.017							
Took 3 Years of HS Math	0.027	*	0.033	*	0.020	0.059	***	0.024	-0.002	-0.006	0.007	-0.030	-0.005	0.064	**	0.005								
Took 2 Years of HS Science	-0.064	***	-0.030	0.000	-0.058	**	-0.054	**	-0.073	**	-0.002	-0.022	**	0.042	-0.060	*	-0.102	***	-0.048					
HS Band	-0.005	0.006	0.009	-0.017	0.031	**	-0.023	0.004	-0.002	-0.009	0.011	0.012	-0.013											
HS Drama	0.001	-0.007	-0.003	0.010	0.006	0.006	-0.001	0.032	***	0.025	**	0.016												
HS Student Gov	0.019	***	0.013	0.019	**	0.004	0.033	***	0.029	***	0.039	***	0.002	0.051	***	0.062	***	0.066	***	0.059	***			
HS National Honor Society	0.027	***	0.022	***	0.031	***	0.025	***	0.022	**	0.029	***	0.017	**	0.008	*	-0.034	***	0.037	***	0.024	**	0.013	
HS Year Book	-0.059	***	-0.035	***	-0.019	-0.056	***	-0.051	***	-0.059	***	0.028	**	-0.014	*	-0.028	*	0.006	-0.044	**	0.001			
HS Hobby Club	0.014	*	-0.011	-0.001	0.006	0.006	0.032	**	0.013	0.006	0.012	-0.017	0.006	-0.019										
HS Intermural Sports	0.004	-0.009	0.006	0.010	-0.003	0.002	0.010	0.000	-0.004	-0.003														
Transcript Missing	-0.015	0.004	-0.037	-0.012	-0.002	-0.019	**	-0.051	**	0.017	-0.031	*	-0.020											
District Per Pupil Expenditure (\$000s)	0.010	***	0.005	0.010	**	0.006	0.009	*	0.015	***	0.026	***	0.008	***	0.040	***	0.027	***	0.012	**	0.016	***		
District Per Pupil Expenditure = Missing	0.044	***	0.027	**	0.055	***	0.018	0.057	***	0.064	***	0.035	***	0.018	***	0.125	***	0.151	***	0.137	***	0.148	***	
Feeder HS	0.018	***	0.022	***	0.019	**	0.032	***	0.016	*	0.014	-0.003	0.004	0.030	***	0.013	0.027	**	0.045	***				
LOS HS	-0.053	***	-0.070	***	-0.063	**	-0.073	***	-0.108	***	0.005	-0.057	**	-0.027	*	-0.016	0.030	-0.034	-0.096	***				
Century HS	-0.001	0.016	-0.006	0.016	-0.013	-0.025	-0.004	0.015	0.073	**	0.108	***	0.152	***	0.080	***								
Instate HS	0.073	***	0.116	***	0.122	***																		
Year of Application	0.000																							
Number of Observations	38,457	11,934	11,908	12,076	12,974	13,323	13,305	11,865	14,370	18,694	18,809	19,848												
Pseudo-R ²	36.0%	48.2%	41.8%	37.6%	40.7%	35.3%	39.6%	38.2%	36.5%	41.5%	38.8%	38.9%												
Joint Significance of Race-Ethnicity Variables	0.0%	***	0.0%	***	0.0%	***	0.0%	***	0.0%	***	0.0%	***	0.3%	***	0.0%	***	0.0%	***	0.0%	***	0.0%	***		

***, "**", and "*" indicate two-tailed significance at the 1%, 5%, and 10% levels.

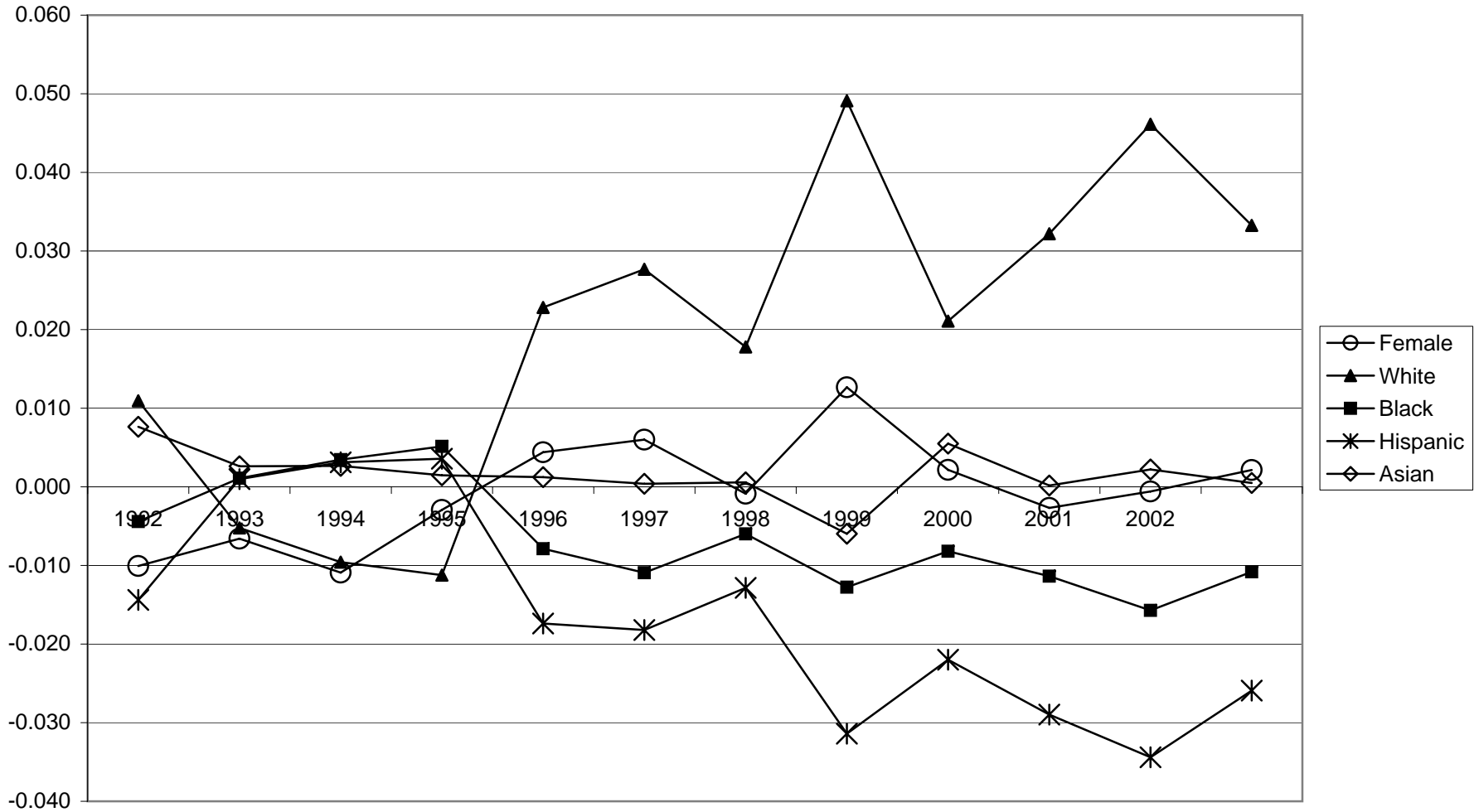
Table displays the marginal effect of each dependent variable for an applicant with mean characteristics. Standard errors (which are omitted here for space concerns) are available upon request. "+" indicates that all students with this characteristic were admitted. "-" indicates that all students with this characteristic were not admitted. Such students were dropped from the regression.

