

Diversifying Society's Leaders? The Determinants and Consequences of Admission to Highly Selective Colleges

RAJ CHETTY, DAVID J. DEMING, JOHN N. FRIEDMAN



Highly selective private colleges in America could significantly increase socioeconomic diversity among the country's leaders by changing their admissions practices.

Leadership positions in the United States are held disproportionately by graduates of a group of 12 highly selective, private “Ivy-Plus” colleges—the eight colleges in the Ivy League, the University of Chicago, Duke, MIT, and Stanford. Less than one percent of Americans attend these 12 colleges, yet they account for 13.4% of those in the top 0.1% of the income distribution, a quarter of U.S. Senators, half of all Rhodes scholars, and three-fourths of Supreme Court justices appointed in the last half-century (Figure 1).

Furthermore, the students who attend Ivy-Plus institutions disproportionately come from high-income backgrounds themselves: just 10% of students scoring at the 99th percentile on the SAT/ACT from middle-class families attend an Ivy-Plus college, compared with 40% of similarly high-scoring students from families in the top 1 percent of the income distribution (Figure 2).

These two facts motivate our central question: **Do highly selective colleges perpetuate privilege across generations and, conversely, could these colleges diversify America's leaders by changing their admissions policies?**

We answer this question using a “big data” approach—combining anonymized admissions data from several private and public colleges linked to parents' and students' income tax records and students' SAT/ACT scores. We find that certain admissions practices at Ivy-Plus colleges—legacy preferences, weight placed on non-academic factors, and athletic recruitment—give children from high-income families an advantage in admissions. Furthermore, being admitted to an Ivy-Plus college dramatically changes children's life trajectories, giving them much greater chances of reaching positions of leadership. Together, these results imply that Ivy-Plus colleges could significantly increase the socioeconomic diversity of America's leaders by changing their admissions practices.

KEY FINDINGS

- Ivy-Plus colleges are more than twice as likely to admit a student from a high-income family as compared to low- or middle-income families with comparable SAT/ACT scores.
- Higher admission rates for students from high-income families can be attributed to three factors: preferences for children of alumni (legacies), higher non-academic ratings, and athletic recruitment.
- The three factors underlying the high-income admissions advantage are not associated with better post-college outcomes; in contrast, SAT/ACT scores and academic ratings are highly predictive of post-college success.
- Attending an Ivy-Plus instead of a flagship public college triples students' chances of obtaining jobs at prestigious firms and substantially increases their chances of earning in the top 1%.
- By changing their admissions policies, Ivy-Plus colleges could significantly diversify the socioeconomic backgrounds of America's highest earners and leaders.

[Explore new college-level data for 139 selective American colleges](#) ↗

FIGURE 1: High-income and leadership positions in the U.S. are disproportionately held by people who attended Ivy-Plus colleges.

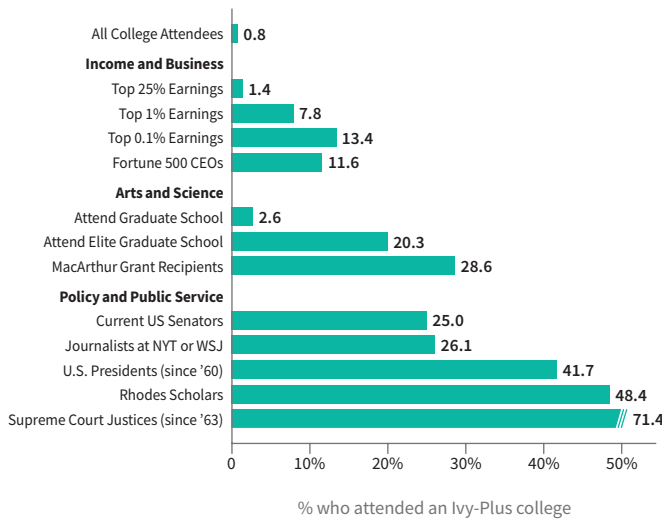


Figure 1 shows the proportion of individuals in various positions who attended an Ivy-Plus college as an undergraduate.

[Download Figure](#)

FIGURE 2: Among students scoring at the 99th percentile on the SAT/ACT, students from the highest income families attend Ivy-Plus colleges at far greater rates than those from lower-income families.

