EXHIBIT 155

Modeling Admissions to Harvard College: Preliminary Analysis
Office of Institutional Research
CONFIDENTIAL DRAFT
October 8, 2013

Goal: Using various admissions ratings, how well can we approximate admit rates by race/ethnicity and the demographic composition of the admitted students pool?
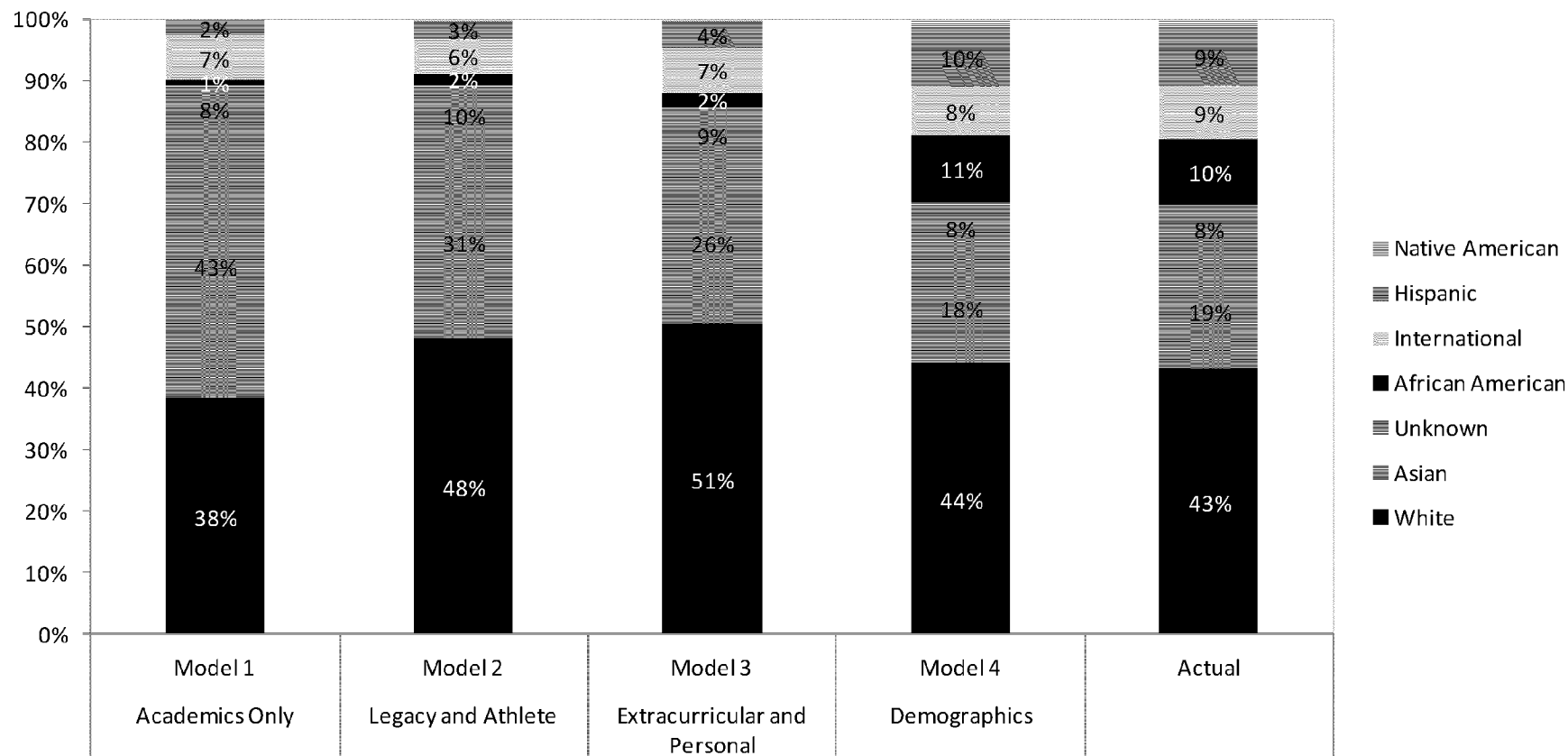
Strategy:
- Fit a series of basic logistic regression models.