Table 5: Effect of Texas A&M's Response to Hopwood and the Top-10% Policy

	Actually admitted						Counterfactual: Holding 1992-96 admissions system constant						Net effect of <i>Hopwood</i> and top-10% policy (including Texas A&M's response)					
	Female	White	Black	Hispanic	Asian	SATACT	Female	White	Black	Hispanic	Asian	SATACT	Female	White	Black	Hispanic	Asian	SATACT
1992	0.479	0.752	0.047	0.136	0.059	1,155	0.489	0.741	0.051	0.151	0.052	1,157	-0.010	0.011	-0.004	-0.014	0.008	-2
1993	0.489	0.744	0.047	0.154	0.051	1,155	0.496	0.749	0.046	0.153	0.048	1,161	-0.007	-0.005	0.001	0.001	0.003	-6
1994	0.494	0.724	0.053	0.161	0.056	1,162	0.505	0.733	0.050	0.158	0.053	1,168	-0.011	-0.010	0.003	0.003	0.003	-6
1995	0.505	0.710	0.058	0.167	0.050	1,166	0.508	0.722	0.053	0.164	0.049	1,173	-0.003	-0.011	0.005	0.004	0.001	-7
1996	0.515	0.758	0.045	0.135	0.046	1,163	0.511	0.735	0.053	0.152	0.045	1,176	0.004	0.023	-0.008	-0.017	0.001	-14
1997	0.517	0.754	0.037	0.121	0.061	1,163	0.511	0.727	0.048	0.139	0.060	1,176	0.006	0.028	-0.011	-0.018	0.000	-13
1998	0.514	0.780	0.036	0.110	0.055	1,161	0.515	0.762	0.042	0.123	0.054	1,166	-0.001	0.018	-0.006	-0.013	0.001	-5
1999	0.519	0.786	0.034	0.105	0.057	1,167	0.507	0.736	0.047	0.136	0.063	1,189	0.013	0.049	-0.013	-0.031	-0.006	-22
2000	0.521	0.751	0.033	0.122	0.067	1,174	0.519	0.730	0.041	0.144	0.061	1,198	0.002	0.021	-0.008	-0.022	0.005	-24
2001	0.513	0.760	0.035	0.118	0.062	1,174	0.516	0.728	0.046	0.147	0.061	1,196	-0.003	0.032	-0.011	-0.029	0.000	-22
2002	0.518	0.773	0.033	0.110	0.073	1,175	0.519	0.727	0.048	0.144	0.071	1,199	-0.001	0.046	-0.016	-0.034	0.002	-24
1998-02 Ave	0.517	0.770	0.034	0.113	0.063	1,170	0.515	0.737	0.045	0.139	0.062	1,190	0.002	0.033	-0.011	-0.026	0.000	-19

	Alternative counterfactual: Holding 1992-96 admission formula constant, but setting race-ethnicity coefficients to zero and admitting all in-state top-10% students (i.e., automatic effect of <i>Hopwood</i> and top-10% policy)						Effect of non-automatic changes in Texas A&M's admissions formula					
1997	0.510	0.759	0.034	0.113	0.066	1,180	0.007	-0.005	0.003	0.008	-0.005	-17
1998	0.514	0.782	0.034	0.107	0.057	1,169	0.000	-0.002	0.002	0.003	-0.002	-8
1999	0.508	0.777	0.031	0.104	0.067	1,193	0.011	0.008	0.003	0.000	-0.011	-26
2000	0.521	0.771	0.025	0.106	0.071	1,201	0.000	-0.020	0.008	0.015	-0.004	-27
2001	0.517	0.767	0.031	0.110	0.072	1,199	-0.004	-0.007	0.003	0.009	-0.011	-25
2002	0.520	0.770	0.032	0.105	0.081	1,203	-0.002	0.003	0.000	0.004	-0.008	-28
1998-02 Ave	0.516	0.773	0.031	0.107	0.070	1,193	0.001	-0.003	0.003	0.006	-0.007	-23

Figure 2: Texas A&M -- Net Effect of *Hopwood* and the Top-10% Policy on the Composition of Admitted Students