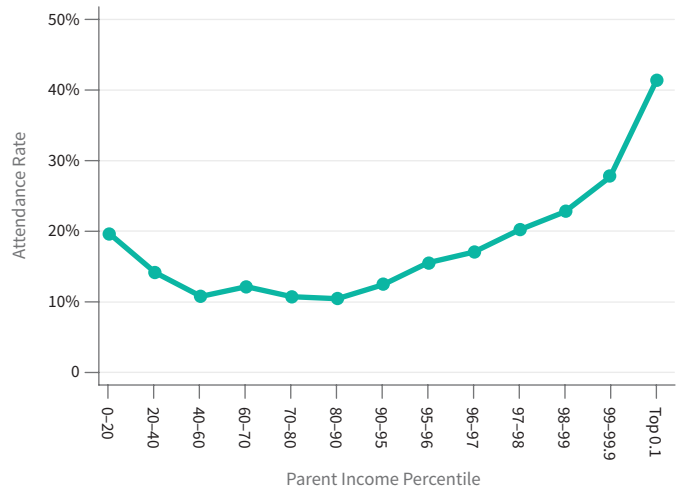


Figure 2 shows the undergraduate Ivy-Plus attendance rate according to families' income for students scoring at the 99th percentile on the SAT/ACT (SAT score of 1510 or ACT score of 34). Families in the top 1% earn >\$611,000; those between the 70th to 80th percentile (the midpoint of the income distribution for Ivy-Plus applicants) earn between \$91,000 - \$114,000; and those below the 20th percentile earn <\$23,000.

[Download Figure](#)

FINDING 1

Ivy-Plus colleges are more than twice as likely to admit a student from a high-income family as compared to low- or middle-income families with comparable SAT/ACT scores.

The over-representation of students from high-income families at Ivy-Plus colleges is driven largely by differences in **admissions rates**, rather than differences in application or enrollment among those who are admitted. Students from the top 1% of the income distribution are nearly twice as likely to be admitted to Ivy-Plus colleges as compared to applicants from low- or middle-income families with comparable SAT/ACT scores (Figure 3). This higher admissions rate leads to 114 extra students from the top 1% in a typical Ivy-Plus class (of 1,650 students) relative to a benchmark in which students are admitted at the same rates across the parental income distribution conditional on their test scores.

In contrast, admission rates at flagship public colleges do not vary with parental income conditional on students' test scores. However, students from higher-income families are more likely to **apply** to flagship public colleges—showing that public colleges could potentially do more to recruit applications from lower-income families.

FIGURE 3: Ivy-Plus colleges admit students from the highest income families at much higher rates than lower-income students with the same SAT/ACT scores.

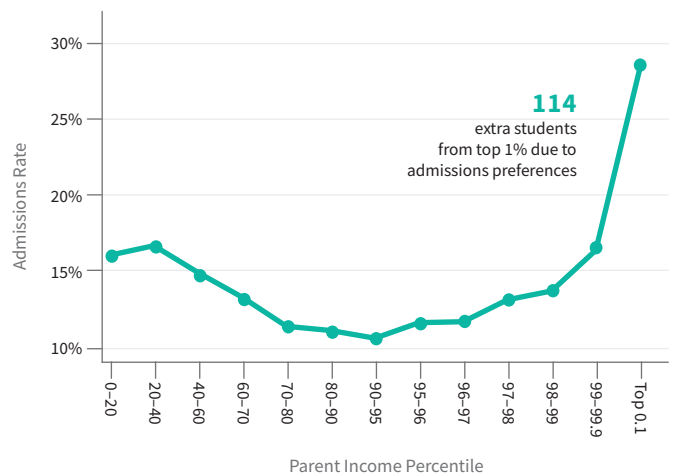


Figure 3 shows admissions rates for students at Ivy-Plus colleges by parental income with SAT/ACT scores comparable to current students. We estimate there are 114 extra students admitted at Ivy-Plus colleges from families earning in the top 1% (per class of 1,650 students) due to admissions preferences. This is calculated as the difference between the actual admissions rate for students from the top 1% and their admissions rate if it were equal to middle-class students (parental incomes in the 70th-80th percentile) with the same SAT/ACT scores.

[Download Figure](#)

FINDING 2

Higher admission rates among students from high-income families are driven by three factors: legacy preferences for children of alumni, higher non-academic ratings, and athletic recruitment.

