Racial and Ethnic Preferences in Admission at the University of Arizona College of Law

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Executive Summary

The University of Arizona (UA) College of Law awarded an extremely large degree of preference to blacks over whites and Asians, and to a lesser extent, to Hispanics and Asians over whites.

Grades and LSATs. In 2005, 2006, and 2007:

- Black admittees to UA law school had lower average LSAT scores compared to those of Hispanic, Asian, and white admittees, while the average scores of Hispanic admittees were lower than those of Asians and whites. The Asian and white scores were roughly the same.
- The average college GPA of black admittees was equal to or slightly lower than the averages of Hispanic admittees. It was lower than the median GPA of Asian and white admittees in all three years.
- The college GPA of Hispanic admittees was equal to or slightly lower than the average GPA of Asian admittees, and was slightly lower than the average college GPA of white admittees.

During these years, UA law school admitted every black applicant with higher test scores and grades compared to the black admittee median. In contrast, 25 Hispanics, 65 Asians, and 764 whites were rejected despite scores and grades higher than the average scores and grades of black admittees.

Odds Ratios. Odds ratios favoring black over white applicants were extremely large, controlling for scores, GPAs, residency, and sex. The black-over-white odds ratio was 250 to 1.

The law school also preferred Hispanic to white applicants, by roughly 18 to 1, and granted a 3-to-1 preference of Asian over white applicants.

Probability of Admission. Converting odds ratios into probabilities of admission, for an applicant with the credentials of the average black admittee, we note that race is given much more weight in admission than is Arizona residency (see Figure 1, next page).
Figure 1. Probability of Admission

With the same credentials as the average black admittee:

- **Hispanic, Asian, and white residents** are all less likely to be admitted compared to black residents and even when compared to black *non-residents*.
- Among in-state applicants, the largest gap is between white residents compared to black residents and non-residents with the same credentials as the average black admittee.

For example, a white resident in 2006, with the same credentials as the average black admittee, would have only a 5% chance of admission – versus a 93% chance if a black *resident* and a 58% chance if a black *non-resident*. In 2007, the probabilities of admission would be 9% for a white *resident*, 96% for a black *resident*, and a 71% chance for a black *non-resident*, comparing applicants with the same credentials as the average black admittee.
Acknowledgments

On behalf of the Center for Equal Opportunity, I would like to thank the National Association of Scholars and their Arizona state chapter for submitting the original freedom-of-information letter along with the Center for Equal Opportunity to obtain the data analyzed here from the University of Arizona College of Law.

I would also like to thank Linda Chavez and the staff at the Center for Equal Opportunity for giving me the chance to work on another major study of racial and ethnic preferences in university admissions. I especially would like to thank Rudy Gersten, who handled numerous tasks related to obtaining the data and releasing the report, and Roger Clegg, who provided useful suggestions on the manuscripts.
Introduction

For over thirty years, racial and ethnic preferences have played a key role in how admissions officers at many of the nation’s public and private institutions of higher learning have chosen their classes. A system of racial and ethnic preferences in admissions operates by establishing different standards of admission for individuals based upon their racial or ethnic background, with some students held to a higher standard and others admitted at a lower standard. Earlier in this century, some colleges and universities denied admission to Jews, blacks, women, and members of other groups even when their grades, test scores, and other measures of academic achievement surpassed those of white males who were offered an opportunity to enroll. The passage of new civil rights legislation in the 1960s made this kind of blatant discrimination illegal.

Since then, however, many colleges, universities, and professional schools have created programs meant to boost the enrollment of students whose backgrounds previously had excluded them from pursuing a higher education – especially blacks and, to a lesser extent, Hispanics – by granting them preferences during the admissions process. These policies, when their existence was made public, immediately became controversial, and they remain so today. Defenders of racial and ethnic preferences claim that these policies are not discriminatory and help administrators choose between equally or almost equally qualified students, giving a slight edge to applicants who likely have faced discrimination or have come from disadvantaged backgrounds. Critics of preferences say that these policies are no better than the discriminatory ones they replaced and that, in any event, the advantages they confer upon certain applicants are much greater than supporters are willing to admit.