Note: differences from zero in the years 1992-1996 reflect prediction errors

Table 6: Texas Tech -- Admission Probit Regression Results

Dependent Variable	Admission Entry Year											
	1991-96	1991	1993	1995	1996	1997	1998	1999	2000	2001	2002	2003
Female	-0.017 ***	-0.045 ***	0.000	-0.016 **	-0.014 **	0.019	0.004	0.010	0.008	-0.008	-0.015 *	0.010
Black	-0.022 ***	-0.006	-0.003	-0.036 **	-0.031 **	0.014	-0.069 *	-0.075 ***	-0.098 ***	-0.077 ***	-0.097 ***	-0.119 ***
Hispanic	0.008	0.035 ***	-0.001	0.021 **	-0.015 *	0.020	-0.012	-0.021	-0.058 ***	-0.033 **	-0.048 ***	-0.038 **
Asian	-0.092 ***	-0.200 ***	-0.040 ***	-0.070 ***	-0.063 ***	-0.005	-0.045	-0.047	-0.033	-0.036	-0.067 ***	-0.051 *
American Indian	-0.036	-0.120	0.021	-0.038	-0.051	0.003	0.031	-0.082	0.018	-0.004	0.001	0.008
Ethnic=International	-0.383 ***	-0.172 **	-0.127 ***	-0.375 ***	-0.418 ***	0.074	0.099	-0.028	-0.019	0.100 ***	0.138 ***	0.205 ***
U.S. Citizen	0.003	-0.061 *	0.000	0.022	0.033	-0.030	0.033	0.111 ***	0.074 **	0.128 ***	0.052	0.115 ***
Parent's Highest Education = No HS									0.014	-0.028	-0.050	0.005
Parent's Highest Education = Some HS									-0.043	-0.003	-0.092 **	-0.021
Parent's Highest Education = HS									-0.065 ***	-0.041 **	-0.076 ***	-0.033 *
Parent's Highest Education = Some College									-0.033 **	-0.035 ***	-0.032 ***	-0.046 ***
Parent's Highest Education = Graduate School									0.010	0.010	-0.006	-0.007
Parent's Education = Missing									-0.004	0.082 ***	0.088 ***	-0.014
SAT/ACT (00s)	0.008 *	-0.022	0.006	0.009	0.017 ***	0.058 ***	0.012 *	0.065 ***	0.075 ***	0.102 ***	0.103 ***	0.154 ***
SAT/ACT = Missing	-0.287 ***	-0.347 ***	-0.291 ***	-0.249 ***	-0.262 ***	-0.953 ***	-0.926 ***	-0.245 ***	-0.349 ***	-0.489 ***	-0.486 ***	-0.533 ***
Class Rank Percentile (0s)	0.047 ***	0.070 ***	0.020 ***	0.046 ***	0.039 ***	0.007 *	0.010 **	0.038 ***	0.039 ***	0.050 ***	0.053 ***	0.087 ***
Class Rank PCT = Missing	-0.850 ***	-0.871 ***	-0.793 ***	-0.908 ***	-0.761 ***	-0.583 ***	-0.693 ***	-0.758 ***	-0.785 ***	-0.745 ***	-0.747 ***	-0.785 ***
Top 10%	-0.026 ***	-0.009	-0.016 **	-0.038 ***	-0.019 *	-0.014	0.026	-0.029	-0.046 ***	-0.028	0.013	-0.101 ***
District Per Pupil Expenditure (\$000s)	-0.006 ***	-0.014 **	-0.002	-0.006	-0.003	0.019 **	0.014	0.011 **	0.007	0.006	0.004	0.015 ***
District Per Pupil Expenditure = Missing	0.010 **	0.010	-0.002	0.005	0.019 ***	0.011	-0.063 ***	-0.004	-0.030 **	0.007	0.020 *	0.054 ***
Feeder HS	0.028 ***	0.017	0.012 **	0.038 ***	0.023 ***	-0.072 ***	-0.069 ***	-0.014	-0.003	0.008	0.005	-0.001
LOS HS	-0.041 ***	-0.035	-0.013	-0.052 **	-0.060 ***	-0.104 **	-0.026	-0.102 ***	-0.081 ***	-0.018	-0.052 *	-0.106 ***
Century HS	-0.022	-0.007	-0.033 **	-0.043	0.005	-0.045	0.062	-0.066	-0.005	-0.060	-0.031	0.021
Instate HS	0.007	-0.011	-0.001	-0.008	0.045 ***	-0.033	-0.033	0.012	-0.027 *	-0.004	-0.027	-0.032
Year of Application	-0.002											
Number of Observations	25,509	6,712	5,599	6,478	6,720	7,545	7,144	7,247	9,602	11,005	12,332	13,080
Pseudo-R ²	51.1%	57.0%	52.5%	46.9%	47.5%	84.9%	80.7%	39.1%	44.2%	43.7%	44.7%	49.4%
Joint Significance of Race-Ethnicity Variables	0.0% ***	0.0% ***	7.5% *	0.0% ***	0.4% ***	86.5%	46.6%	0.4% ***	0.0% ***	0.1% ***	0.0% ***	0.0% ***