Legacy admission policies are the largest factor contributing to the over-representation of children from high-income families at Ivy-Plus colleges—accounting for about 52 of the 114 extra students from the top 1%. Legacy applicants are admitted at higher rates at all levels of parental income. However, the biggest boost is awarded to high-income legacy applicants, who are 5 times more likely to be admitted to an Ivy-Plus college than peers with comparable credentials whose parents did not attend the college (Figure 4).

Although children of alumni at a given Ivy-Plus college are much more likely to be admitted at that college, they are no more likely than non-legacies to gain admission at other Ivy-Plus colleges, indicating that they do not have stronger overall credentials.

Legacy applicants from Top 1% Families are 5 times more likely to be admitted to Ivy-Plus colleges than peers with comparable credentials.

Non-academic ratings—the weight placed on factors such as extracurricular activities, leadership capacity, and personal traits—are the next largest factor contributing to the high-income admissions advantage, accounting for 35 of the 114 extra top 1% students. Students from high-income families tend to obtain significantly higher non-academic ratings from admissions committees (Figure 5). These differences in non-academic ratings arise primarily from differences across high schools: among students with similar SAT/ACT scores, those who attend private high schools tend to obtain much higher non-academic ratings (but similar academic ratings) than students attending public high schools. Because children from high-income families are more likely to attend private high schools, these differences in non-academic factors across high schools (which may arise from differences in access to resources such as extracurricular activities and guidance counselors) lead to an admissions advantage for high-income applicants.

The rest of the high-income admissions advantage is explained by **athletic recruitment**, which typically follows a separate process and generates another 27 extra students from the top 1% because recruited athletes come disproportionately from high-income families.

FIGURE 4: Legacy students are more likely to be admitted to the Ivy-Plus colleges their parents attended, especially if their parents have high-incomes, but not to other Ivy-Plus colleges.

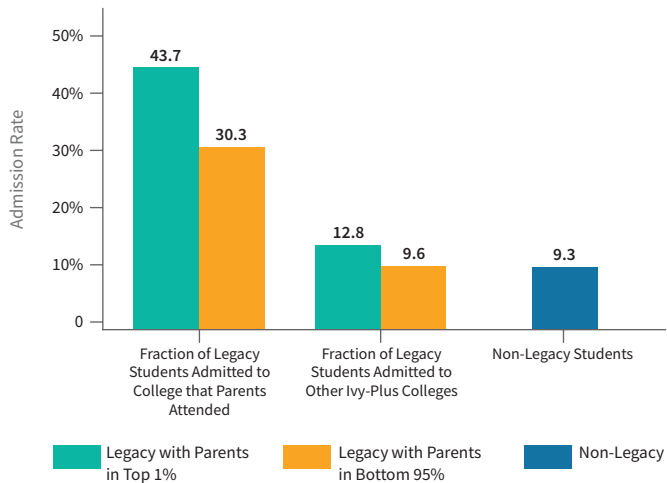


Figure 4 compares admissions rates to Ivy-Plus colleges by legacy status and parental income among applicants with comparable SAT/ACT scores. The left pair of bars show admissions rates for legacy applicants at the college their parents attended; the second pair of bars shows admissions rates for the same students at other Ivy-plus colleges; and the last bar shows admissions rates for non-legacy students.

[Download Figure](#)

FIGURE 5: Students from high-income families receive significantly higher non-academic admissions ratings than students from lower-income families with comparable SAT/ACT scores.

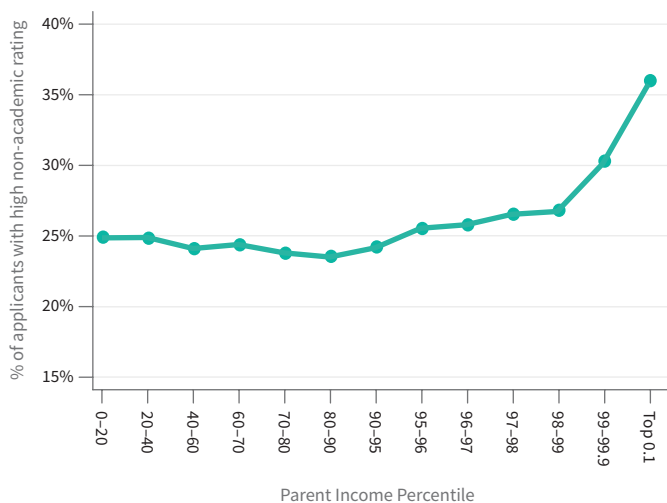


Figure 5 shows the percentage of applicants who receive high non-academic ratings by parental income, controlling for SAT/ACT scores.