In the last decade or so, public institutions of post-secondary and professional education have seen their ability to use racial and ethnic preferences increasingly restricted. The 1996 enactment of California’s Proposition 209 (also known as the California Civil Rights Initiative) forbids discrimination against or granting special treatment to any applicant on the bases of race, ethnicity, or sex in the public programs of the country’s most populous state. Large majorities of voters approved similar ballot initiatives in the state of Washington in 1998 and in the state of Michigan in 2006. Other states such as Florida and Texas (for a period) have created policies that end explicit preferences and guarantee admission in the state university system to the top graduates of their respective state’s high schools regardless of race or ethnicity. Most schools have never used such preferences since they are relatively non-selective.

The question of the legality of racial and ethnic preferences in higher education came to a head in 2003, when the U.S. Supreme Court ruled in two major cases on the legality of
racial preferences in higher education admission. In the first case, *Gratz v. Bollinger*, the Court found that a point-system of preferences (used by the University of Michigan in its undergraduate admissions) was unconstitutional. In the second case, *Grutter v. Bollinger*, the Court upheld a system of preferences used by the University of Michigan law school that it found to be less mechanical.¹

The *Gratz* and *Grutter* decisions make it appropriate to monitor universities’ use of racial and ethnic preferences for at least three reasons. First, as the split holdings demonstrate, if race is weighed too heavily or too mechanically, the law is violated. Second, since racial preferences are only allowed but not required under current law, the question remains whether universities *should* use them, even when they are allowed to. This policy question cannot be answered if the decisionmakers – particularly those outside the university admissions office, including, in the case of public universities, the general public – do not have all the facts. Third, at the conclusion of her majority opinion in *Grutter*, Justice Sandra Day O’Connor wrote, “We expect that 25 years from now, the use of racial preferences will no longer be necessary.” Accordingly, one would expect to see the use of preferences and the weight afforded them to decline over time (five years of the grace period Justice O’Connor allowed have now lapsed).

This study of the University of Arizona (UA) College of Law² builds on previous work on racial and ethnic preferences in undergraduate, law, and medical school admissions done for the Center for Equal Opportunity and is one of several CEO studies since the *Grutter* decision.³ As with CEO’s reports on three Virginia public law schools and the University of Michigan law school, CEO sought data on individual applicants’ admission status, matriculation status, racial/ethnic group membership, sex, in-state or out-of-state residency, LSAT scores, and college GPAs.

CEO obtained the data from the College of Law for 2005, 2006, and 2007. Omitted from the data analyses are those cases for which race or ethnicity is listed as “Other,” missing, or unknown. American Indians and Native Hawaiians were also omitted because of their small numbers in this context. In addition, cases with missing academic data were dropped from the statistical analyses. Lastly, where instances might lead to the identification of an individual, the law school excluded the data from disclosure.

¹ In response to these decisions, Michigan voters in 2006 passed Proposal 2, banning race, ethnic, and gender preferences in Michigan public contracting, public employment, and public education, including university admissions.
² Its official name is the University of Arizona James E. Rogers College of Law.
³ The studies are found on CEO’s website, [www.ceousa.org](http://www.ceousa.org).

Racial/Ethnic Composition of the Pool

Table 1 displays the racial composition of the law school’s pool of applicants and admittees in 2005, 2006, and 2007.