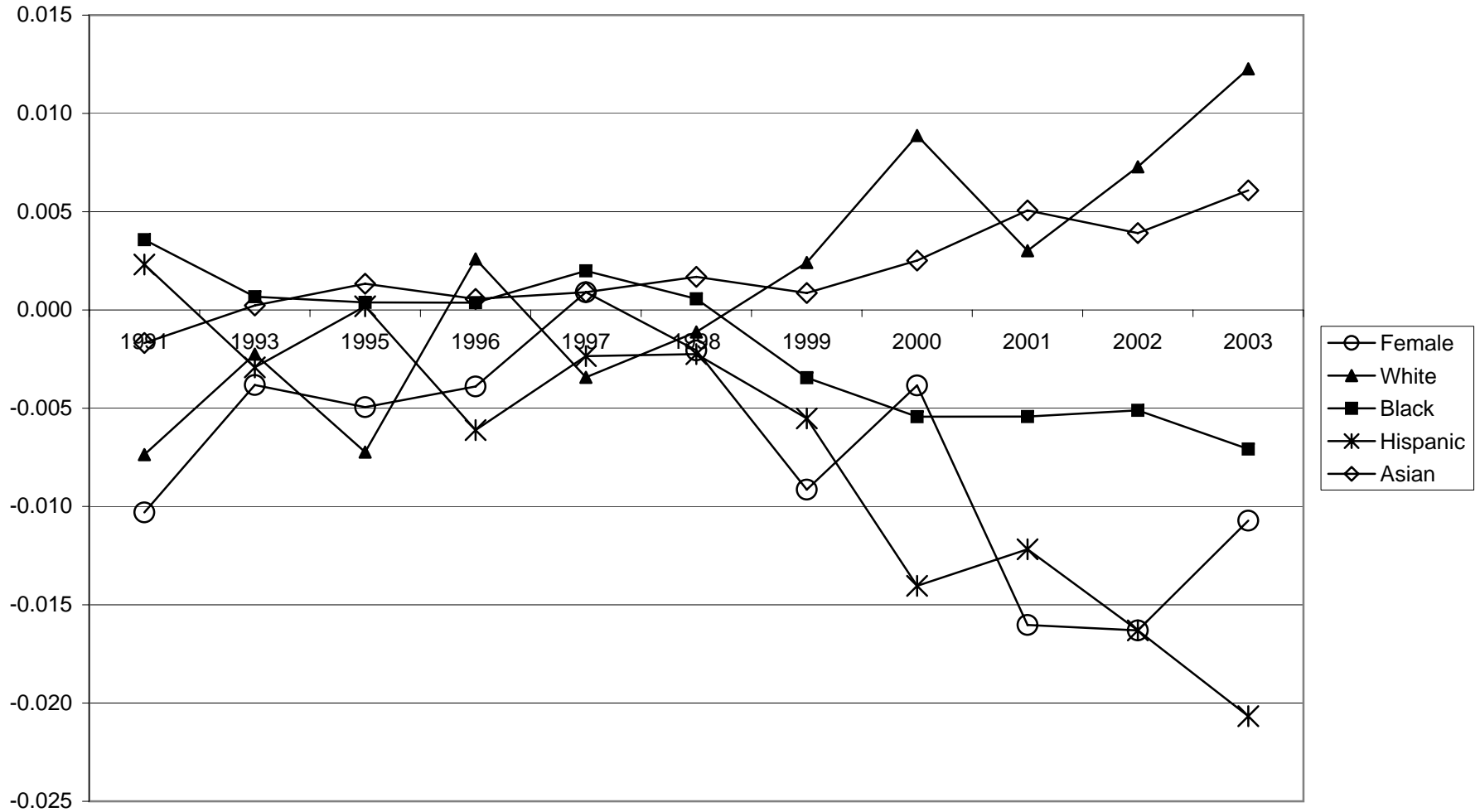
***, "**", and "*" indicate two-tailed significance at the 1%, 5%, and 10% levels.

Table displays the marginal effect of each dependent variable for an applicant with mean characteristics. Standard errors (which are omitted here for space concerns) are available upon request.

Table 7: Effect of Texas Tech's Response to Hopwood and the Top-10% Policy

	Actually admitted						Counterfactual: Holding 1991-96 admissions system constant						Net effect of <i>Hopwood</i> and top-10% policy (including UT-Austin's response)					
	Female	White	Black	Hispanic	Asian	SATACT	Female	White	Black	Hispanic	Asian	SATACT	Female	White	Black	Hispanic	Asian	SATACT
1991	0.528	0.772	0.058	0.143	0.019	1,000	0.538	0.780	0.055	0.141	0.020	1,000	-0.010	-0.007	0.004	0.002	-0.002	0
1993	0.516	0.796	0.037	0.133	0.025	1,005	0.520	0.798	0.037	0.136	0.025	1,005	-0.004	-0.002	0.001	-0.003	0.000	0
1995	0.538	0.790	0.034	0.140	0.025	1,009	0.543	0.797	0.033	0.140	0.023	1,008	-0.005	-0.007	0.000	0.000	0.001	1
1996	0.516	0.787	0.048	0.130	0.024	1,052	0.520	0.785	0.048	0.136	0.024	1,051	-0.004	0.003	0.000	-0.006	0.001	1
1997	0.508	0.818	0.039	0.103	0.028	1,097	0.507	0.822	0.037	0.106	0.027	1,097	0.001	-0.003	0.002	-0.002	0.001	0
1998	0.518	0.805	0.036	0.121	0.028	1,094	0.520	0.806	0.035	0.123	0.026	1,096	-0.002	-0.001	0.001	-0.002	0.002	-2
1999	0.498	0.832	0.037	0.095	0.025	1,095	0.507	0.829	0.040	0.100	0.024	1,089	-0.009	0.002	-0.003	-0.006	0.001	6
2000	0.495	0.798	0.039	0.118	0.032	1,093	0.499	0.790	0.044	0.132	0.030	1,085	-0.004	0.009	-0.005	-0.014	0.003	8
2001	0.489	0.800	0.035	0.111	0.038	1,108	0.505	0.797	0.041	0.124	0.033	1,098	-0.016	0.003	-0.005	-0.012	0.005	10
2002	0.491	0.791	0.037	0.118	0.036	1,107	0.507	0.784	0.042	0.134	0.032	1,095	-0.016	0.007	-0.005	-0.016	0.004	12
2003	0.488	0.802	0.030	0.117	0.034	1,127	0.498	0.790	0.037	0.138	0.028	1,110	-0.011	0.012	-0.007	-0.021	0.006	17
1998-03 Ave	0.496	0.805	0.036	0.113	0.032	1,104	0.506	0.799	0.040	0.125	0.029	1,095	-0.010	0.005	-0.004	-0.012	0.003	9
							Alternative counterfactual: Holding 1991-96 admission formula constant, but setting race-ethnicity coefficients to zero and admitting all in-state top-10% students (i.e., automatic effect of <i>Hopwood</i> and top-10% policy)						Effect of non-automatic changes in UT-Austin's admissions formula					
1997							0.509	0.818	0.038	0.104	0.030	1,097	-0.001	0.000	0.001	-0.001	-0.002	-1
1998							0.522	0.804	0.036	0.123	0.028	1,096	-0.004	0.001	0.000	-0.002	0.000	-2
1999							0.507	0.825	0.042	0.100	0.027	1,089	-0.009	0.006	-0.005	-0.005	-0.002	6
2000							0.499	0.785	0.046	0.131	0.034	1,085	-0.004	0.014	-0.008	-0.013	-0.001	8
2001							0.505	0.792	0.043	0.121	0.039	1,098	-0.016	0.008	-0.007	-0.010	0.000	10
2002							0.508	0.778	0.044	0.132	0.038	1,095	-0.017	0.013	-0.007	-0.014	-0.002	12
2003							0.498	0.783	0.039	0.134	0.035	1,111	-0.010	0.019	-0.009	-0.017	0.000	16
1998-03 Ave							0.507	0.794	0.042	0.124	0.033	1,096	-0.010	0.010	-0.006	-0.010	-0.001	8

