EXHIBIT 145
Admissions Part II
Subtitle

February 14, 2012
• Athletes and Legacies explain the difference in raw admit rates for Asian and White applicants.

• Asian applicants have higher average ratings and test scores (excluding the personal rating).

• Differences exist in the raw admit rates of Asian and White students with similar test scores and academic indices. Even top scores and ratings don’t guarantee admission.

• Personal rating is important in models of the admissions process and drive some of the demographic differences we see.
### Admit Rates by Ethnicity, Classes of 2007-2016

<table>
<thead>
<tr>
<th>Year</th>
<th>Admit Rate -White</th>
<th>Admit Rate -Asian</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>7.60%</td>
<td>11.69%</td>
<td>4.09%</td>
</tr>
<tr>
<td>2008</td>
<td>9.39%</td>
<td>12.13%</td>
<td>2.74%</td>
</tr>
<tr>
<td>2009</td>
<td>7.72%</td>
<td>11.27%</td>
<td>3.55%</td>
</tr>
<tr>
<td>2010</td>
<td>7.71%</td>
<td>11.58%</td>
<td>3.88%</td>
</tr>
<tr>
<td>2011</td>
<td>8.56%</td>
<td>10.94%</td>
<td>2.38%</td>
</tr>
<tr>
<td>2012</td>
<td>7.72%</td>
<td>9.93%</td>
<td>2.21%</td>
</tr>
<tr>
<td>2013</td>
<td>6.57%</td>
<td>9.11%</td>
<td>2.54%</td>
</tr>
<tr>
<td>2014</td>
<td>6.36%</td>
<td>8.76%</td>
<td>2.40%</td>
</tr>
<tr>
<td>2015</td>
<td>5.45%</td>
<td>7.58%</td>
<td>2.14%</td>
</tr>
<tr>
<td>2016</td>
<td>6.02%</td>
<td>7.50%</td>
<td>1.48%</td>
</tr>
</tbody>
</table>
Non-Legacy, Non-Athlete Admit Rates by Ethnicity, Classes of 2007-2016

<table>
<thead>
<tr>
<th>Year</th>
<th>White</th>
<th>Asian</th>
<th>African American</th>
<th>International</th>
<th>Hispanic</th>
<th>Native American</th>
<th>Unknown</th>
<th>Native American</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>7.21%</td>
<td>8.75%</td>
<td>1.54%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2008</td>
<td>8.90%</td>
<td>8.79%</td>
<td>-0.12%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2009</td>
<td>7.34%</td>
<td>8.30%</td>
<td>0.96%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td>7.34%</td>
<td>8.26%</td>
<td>0.93%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td>8.09%</td>
<td>7.46%</td>
<td>-0.64%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td>7.21%</td>
<td>7.17%</td>
<td>-0.04%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2013</td>
<td>6.00%</td>
<td>6.46%</td>
<td>0.46%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2014</td>
<td>5.96%</td>
<td>6.25%</td>
<td>0.29%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2015</td>
<td>4.93%</td>
<td>5.32%</td>
<td>0.38%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2016</td>
<td>5.34%</td>
<td>5.09%</td>
<td>-0.25%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Notes:

- Excludes legacies and athletes.
- OIR doesn’t have all ratings for all years, so number of applicants differs for each rating/test score.
- Differences are in standard deviations.
Admit Rates by Academic Index for White and Asian Applicants, Classes of 2007-2016

Notes:
- Excludes legacies and athletes.
- Academic Index doesn’t account for everything in admissions process. Even top rated students barely have a 50% admit rate.
Admit Rates by Average SAT I for White and Asian Applicants, Classes of 2007-2016

Notes:
• Excludes legacies and athletes.
• Spikiness in distribution due to rounding averages to integers.
Odds Ratios for Main Effect Logistic Model

High Personal Rating
African American
Legacy
Native American
High Extracurricular Rating
Early Applicant
High Academic Rating
Hispanic
z-Academic Index
First Generation
Class of 2008
Class of 2012
Class of 2014
Class of 2013
Class of 2011
Class of 2010
Class of 2009
Class of 2015
Average SAT II
Average SAT I
Unknown
International
Female
Class of 2016
Asian
Other