Table 1. Racial Composition of Applicants and Admittees

<table>
<thead>
<tr>
<th>Year</th>
<th>Applicants</th>
<th>Admittees</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black</td>
<td>5%</td>
<td>4%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>11%</td>
<td>9%</td>
</tr>
<tr>
<td>Asian</td>
<td>11%</td>
<td>12%</td>
</tr>
<tr>
<td>White</td>
<td>72%</td>
<td>75%</td>
</tr>
<tr>
<td>2006</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black</td>
<td>4%</td>
<td>3%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>11%</td>
<td>10%</td>
</tr>
<tr>
<td>Asian</td>
<td>11%</td>
<td>10%</td>
</tr>
<tr>
<td>White</td>
<td>74%</td>
<td>77%</td>
</tr>
<tr>
<td>2007</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black</td>
<td>7%</td>
<td>7%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>12%</td>
<td>10%</td>
</tr>
<tr>
<td>Asian</td>
<td>10%</td>
<td>10%</td>
</tr>
<tr>
<td>White</td>
<td>70%</td>
<td>74%</td>
</tr>
</tbody>
</table>

Applicants

Blacks made up a relatively small percentage of applicants in every year. In 2005, 5% of the applicant pool was black. In 2006, it was 4%. In 2007, blacks made up 7% of all UA’s law school applicants.

4 “No Response,” “American Indian,” “Native Hawaiian,” “Alaskan Native,” and “Other” were dropped from the analysis. In cases where the information could potentially lead to the identification of an individual student, the law school excluded the data from disclosure. The numbers are below.

<table>
<thead>
<tr>
<th>Year</th>
<th>Applicants</th>
<th>Admittees</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black</td>
<td>88</td>
<td>16</td>
</tr>
<tr>
<td>Hispanic</td>
<td>208</td>
<td>41</td>
</tr>
<tr>
<td>Asian</td>
<td>209</td>
<td>53</td>
</tr>
<tr>
<td>White</td>
<td>1322</td>
<td>335</td>
</tr>
<tr>
<td>2006</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black</td>
<td>72</td>
<td>20</td>
</tr>
<tr>
<td>Hispanic</td>
<td>234</td>
<td>55</td>
</tr>
<tr>
<td>Asian</td>
<td>231</td>
<td>57</td>
</tr>
<tr>
<td>White</td>
<td>1519</td>
<td>445</td>
</tr>
<tr>
<td>2007</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black</td>
<td>141</td>
<td>43</td>
</tr>
<tr>
<td>Hispanic</td>
<td>243</td>
<td>60</td>
</tr>
<tr>
<td>Asian</td>
<td>208</td>
<td>59</td>
</tr>
<tr>
<td>White</td>
<td>1407</td>
<td>453</td>
</tr>
</tbody>
</table>
Hispanics and Asians made up roughly the same percentage of applicants in all years. In 2005 and 2006, Hispanics made up 11% of all applicants, rising to 12% of the applicant pool in 2007. Asians also made up 11% of the pool in 2005 and 2006, while making up 10% in 2007.

Whites were the overwhelming majority of applicants. In 2005, 72% of applicants were white, rising to 74% in 2006. In 2007, whites were 70% of all applicants.

**Admittees**

In 2005, 4% of those admitted were black, as were 3% of admittees in 2006. In 2007, blacks made up 7% of those admitted to UA Law.

Hispanics were 9% of admittees in 2005, rising to 10% of admittees in 2006 and 2007.

Asians admitted to UA’s law school made up 12% of admittees in 2005, dropping to 10% of admittees in 2006 and 2007.

Whites made up the overwhelming majority of admittees as well as of applicants. In 2005, 75% of admittees were white, rising to 77% of those admitted in 2006. In 2007, whites as a percentage of those admitted dropped to 74%.
Admission Rates

Figure 2. University of Arizona College of Law Admission Rates

UA law school admitted black applicants at a lower rate compared to the other three groups (see Figure 2). In 2005, 18% of blacks were admitted, compared to 20% of Hispanics and 25% of Asians and whites. In 2006, 28% of blacks were admitted, a higher rate than that of Hispanics (24%) and Asians (25%), and only one point lower than the admission rate of whites (29%). In 2007, the black admission rate (30%) was two points lower than that of whites (32%) but five points higher than the admission rate for Hispanics (25%) and two points higher than the rate for Asians (28%).