Figure 3: Texas Tech -- Net Effect of *Hopwood* and the Top-10% Policy on the Composition of Admitted Students



Note: differences from zero in the years 1991-1996 reflect prediction errors

Table 8: UT - Pan American -- Admission Probit Regression Results

Dependent Variable	Admission Entry Year																	
	1995-96	1995	1996	1997	1998	1999	2000	2001	2002									
Female	0.002	0.003	0.000	-0.017	**	-0.023	**	-0.008	-0.023	***	-0.017	**	-0.022	***				
Black	0.027	0.026	0.033	0.053		0.009	+	0.025	0.047		0.033							
Hispanic	0.078	***	0.066	***	0.092	***	0.017	-0.020	-0.022	**	0.040	***	-0.015	0.012				
Asian	0.062	**	0.045	+	0.065	*	0.047	-0.017	0.032		0.042		+					
American Indian	0.045		0.003	+	0.028		-0.073	+	-0.010		+		+					
Ethnic=International	0.027		0.046	-0.039	-0.015		-0.085	0.032	+		+		+					
Ethnic=Other	+	+	+	0.077	***	+	0.067	***	0.065	***	+		+					
U.S. Citizen	-0.062	***	-0.049	***	-0.081	***	-0.076	***	-0.102	***	-0.050	***	-0.044	***	0.020	***	+	
SAT/ACT (00s)	0.038	***	0.038	***	0.038	***	0.019	***	0.025	***	0.013	***	0.021	***	-0.003		0.021	***
SAT/ACT = Missing	0.074	***	0.059	***	0.091	***	-0.035	***	-0.005		-0.011		-0.033	***	-0.009	***	0.002	
Class Rank Percentile (0s)	-0.008	***	-0.006	***	-0.011	***	-0.009	***	-0.006	*	-0.004	*	-0.007	***	-0.065	***	-0.005	**
Class Rank PCT = Missing	-0.126	***	-0.123	***	-0.130	***	-0.066	***	-0.145	***	-0.047	***	-0.038	***	0.000		-0.061	***
Top 10%	-0.063	***	-0.105	***	-0.015		0.022		-0.062	**	-0.016		-0.001		0.015		-0.044	**
Took AP Test	0.042	***	0.040	*	0.046	*	0.046	**	0.060	**	0.034	**	0.034	***	0.001		0.030	**
District Per Pupil Expenditure (\$000s)	0.006		-0.004		0.025	**	0.001		0.023	**	0.006		-0.003		-0.074	**	0.008	
District Per Pupil Expenditure = Missing	-0.108	***	-0.128	***	-0.079	**	-0.043		-0.089	**	-0.083	**	-0.085	**	+		-0.073	**
Feeder HS	+		+		+		+		-0.076		-0.097		+		+		-0.037	
LOS HS	0.026		+		-0.012		0.013		+		+		+		+		+	
Century HS	0.013		+		-0.123		+		-0.424		+		+		+		+	
Instate HS	-0.077	***	-0.097	***	-0.047		-0.033		-0.024		-0.011		-0.008		0.018		0.023	
Year of Application	-0.022	***																
Number of Observations	12,225		6,853		5,301		4,885		5,222		4,547		4,668		5,283		5,806	
Pseudo-R ²	17.0%		16.8%		17.6%		8.2%		10.6%		9.0%		13.0%		10.9%		11.1%	
Joint Significance of Race-Ethnicity Variables	0.0%	***	0.0%	***	0.0%	***	19.7%		30.4%		8.4%	*	3.6%	**	11.8%		46.4%	