- 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:
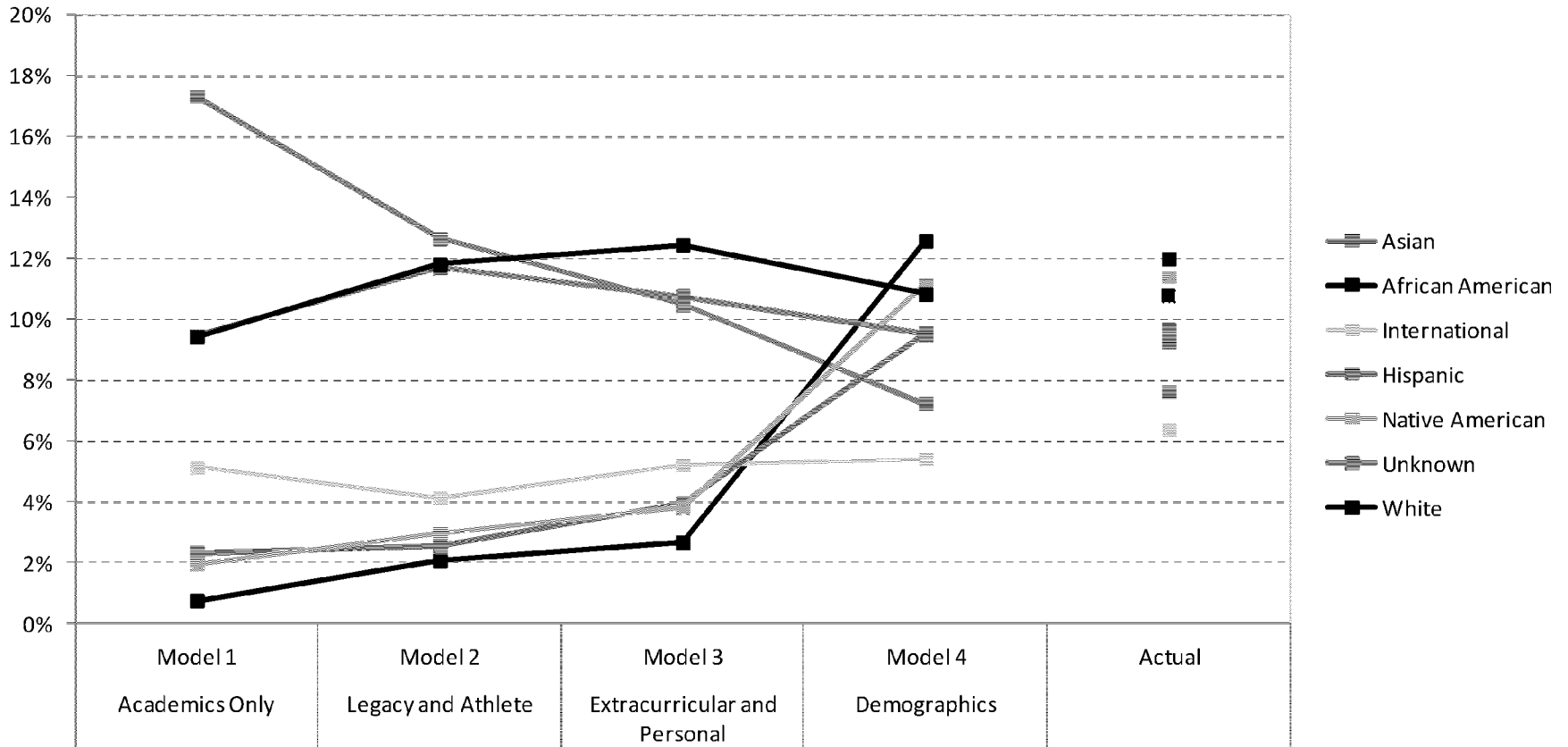- This analysis uses the classes of 2007-2016, excluding students with missing data
- N=193,306

Model 1: Academic only	Model 2: Add legacy and athlete	Model 3: Add personal and extracurricular	Model 4: Add demographics
Academic Index	Academic Index	Academic Index	Academic Index
Academic Rating	Academic Rating	Academic Rating	Academic Rating
	legacy	legacy	legacy
	athlete	athlete	athlete
		Personal Rating	Personal Rating
		Extracurricular Rating	Extracurricular Rating
			Gender
			Ethnicity

Projected Admitted Student Pools

	Academics Only	Legacy and Athlete	Extracurricular and Personal	Demographics	
	Model 1	**Model 2**	**Model 3**	**Model 4**	**Actual**
Asian	43.04%	31.40%	25.99%	17.97%	18.66%
African American	0.67%	1.83%	2.36%	11.12%	10.46%
International	7.27%	5.86%	7.39%	7.68%	8.90%
Hispanic	2.42%	2.62%	4.07%	9.83%	9.46%
Native American	0.21%	0.32%	0.41%	1.21%	1.23%
Unknown	8.02%	9.93%	9.14%	8.11%	8.09%
White	38.37%	48.03%	50.63%	44.08%	43.21%

Projected Admit Rates

	Academics Only	Legacy and Athlete	Extracurricular and Personal	Demographics	
	Model 1	**Model 2**	**Model 3**	**Model 4**	**Actual**
Asian	17.35%	12.66%	10.48%	7.24%	7.63%
African American	0.75%	2.07%	2.67%	12.59%	12.00%
International	5.13%	4.14%	5.22%	5.42%	6.37%
Hispanic	2.34%	2.53%	3.94%	9.51%	9.27%
Native American	1.97%	2.98%	3.81%	11.17%	11.43%
Unknown	9.45%	11.70%	10.77%	9.56%	9.67%
White	9.43%	11.81%	12.45%	10.84%	10.77%

Admit Rates

	Model 4	Actual	Difference
Asian	7.24%	7.63%	-0.39%
African American	12.59%	12.00%	0.59%
International	5.42%	6.37%	-0.95%
Hispanic	9.51%	9.27%	0.23%
Native American	11.17%	11.43%	-0.26%
Unknown	9.56%	9.67%	-0.12%
White	10.84%	10.77%	0.06%

Entering Classes

	Model 4	Actual	Difference
Asian	17.97%	18.66%	-0.69%
African American	11.12%	10.46%	0.66%
International	7.68%	8.90%	-1.22%
Hispanic	9.83%	9.46%	0.37%
Native American	1.21%	1.23%	-0.02%
Unknown	8.11%	8.09%	0.02%
White	44.08%	43.21%	0.87%

- **Identify additional factors that might be alternatives to race in admissions**
    - **Socio-economic status (fee waiver)**
    - **Geography (zip code)**
    - **Others?**

- **Test these factors in predicting admissions and compare the results to actual admitted classes**