UA admitted Hispanic applicants at lower rates compared to Asians and whites, although the Hispanic admission rate rose from 2005 to 2007. In 2005, 20% of Hispanics were admitted, compared to 25% of Asians and whites. In 2006, 24% of Hispanics were admitted, which was one point lower than the Asian admission rate and five points lower than the admission rate for whites. In 2007, the difference in admission rate had widened: 25% of Hispanics were admitted, which was three points lower than the Asian admission rate and seven points lower than that for whites.

Asian applicants, in turn, were admitted at the same rate as whites in 2005 (25%), but at a lower rate in 2006 and 2007 (25% and 29% in 2006; 28% and 32% in 2007).
Overall Group Comparisons of Admittees’ Test Scores and Grades

Methodology

Just as high school seniors seeking college admission take the SAT or the ACT, prospective law school students must take the Law School Admission Test (LSAT), a standardized multiple-choice test consisting of questions that aim to measure analytical reasoning, logical reasoning, and reading comprehension skills. Law school admission offices usually look carefully at the undergraduate grades and LSAT scores of their applicants. LSAT scores range from 120 to 180. The mean score for LSAT test takers is 150. An LSAT score of 160 is at the 84th percentile of all test takers, while a score of 140 is at the 36th percentile. An LSAT score of 170 is at the 98th percentile.

In the following section, we report group medians and related percentiles for LSAT scores and undergraduate GPAs of those admitted to the law school rather than reporting group means. The median LSAT score (i.e., the score at the 50th percentile) is that score where half the group scored above that number and half scored below it. Similarly, the median undergraduate GPA is that grade-point average where half of those in a particular group had GPAs above it and half below it. Using group medians rather than the means avoids placing greater weight on extreme cases than is warranted.

We also report scores at the 25th and 75th percentiles, again to deal with the problem of extreme cases. While the median represents the middle of the distribution of scores, the 25th and 75th percentile scores taken together represent the actual spread of scores. For example, a GPA of 3.2 at the 25th percentile means that 25 percent of GPAs were below 3.2, while 75 percent of scores were above it. A GPA of 3.9 at the 75th percentile means that 75 percent of scores were below 3.9, while 25 percent were above it.

The next section compares the LSAT scores and undergraduate GPAs of admittees by racial and ethnic group. That is, these are the test scores and grades of those admitted to the law school at the 25th, 50th, and 75th percentiles.
## Results

### LSAT Scores

**Figure 3. LSAT Scores for University of Arizona College of Law Admittees**

<table>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>75th</td>
<td>162</td>
<td>162</td>
<td>166</td>
<td>167</td>
<td>162</td>
<td>163</td>
<td>167</td>
<td>167</td>
<td>159</td>
<td>163</td>
<td>165</td>
<td>166</td>
</tr>
<tr>
<td>50th</td>
<td>155</td>
<td>158</td>
<td>163</td>
<td>164</td>
<td>156</td>
<td>159</td>
<td>164</td>
<td>164</td>
<td>156</td>
<td>159</td>
<td>163</td>
<td>164</td>
</tr>
<tr>
<td>25th</td>
<td>153</td>
<td>156</td>
<td>161</td>
<td>162</td>
<td>154</td>
<td>155</td>
<td>161</td>
<td>163</td>
<td>153</td>
<td>155</td>
<td>161</td>
<td>161</td>
</tr>
</tbody>
</table>

As shown in Figure 3, black admittees had lower median scores compared to the other groups in every year. In 2005, the median score for blacks (155) was three points lower than the Hispanic median, eight points lower than the Asian median, and nine points lower than the white median. In 2006, the black median (156) was three points lower than the Hispanic median and eight points lower than the Asian/white medians. In 2007, the gaps were similar—three points between black and Hispanic medians, seven points between black and Asian medians, and eight points between black and white medians. In all three years, the black 75th percentile score was at or below the white 25th percentile score. That is, 75 percent of all blacks admitted scored lower than all but 25 percent of whites admitted.