***, "**", and "*" indicate two-tailed significance at the 1%, 5%, and 10% levels.

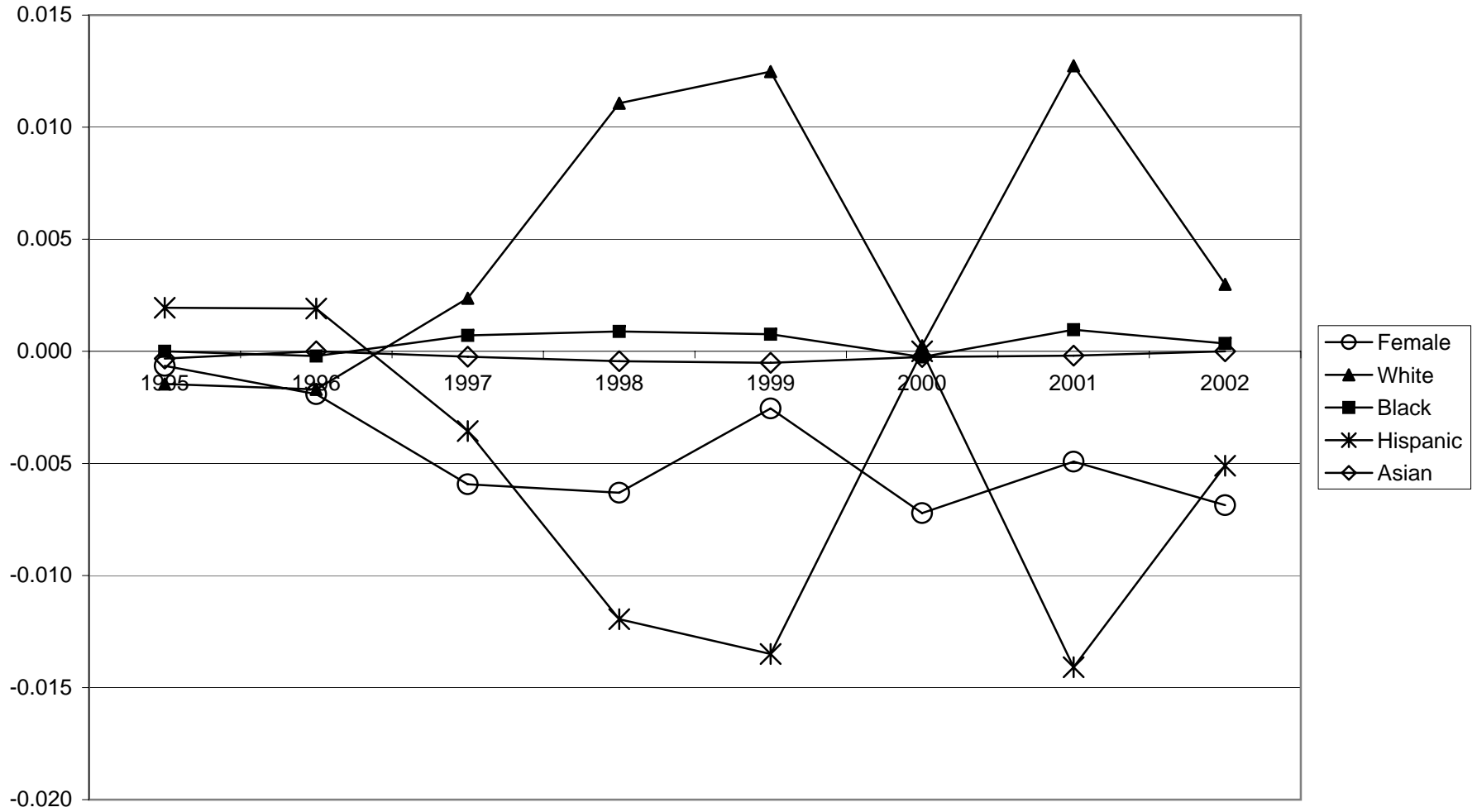
Table displays the marginal effect of each dependent variable for an applicant with mean characteristics. Standard errors (which are omitted here for space concerns) are available upon request. "+" indicates that all students with this characteristic were admitted. "-" indicates that all students with this characteristic were not admitted. Such

Table 9: Effect of UT- Pan American's Response to Hopwood and the Top-10% Policy

Actually admitted							Counterfactual: Holding 1995-96 admissions system constant						Net effect of <i>Hopwood</i> and top-10% policy (including UT-PanAm's response)					
	Female	White	Black	Hispanic	Asian	SATACT	Female	White	Black	Hispanic	Asian	SATACT	Female	White	Black	Hispanic	Asian	SATACT
1995	0.524	0.105	0.006	0.875	0.006	782	0.525	0.106	0.006	0.873	0.006	792	-0.001	-0.001	0.000	0.002	0.000	-11
1996	0.521	0.100	0.008	0.875	0.007	811	0.523	0.102	0.008	0.873	0.007	830	-0.002	-0.002	0.000	0.002	0.000	-19
1997	0.530	0.101	0.010	0.867	0.009	828	0.536	0.099	0.009	0.871	0.010	842	-0.006	0.002	0.001	-0.004	0.000	-14
1998	0.537	0.147	0.010	0.824	0.009	844	0.544	0.135	0.010	0.836	0.009	861	-0.006	0.011	0.001	-0.012	0.000	-17
1999	0.570	0.136	0.007	0.829	0.011	848	0.572	0.124	0.006	0.843	0.011	861	-0.003	0.012	0.001	-0.013	-0.001	-13
2000	0.543	0.080	0.009	0.886	0.008	845	0.550	0.079	0.010	0.886	0.008	857	-0.007	0.000	0.000	0.000	0.000	-12
2001	0.555	0.104	0.008	0.854	0.010	842	0.560	0.092	0.007	0.868	0.010	853	-0.005	0.013	0.001	-0.014	0.000	-10
2002	0.552	0.072	0.007	0.875	0.010	849	0.559	0.069	0.007	0.880	0.010	860	-0.007	0.003	0.000	-0.005	0.000	-11
1998-02 Ave	0.551	0.108	0.008	0.854	0.010	846	0.557	0.100	0.008	0.863	0.010	858	-0.006	0.008	0.001	-0.009	0.000	-13