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**Logit Coefficients for Main Effect Logistic Model**

- High Personal Rating
- African American Legacy
- Native American
- High Extracurricular Rating
- Early Applicant
- High Academic Rating
- Hispanic
- z-Academic Index
- First Generation
- Class of 2008
- Class of 2012
- Class of 2014
- Class of 2013
- Class of 2011
- Class of 2010
- Class of 2009
- Class of 2015
- Average SAT II
- Average SAT I
- Unknown
- International
- Female
- Class of 2016
- Asian
- Other

-1 -0.5 0 0.5 1 1.5 2 2.5
Methods

Goal: Using various admissions ratings, how well can we approximate admit rates by race/ethnicity and the demographic composition of the admitted students pool?

Strategy:
• Fit a series of basic logistic regression models.
• Generate fitted probabilities of admissions - given an applicant’s characteristics how likely are they to be admitted (0-1)?
• For each class, select the 2100 applicants with the highest probability of admissions as our simulated admitted class.
• Examine resulting demographics and admit rates by ethnicity.

Notes:
• Students with no academic index are excluded from this analysis. N = , admit rate =

<table>
<thead>
<tr>
<th>Model 1: Academic only</th>
<th>Model 2: Add legacy and athlete</th>
<th>Model 3: Add personal and extracurricular</th>
<th>Model 4: Add demographics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic Index</td>
<td>Academic Index</td>
<td>Academic Index</td>
<td>Academic Index</td>
</tr>
<tr>
<td>Academic Rating</td>
<td>Academic Rating</td>
<td>Academic Rating</td>
<td>Academic Rating</td>
</tr>
<tr>
<td>legacy</td>
<td>legacy</td>
<td>legacy</td>
<td>legacy</td>
</tr>
<tr>
<td>athlete</td>
<td>athlete</td>
<td>athlete</td>
<td>athlete</td>
</tr>
<tr>
<td></td>
<td>Personal Rating</td>
<td>Personal Rating</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Extracurricular Rating</td>
<td>Extracurricular Rating</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Gender</td>
<td>Ethnicity</td>
<td></td>
</tr>
</tbody>
</table>
Projected Admitted Student Pools

Preliminary Draft

100% - 90%
80% - 70%
60% - 50%
40% - 30%
20% - 10%
0% - 0%

Model 1: Academics Only
Model 2: Legacy and Athlete
Model 3: Extracurricular and Personal
Model 4: Demographics
Actual

Native American
Hispanic
International
African American
Unknown
Asian
White

<table>
<thead>
<tr>
<th></th>
<th>Academics Only</th>
<th>Legacy and Athlete</th>
<th>Extracurricular and Personal</th>
<th>Demographics</th>
<th>Actual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model 1</td>
<td>43.04%</td>
<td>31.40%</td>
<td>25.99%</td>
<td>17.97%</td>
<td>18.66%</td>
</tr>
<tr>
<td>Model 2</td>
<td>0.67%</td>
<td>1.83%</td>
<td>2.36%</td>
<td>11.12%</td>
<td>10.46%</td>
</tr>
<tr>
<td>Model 3</td>
<td>7.27%</td>
<td>5.86%</td>
<td>7.39%</td>
<td>7.68%</td>
<td>8.90%</td>
</tr>
<tr>
<td>Model 4</td>
<td>2.42%</td>
<td>2.62%</td>
<td>4.07%</td>
<td>9.83%</td>
<td>9.46%</td>
</tr>
<tr>
<td>Model 4</td>
<td>0.21%</td>
<td>0.32%</td>
<td>0.41%</td>
<td>1.21%</td>
<td>1.23%</td>
</tr>
<tr>
<td>Model 4</td>
<td>8.02%</td>
<td>9.93%</td>
<td>9.14%</td>
<td>8.11%</td>
<td>8.09%</td>
</tr>
<tr>
<td>White</td>
<td>38.37%</td>
<td>48.03%</td>
<td>50.63%</td>
<td>44.08%</td>
<td>43.71%</td>
</tr>
</tbody>
</table>
### Projected Admit Rates