Hispanic median scores were, in turn, lower than those of Asian and white admittees. In 2005, the Hispanic median score (158) was five points lower than the Asian median, and six points lower than that of whites. In 2006, the median Hispanic score (159) was five
points lower than the medians of Asians and whites. In 2007, the Hispanic median score (also 159) was four points lower than the Asian median and five points lower than the median score of white admittees.

The Asian median was one point lower than the white median in 2005 and 2007, and the same in 2006.

**Undergraduate GPAs**

*Figure 4. Undergraduate GPAs for University of Arizona College of Law Admittees*

As shown in Figure 4, the median college GPA of black admittees was equal to the Hispanic median in 2005 and lower than the Hispanic median in 2006 and 2007. It was also lower than the median GPA of Asian and white admittees in all three years.

The Hispanic median GPA in 2005 and 2007 (3.5) was one-tenth of a point lower than the median GPA of Asians in 2005 and 2007, and was the same as the Asian median in 2006. It was one-tenth of a point lower than the white median GPA in all three years.

The median GPA of Asian admittees was the same as that of white admittees in 2005 and 2007 (3.6), and one-tenth lower in 2006.
Next we compare the test scores and undergraduate GPAs of Hispanics, Asians, and whites rejected by the law school with the median test scores and GPAs of black admittees. That is, we are looking at applicants who were rejected despite having higher LSAT scores and GPAs than the average test scores and grades of black admittees.

As shown in Table 2, UA admitted every black applicant with higher test scores and grades compared to the black admittee median. In contrast, 25 Hispanics, 65 Asians, and 764 whites were rejected despite test scores and grades higher than the average scores and grades of black admittees.
Logistic Regression Analysis and Odds Ratios

Methodology

Admitting students based on racial and ethnic preferences results in schools accepting preferred minorities with lower test scores and grades than those of nonpreferred minorities and white students at the same school. Admission officers essentially reach down into the applicant pool and pull up certain students, a practice that necessarily results in at least some whites with better credentials than preferred minority admittees being rejected from the same schools, despite their superior qualifications.

Although the data presented thus far provide substantial evidence of the operation of racial and ethnic preferences in admissions at UA’s College of Law, it is possible to make the case even stronger and considerably more precise. The most powerful means of assessing the degree of racial and ethnic preference in admissions is to develop a statistical model that predicts the probability of admission at a school for members of the different ethnic and racial groups, holding constant their qualifications. Computing a multiple logistic regression equation that predicts admission decisions by race and ethnicity and that includes LSAT scores and undergraduate GPAs, among other things, as statistical control variables does this.

Multiple logistic regression analysis was used as the preferred statistical technique because of the nature of the data provided. One way of conventionally expressing a relationship between the independent and dependent variable is by using correlation coefficients. A negative correlation coefficient of -1.0 signifies a perfect negative relationship between the independent (predictor) variable and the dependent (or outcome) variable, whereby an increase in the value of the independent variable yields a decrease in the value of the dependent variable. A positive correlation coefficient of 1.0 signifies a perfect positive relationship between the two variables; as the independent variable increases, so does the dependent variable. Strictly speaking, however, one cannot use correlations to analyze admissions data because correlations and standard multiple regression analysis require a dependent variable that is non-binary in form. In the case of an applicant’s admission status, the dependent variable (individual admission status) is a binary dependent variable—reject versus admit. To address this binary-variable problem, we rely on multiple logistic regression equations and their corresponding odds ratios.
The odds ratio is somewhat like a correlation coefficient, except instead of varying from 1.0 to –1.0, it varies between zero and infinity. An odds ratio of 1.0 to 1 means that the odds of admissions for the two groups are equal. It is equivalent to a correlation of zero. An odds ratio greater than 1.0 to 1 means that the relative odds of members of Group A being admitted are greater than those for members of Group B, in precisely the amount calculated. An odds ratio of less than 1.0 to 1 means the members of Group A are less likely to be admitted than those in Group B. The former is similar to a positive correlation, the latter similar to a negative correlation.