Alternative counterfactual: Holding 1995-96 admission formula constant, but setting race-ethnicity coefficients to zero and admitting all in-state top-10% students (i.e., automatic effect of <i>Hopwood</i> and top-10% policy)							Effect of non-automatic changes in UT-PanAm's admissions formula					
	Female	White	Black	Hispanic	Asian	SATACT	Female	White	Black	Hispanic	Asian	SATACT
1997	0.538	0.107	0.009	0.864	0.009	843	-0.009	-0.005	0.001	0.004	0.000	-14
1998	0.540	0.151	0.011	0.819	0.008	863	-0.003	-0.005	-0.001	0.005	0.000	-18
1999	0.572	0.136	0.007	0.830	0.011	862	-0.002	0.000	0.001	-0.001	0.000	-14
2000	0.553	0.086	0.010	0.879	0.008	858	-0.010	-0.006	0.000	0.007	0.000	-12
2001	0.558	0.102	0.008	0.856	0.010	854	-0.004	0.002	0.000	-0.003	0.000	-11
2002	0.559	0.075	0.007	0.872	0.010	861	-0.007	-0.003	0.000	0.003	0.000	-12
1998-02 Ave	0.557	0.110	0.008	0.851	0.009	859	-0.005	-0.002	0.000	0.002	0.000	-13

Figure 4: UT-PanAm -- Net Effect of *Hopwood* and the Top-10% Policy on the Composition of Admitted Students



Note: differences from zero in the years 1995-1996 reflect prediction errors

Table 10: UT - San Antonio -- Admission Probit Regression Results

Dependent Variable	1998	1999	2000	2001	2002	2003	2004
Female	0.003	-0.005	0.009	-0.003	-0.001	-0.025 ***	0.002
Black	-0.037 **	-0.041 ***	-0.009	-0.085 ***	-0.045 **	-0.059 ***	-0.061 ***
Hispanic	-0.015 **	-0.024 ***	-0.004	-0.030 ***	-0.027 **	-0.039 ***	-0.035 ***
Asian	-0.022	0.004	-0.002	-0.002	-0.016	-0.060 **	-0.034 *
American Indian	-0.005	-0.011	-0.086 *	0.016	-0.141 *	0.079	0.063
Ethnic=International	0.006	-0.021	-0.061 *	0.018	0.089 ***	0.001	-0.025
U.S. Citizen	0.131 ***	0.102 ***	0.014	0.077 ***	0.101 ***	0.070 ***	0.054 ***
SAT/ACT (00s)	0.010 ***	0.012 ***	0.015 ***	0.023 ***	0.036 ***	0.011 ***	0.022 ***
SAT/ACT = Missing	-0.317 ***	-0.369 ***	-0.466 ***	-0.524 ***	-0.544 ***	-0.567 ***	-0.601 ***
Class Rank Percentile (0s)	0.008 ***	0.007 ***	0.006 ***	0.012 ***	0.013 ***	0.008 ***	0.015 ***
Class Rank PCT = Missing	-0.351 ***	-0.370 ***	-0.323 ***	-0.382 ***	-0.422 ***	-0.437 ***	-0.574 ***
Top 10%	-0.006	0.003	0.013	0.011	0.048 **	0.012	-0.014
Took AP Test	0.042	0.007	0.038 *	0.100 ***	0.090 **	0.102 ***	0.055 ***
Number of AP Tests Passed	0.032	0.108 *	0.021	0.029	0.007	0.026	-0.004
College Prep Program in HS	0.014	-0.949 ***	-0.016	-0.002	0.006	-0.001	-0.019
HS Program Missing	0.383 *	-0.059 ***	-0.122 ***	-0.103 ***	-0.155 ***	-0.124 ***	-0.101 ***
District Per Pupil Expenditure (\$000s)	-0.004	0.001	-0.001	-0.010 **	0.001	-0.004	-0.004
District Per Pupil Expenditure = Missing	0.050 ***	0.056 ***	0.057 ***	0.122 ***	0.136 ***	0.114 ***	0.081 ***
Feeder HS	0.010	-0.020	-0.003	0.005	0.008	0.047 **	0.015
LOS HS	-0.007	-0.018 *	0.018 *	0.027 *	0.045 **	0.029 *	0.018
Century HS	-0.008	0.001	-0.055	-0.009	-0.017	0.004	-0.048
Instate HS	-0.004	-0.013	-0.034 ***	-0.038 **	-0.093 ***	-0.091 ***	-0.063 ***
Number of Observations	4,652	5,412	5,575	6,636	7,077	8,665	8,441
Pseudo-R ²	43.1%	42.8%	49.9%	44.5%	46.1%	45.6%	57.5%
Joint Significance of Race-Ethnicity Variables	8.5% *	0.6% ***	52.7%	0.1% ***	7.4% *	0.1% ***	0.0% ***

***, "**", and "*" indicate two-tailed significance at the 1%, 5%, and 10% levels.

Table displays the marginal effect of each dependent variable for an applicant with mean characteristics. Standard errors (which are omitted here for space concerns) are available upon request.