**Model 1**
- Academics Only: 17.35%
- Legacy and Athlete: 12.66%
- Extracurricular and Personal: 10.48%
- Demographics: 7.24%
- Actual: 7.63%

**Model 2**
- Academics Only: 0.75%
- Legacy and Athlete: 2.07%
- Extracurricular and Personal: 2.67%
- Demographics: 12.59%
- Actual: 12.00%

**Model 3**
- Academics Only: 5.13%
- Legacy and Athlete: 4.14%
- Extracurricular and Personal: 5.22%
- Demographics: 5.42%
- Actual: 6.37%

**Model 4**
- Academics Only: 2.34%
- Legacy and Athlete: 2.53%
- Extracurricular and Personal: 3.94%
- Demographics: 9.51%
- Actual: 9.27%

**Actual**
- Academics Only: 1.97%
- Legacy and Athlete: 2.98%
- Extracurricular and Personal: 3.81%
- Demographics: 11.17%
- Actual: 11.43%

- Unknown: 9.45%
- Legacy and Athlete: 11.70%
- Extracurricular and Personal: 10.77%
- Demographics: 9.56%
- Actual: 9.67%

- White: 9.43%
- Legacy and Athlete: 11.81%
- Extracurricular and Personal: 12.45%
- Demographics: 10.84%
- Actual: 10.77%

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The Personal Rating: Numeric value doesn’t capture full picture of applicant

**Inputs**

- SAT Scores
- GPA
- Alumni Interview
- Teacher Ratings
- Guidance Counselor Ratings
- Application Essay?

**Outputs**

- Reader classifies student → Academic Rating
- Calculation performed → Academic Index
- Reader classifies student → Personal Rating

<table>
<thead>
<tr>
<th>Academic Index</th>
<th>SAT Scores + GPA</th>
<th>Accounts for 98% of the variation in Academic Index. Academic Index is a weighted average.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic Rating</td>
<td>SAT Scores + GPA</td>
<td>Accounts for 70% of the variation in Academic Rating. Can't explain some of the variation because Academic Rating data doesn't include the granularity provided by + and -. Also potentially some noise due to readers</td>
</tr>
<tr>
<td>Personal Rating</td>
<td>School Support + Alumni Interviews</td>
<td>Accounts for 20% of the variation in Personal Rating. Inputs of Teacher Evaluations, Guidance Counselor Evaluations, and Alumni Interviews don't fully explain how Personal Ratings are assigned. Don't have any numeric rating of personal statement.</td>
</tr>
</tbody>
</table>

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Admit Rates by Region for White and Asian Non-Athlete, Non-Legacy Applicants, Classes of 2007-2016

<table>
<thead>
<tr>
<th>Region</th>
<th>Percent Asian</th>
<th>Percent White</th>
<th>Total Applicants</th>
</tr>
</thead>
<tbody>
<tr>
<td>CA and Northwest</td>
<td>39%</td>
<td>23%</td>
<td>42,033</td>
</tr>
<tr>
<td>Texas</td>
<td>28%</td>
<td>28%</td>
<td>12,165</td>
</tr>
<tr>
<td>Northeast and Atlantic</td>
<td>25%</td>
<td>28%</td>
<td>31,706</td>
</tr>
<tr>
<td>Great Lakes</td>
<td>24%</td>
<td>23%</td>
<td>22,000</td>
</tr>
<tr>
<td>New York</td>
<td>23%</td>
<td>23%</td>
<td>21,373</td>
</tr>
<tr>
<td>Massachusetts</td>
<td>20%</td>
<td>20%</td>
<td>17,161</td>
</tr>
<tr>
<td>South</td>
<td>20%</td>
<td>20%</td>
<td>31,135</td>
</tr>
<tr>
<td>Midwest and Southwest</td>
<td>20%</td>
<td>20%</td>
<td>15,733</td>
</tr>
</tbody>
</table>

Notes:
- Excludes legacies and athletes.
• Information lost by not recording plusses and minuses.

• Yield considered when admitting students?

• Other factors not used in models:
  • Children faculty/staff
  • Search for socioeconomic diversity
  • High school quality/opportunities open to student
  • Dockets