The statistical technique of multiple logistic regression allows us to present admissions data in terms of the relative odds of those in Group A being admitted as compared to Group B while simultaneously controlling for a host of other possibly confounding variables. The value of the odds ratio is that it provides a relatively direct summary measure of the degree of racial or ethnic preference given in the admissions process for a given group at a particular school.

Logistic regression equations predicting the likelihood of admissions were computed for the 2005, 2006, and 2007 applicant pools, controlling for LSAT scores, undergraduate grade-point averages, sex, and in-state residency. We were able to derive the odds of admission from these equations for each minority group relative to that of whites, while simultaneously controlling for the effects of these other variables.\(^5\)

Logistic regression analysis also allows us to test for statistical significance. Statistical calculations always include what is called a \(p\)-value. When results are deemed to be statistically significant, this means that the calculated \(p\)-value is less than some predetermined cutoff level of significance. The level of significance conventionally is reported in the form of “\(p \leq .05\).” This value means that, with these data, there is a probability equal to or less than 5 percent that the difference found between one group and another (e.g., blacks versus whites, Hispanics versus whites, or Asians versus whites, since minority groups are being compared to whites) is due to chance. It is a convention in statistical studies to use the 0.05 value. In more stringent analyses, 0.01 (one in 100) or occasionally 0.001 (one in 1,000) or even 0.0001 (one in 10,000) can be used as the cutoff. Any \(p\) value greater than 0.05 (or the more stringent 0.01) is rejected, and the results are said to be nonsignificant. A difference that is statistically significant, however, has very little chance of being the result of chance—that is, a statistical fluke.

In the next section, we discuss odds ratios derived from comparing blacks to whites, Hispanics to whites, and Asians to whites in UA’s law school admission process. Statistical significance is also noted. The size of the odds ratio reflects the strength of the association between race or ethnicity and admission status. Another way to state this is that the odds ratio measures the magnitude of the preference given relative to the baseline

\(^5\) For a discussion of logistic regression and a more complete discussion of odds ratios, see Alan Agresti, *Introduction to Categorical Data Analysis* (New York: John Wiley and Sons, 1996).
group (here, whites). An odds ratio equal to or greater than 3.0 to 1 is commonly thought to reflect a strong association; an odds ratio less than 3.0 to 1 but greater than 1.5 to 1 reflects a moderate association; while a relative odds ratio of 1.5 or less to 1 indicates a weak association. Of course, an odds ratio of 1.0 to 1 indicates no relationship.\(^6\) Note that a very strong association might be taken to be the rough equivalent of the relative odds of smokers versus nonsmokers dying from lung cancer, which in one well-known study is calculated as 14 to 1.\(^7\)

**Results: Relative Odds of Admission, Controlling for Other Factors**

Table 3. Odds of Blacks, Hispanics, and Asians Being Admitted over White Applicants, Controlling for Other Factors

<table>
<thead>
<tr>
<th></th>
<th>Odds Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black over White</td>
<td>250 to 1</td>
</tr>
<tr>
<td>Hispanic over White</td>
<td>18 to 1</td>
</tr>
<tr>
<td>Asian over White</td>
<td>3 to 1</td>
</tr>
</tbody>
</table>

Note: p-values for the odds ratios above are all less than 0.0001.

Table 3 displays the odds ratios of blacks, Hispanics, and Asians being admitted over white applicants with the same test scores and grades, controlling for other factors.

When one controls for the year of admission, LSAT scores, college GPA, gender, and residency, the black-over-white odds ratio is roughly 250 to 1. This displays an extremely large degree of preference awarded black over white applicants with identical qualifications.

The Hispanic-over-white odds ratio is also quite large. Hispanic applicants are favored over white applicants with the same academic qualifications and background, by a factor of 18 to 1.

The Asian-over-white odds ratio also shows preference given Asian applicants over white applicants, by 3 to 1, which is a strong association when controlling for other factors.