Table 11: Rice -- Admission Probit Regression Results

Dependent Variable	2000	2001	2002	2003	2004
Female	0.040 ***	0.015	0.031 ***	0.034 ***	0.032 ***
Black	0.293 ***	0.419 ***	0.372 ***	0.327 ***	0.332 ***
Hispanic	0.258 ***	0.263 ***	0.230 ***	0.219 ***	0.136 ***
Asian	-0.069 ***	-0.069 ***	-0.082 ***	-0.061 ***	-0.082 ***
American Indian	0.234 ***	0.051	0.152 *	0.083	0.307 ***
Ethnic=Other	-0.043 ***	-0.027 *	0.002	0.009	0.014
Ethnic=Multi-Racial	0.048	-0.046 *	-0.019	0.041 *	0.182 ***
Ethnic=International	-0.064 ***	-0.061 ***	-0.041 *	-0.013	-0.041 **
SAT/ACT (00s)	0.125 ***	0.125 ***	0.125 ***	0.129 ***	0.120 ***
SAT/ACT = Missing	-0.124 ***	-	-0.154 ***	-0.174 ***	-0.152 ***
High School GPA	0.043 ***	0.042 ***	0.042 ***	0.032 ***	0.062 ***
High School GPA = Missing	-0.028 ***	-0.036 ***	-0.054 ***	-0.060 ***	-0.035 ***
Class Rank Percentile (0s)	0.041 ***	0.147 ***	0.083 ***	0.046 ***	0.057 ***
Class Rank PCT = Missing	0.004	-0.081 ***	-0.032	-0.030	-0.017
Top 10%	0.070 ***	-0.029	0.036	0.068 ***	0.029
High School Athlete	+	+	0.871 ***	0.806 ***	0.790 ***
District Per Pupil Expenditure (\$000s)	0.009 ***	0.011 ***	0.007 ***	0.006 **	0.012 ***
District Per Pupil Expenditure = Missing	0.099 ***	0.100 ***	0.071 ***	0.085 ***	0.066 ***
Feeder HS	-0.076 ***	-0.060 ***	-0.045 ***	-0.064 ***	-0.061 ***
LOS HS	-0.019	0.106	0.032	0.101 *	0.112 *
Century HS	0.058	0.032	0.135 ***	0.059	0.072 *
Instate HS	0.017	0.011	-0.020 *	-0.011	0.013
Number of Observations	6,744	6,398	7,067	7,502	8,106
Psuedo-R ²	22.3%	24.6%	28.1%	24.0%	25.3%
Joint Significance of Race-Ethnicity Variables	0.0% ***	0.0% ***	0.0% ***	0.0% ***	0.0% ***

***, "**", and "*" indicate two-tailed significance at the 1%, 5%, and 10% levels.

Table displays the marginal effect of each dependent variable for an applicant with mean characteristics. Standard errors (which are omitted here for space concerns) are available upon request. "+" indicates that all students with this characteristic were admitted. "-" indicates that all students with this characteristic were not admitted. Such students were dropped from the regression.

Table 12: SMU -- Admission Probit Regression Results

Dependent Variable	1998	1999	2000	2001	2002	2003	2004
Female	0.004	0.012 **	0.039 ***	0.021 *	0.069 ***	-0.018	-0.040 **
Black	-0.022 **	-0.020	-0.073 ***	-0.080 ***	-0.093 ***	0.139 ***	0.108 ***
Hispanic	-0.006	0.000	-0.019	-0.010	0.045 *	0.013	0.005
Asian	-0.017 *	0.010	-0.015	-0.055 **	-0.071 **	-0.044	-0.039
American Indian	0.000	0.025	0.007	0.079	0.049	-0.021	-0.091
Ethnic=Other	-0.155 ***	-0.031	-0.074 *	-0.046	-0.141 **	-0.291 ***	-0.079
U.S. Citizen	-0.012 *	-0.034 ***	-0.069 ***	-0.075 ***	-0.235 ***	-0.313 ***	-0.302 ***
Parent's Highest Education = Elementary School	0.011	0.001	-0.225 ***	0.028			
Parent's Highest Education = HS	-0.010	-0.009	-0.022	-0.068 **			
Parent's Highest Education = Missing	-0.022 ***	-0.030 ***	-0.084 ***	-0.122 ***			
Legacy applicant	0.003	0.021 ***	0.060 ***	0.087 ***	0.109 ***		
High School GPA	0.068 ***	0.107 ***	0.128 ***	0.210 ***	0.299 ***	0.387 ***	0.451 ***
High School GPA = Missing	-0.012	+	-0.349 **	-0.148	0.154	-0.800 ***	-0.811 ***
SAT/ACT (00s)	0.011 ***	0.026 ***	0.059 ***	0.111 ***	0.160 ***	0.191 ***	0.177 ***
SAT/ACT = Missing	-0.102 ***	-0.349 ***	-0.235 ***	-0.211 ***	-0.476 ***	-0.383 ***	-0.051
Class Rank Percentile (0s)	0.007 ***	0.008 ***	0.012 ***	0.025 ***	0.035 ***	0.015 **	0.002
Class Rank PCT = Missing	-0.035 ***	-0.013	-0.043 ***	0.003	-0.048 **	0.071 ***	0.068 ***
Top 10%	-0.062 ***	-0.018	-0.034 *	-0.116 ***	-0.021	0.058	0.018
High School Athlete	+	+	+	+	+		
High School Band	+	+	0.023	0.157 ***	0.111 ***		
District Per Pupil Expenditure (\$000s)	0.000	0.007 ***	0.005 **	0.008 *	0.010 **	0.011 *	0.010 *
District Per Pupil Expenditure = Missing	0.017 ***	0.017 ***	0.053 ***	0.101 ***	0.165 ***	0.023	0.040 *
Feeder HS	-0.013 *	0.006	0.024 *	0.033 *	0.046 *	-0.049	-0.009
LOS HS	0.010	0.019	0.050 **	-0.005	-0.065	0.098	-0.019
Century HS	-0.014	-0.027	-0.026	0.092 **	0.147 ***	0.101	0.186 ***
Instate HS	-0.014 ***	-0.005	-0.037 ***	-0.067 ***	-0.074 ***	-0.040 **	-0.029
Number of Observations	3,778	4,063	4,546	5,311	6,127	6,774	6,663
Pseudo-R ²	44.8%	40.3%	39.4%	33.8%	36.6%	54.2%	50.5%
Joint Significance of Race-Ethnicity Variables	7.9% *	35.9%	0.3% ***	1.1% **	0.1% ***	0.0% ***	0.9% ***

***, "**", and "*" indicate two-tailed significance at the 1%, 5%, and 10% levels.

Table displays the marginal effect of each dependent variable for an applicant with mean characteristics. Standard errors (which are omitted here for space concerns) are available upon request. "+" indicates that all students with this characteristic were admitted. "-" indicates that all students with this characteristic were not admitted. Such students were dropped from the regression.