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\(^7\) Taken from a 20-year longitudinal study of British male physicians by R. Doll and R. Peto, as quoted in Agresti, *Introduction to Categorical Data Analysis*, p. 47.
Probabilities of Admission

The meaning of logistic regression equations and their associated odds ratios may be difficult to grasp because the equations are complex and hard to explain without resorting to mathematical formulations. A more intuitive way to grasp the underlying dynamic of preferential admissions is to convert these logistic regression equations into estimates of the probabilities of admission for individuals with different racial/ethnic group membership, given the same LSAT scores and grades. In this section, we compare the probabilities of admission for individuals belonging to these different groups, using the logistic regression equation specific to each year. The probability calculations provide an estimate of the admission chances for members of each group, all with the same test scores and grades, residency, and sex.

We chose to examine the probabilities for an in-state male applicant with the same LSAT score and undergraduate GPA as the median for black admittees of each year. The same set of test scores and undergraduate GPAs is entered for blacks, whites, Hispanics, and Asians. Chances of admission were then calculated for a black applicant, a white applicant, a Hispanic applicant, and an Asian applicant with those academic qualifications. These calculations do not change the statistical results reported in the earlier section on odds ratios. They simply provide an easier-to-understand interpretation of their meaning.

The differences in odds ratios illuminate large differences in the probability of admission based on an applicant’s race. The probability of admission is presented in Figure 5. It shows the probability of admission for blacks, Hispanics, Asians, and whites, for the same test scores and grades in a particular year.

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8 One can compare probabilities of admission for any combination of academic qualifications, residency, and sex. The equation for calculating probabilities is in Appendix 2.
Figure 5. Probabilities of Admission *

<table>
<thead>
<tr>
<th></th>
<th>A. In-State</th>
<th>B. Out of State</th>
<th>A. In-State</th>
<th>B. Out of State</th>
<th>A. In-State</th>
<th>B. Out of State</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>92%</td>
<td>53%</td>
<td>93%</td>
<td>58%</td>
<td>96%</td>
<td>71%</td>
</tr>
<tr>
<td>2006</td>
<td>45%</td>
<td>8%</td>
<td>50%</td>
<td>9%</td>
<td>64%</td>
<td>15%</td>
</tr>
<tr>
<td>2007</td>
<td>10%</td>
<td>1%</td>
<td>12%</td>
<td>1%</td>
<td>20%</td>
<td>2%</td>
</tr>
</tbody>
</table>

* Assumes applicant is a male with the same LSAT score and undergraduate GPA as the median for black admittees in each year.

Figure 5 shows the probability of admission for the four groups, divided into in-state and out-of-state applicants. Applicants were assumed to have an LSAT score and college GPA equal to the median of black admittees in 2005, 2006, and 2007, respectively. The extremely large weight given to race can be particularly appreciated when comparing the likelihood of admission of black, Hispanic, Asian and white Arizona applicants with out-of-state applicants of the same racial and ethnic groups, all with the same academic credentials as the average black admittee. The odds ratios favoring blacks and Hispanics over whites (250 to 1 and 18 to 1, respectively), for example, are much larger than the 10-to-1 odds ratio favoring Arizona residents over non-residents (controlling for all other factors).

Accordingly, the results are that, with the same credentials as the average black admittee, Hispanic, Asian, and white residents were all less likely to be admitted compared to black residents and even when compared to black non-residents in 2005, 2006 and 2007.

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9 The median LSAT score for black admittees was 155 in 2005 and 156 in 2006 and 2007. The median college GPA for black admittees was 3.5 in 2005, 3.3 in 2006, and 3.4 in 2007.

10 Gender gives an applicant a relatively small advantage, with an odds ratio favoring women over men by roughly 2 to 1.
In 2005, with the same test scores and grades as the average black admittee, a black male from Arizona would have a 92% chance of admission, while a black non-resident would have a 53% chance of admission.

Hispanic in-state applicants in 2005 with the same test scores and grades as the average black admittee had a 45% chance of admission – a smaller probability of admission compared to black applicants, both in-state and out-of-state (92% and 53%, respectively).

Asian in-state applicants in 2005 with the same test scores and grades as the average black admittee had a 10% chance of admission. This was significantly smaller compared to black in-state and out-of-state applicants (again, 92% and 53%, respectively).

White in-state applicants in 2005 with the same academic credentials as the average black admittee had the smallest probability of admission among all in-state applicant groups (4%). It is significantly smaller than the 92% chance for black residents, the 45% chance for Hispanic residents, and the 12% chance for Asian residents. Moreover, white in-state applicants in 2005 also had a smaller likelihood of admission compared to out-of-state blacks (53%) and out-of-state Hispanics (8%).

In 2006, with the same test scores and grades as the average black admittee, a black male from Arizona had a 93% chance of admission, while a black non-resident had a 58% chance.

In the same year and with the same scores and grades, a Hispanic resident had a 50% chance of admission while an Asian resident had a 12% chance. Both were smaller chances of admission compared to the 93% chance for an in-state black and the 58% chance of an out-of-state black applicant.

White residents in 2006 with the same credentials had the smallest admissions probability of all racial and ethnic groups in Arizona. White residents had a 5% chance of admission, compared to a 93% chance for black residents, a 50% chance for Hispanic residents, and a 12% chance for Asian residents. White in-state applicants also had a smaller chance of admission compared to out-of-state blacks (58%) and out-of-state Hispanics (9%).

In 2007, with the same scores and grades as the average black admittee, black in-state applicants had a 96% chance of admission. Black out-of-state applicants had 71% chance.

Hispanic residents had a 64% chance of admission, which was smaller than the admission chances of both black residents and black non-residents (96% and 71% chance, respectively).

An Asian resident had a 20% chance of admission in 2007, which was lower than the admission chances of in-state blacks (96%) and Hispanics (64%) with the same academic credentials. It was also smaller than the admission chances of out-of-state blacks (71%).
White residents in 2007 had the smallest admissions probability of all ethnic and racial groups. White *in-state* applicants had a 9% chance of admission, compared to a 96% chance for *in-state* blacks, a 64% chance for *in-state* Hispanics, and a 20% chance for *in-state* Asians. White residents also had a smaller chance of admission compared to *out-of-state* blacks (71%) and *out-of-state* Hispanics (15%).
Appendices

Appendix 1. Logistic Regression Equations

<table>
<thead>
<tr>
<th>Unstandardized Regression Coefficient</th>
<th>Odds Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year</td>
<td>0.2631</td>
</tr>
<tr>
<td>LSAT</td>
<td>0.5622</td>
</tr>
<tr>
<td>GPA</td>
<td>3.2110</td>
</tr>
<tr>
<td>Black</td>
<td>5.5216</td>
</tr>
<tr>
<td>Asian</td>
<td>0.9316</td>
</tr>
<tr>
<td>Hispanic</td>
<td>2.8984</td>
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<tr>
<td>Female</td>
<td>0.6819</td>
</tr>
<tr>
<td>Resident</td>
<td>2.2993</td>
</tr>
<tr>
<td>Constant</td>
<td>-631.2862</td>
</tr>
</tbody>
</table>

*p<0.0001

Appendix 2. Calculating the Probability of Admission

Probability of Admission to UA College of Law = A/(1+A)

A= EXP((0.2631*Year) + (0.5622*LSAT) + (3.2110*GPA) + (5.5216*Black) + (0.9316*Asian) + (2.8984*Hispanic) + (0.6819*Gender) + (2.2993*Resident) + (-631.2862))
The Center for Equal Opportunity (CEO) is a non-profit research institution established under Section 501(c)(3) of the Internal Revenue Code. CEO sponsors conferences, supports research, and publishes policy briefs and monographs on issues related to race, ethnicity, and public policy.

Linda Chavez, Chairman