[Download Figure](#)

FINDING 3

The three factors underlying the high-income admissions advantage are not associated with better post-college outcomes; in contrast, SAT/ACT scores and academic ratings are highly predictive of post-college success.

Legacy students, students with higher non-academic ratings, and recruited athletes have equivalent or lower chances of reaching the upper tail of the income distribution, attending an elite graduate school, or working at a prestigious firm (e.g., highly ranked hospitals, universities, research institutions, and firms in law, consulting, and finance) than comparable Ivy-Plus applicants once we adjust for the fact that they are admitted to better colleges (Figure 6). By contrast, SAT/ACT scores and holistic academic ratings (which take test scores and other academic factors into account) are highly predictive of post-college outcomes. These findings show that despite having potential biases that may favor high-income students, SAT/ACT scores remain one of the best predictors of students' post-college outcomes among available indicators. Holistic application reading can help colleges further assess students' long-term potential, but academic factors are much more predictive than the non-academic factors that lead to higher admissions rates for students from high-income families.

Among available indicators, SAT/ACT scores remain one of the best predictors of student success.

FINDING 4

Attending an Ivy-Plus college instead of a flagship public college triples students' chances of obtaining jobs at prestigious firms and substantially increases their chances of earning in the top 1%.

To quantify the causal effect of attending an Ivy-Plus college on income and other measures of life success, we focus on applicants placed on the admissions waitlist at Ivy-Plus colleges. Admission from the waitlist is often driven by random factors—such as happening to play an instrument that a college needs to fill its orchestra that year—rather than systematic student attributes that predict later life success. Comparing the outcomes of waitlisted students who are admitted or rejected thus allows us to identify the causal effect of attending an Ivy-Plus college for a given student.

Being admitted off the waitlist to an Ivy-Plus college greatly increases a student's chances of post-college success. Compared to attending highly selective flagship public colleges, students who attend Ivy-Plus colleges are 60% more likely to earn in the top 1%, twice as likely to attend a graduate school ranked in the top 10, and three times more likely to work at prestigious employers in medicine, research, law, finance, and other fields (Figure 7). These large impacts underscore the outside role that Ivy-Plus colleges have on shaping society's leaders, who can subsequently have great influence on the lives of many others.

FIGURE 6: The factors that lead to admission advantages for students from high-income families are unrelated to or negatively associated with post-college success.

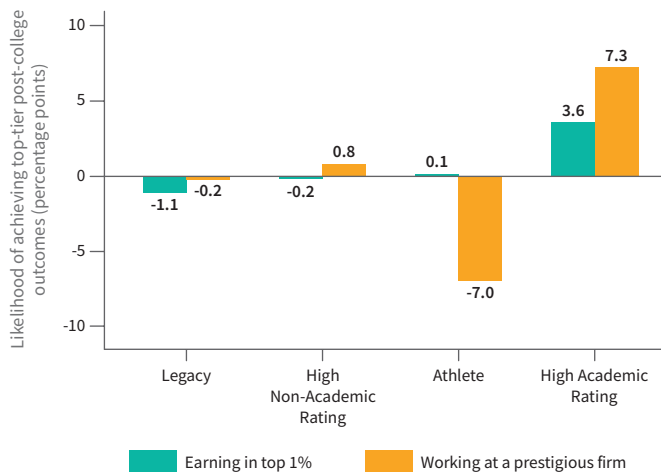


Figure 6 shows how the chances of achieving earnings in the top 1% or working at a prestigious firm vary with candidates' application credentials. For example, compared to all other applicants to Ivy-Plus colleges, those with high academic ratings are 3.6 percentage points more likely to earn in the top 1% (relative to an average rate of 11.4%) and 7.3 percentage points more likely to work at a prestigious firm (relative to an average rate of 22.4%).

[Download Figure](#)

FIGURE 7: Attending an Ivy-Plus college instead of a flagship public college increases students' chances of earning in the top 1%, attending an elite graduate school, and working at a prestigious firm.

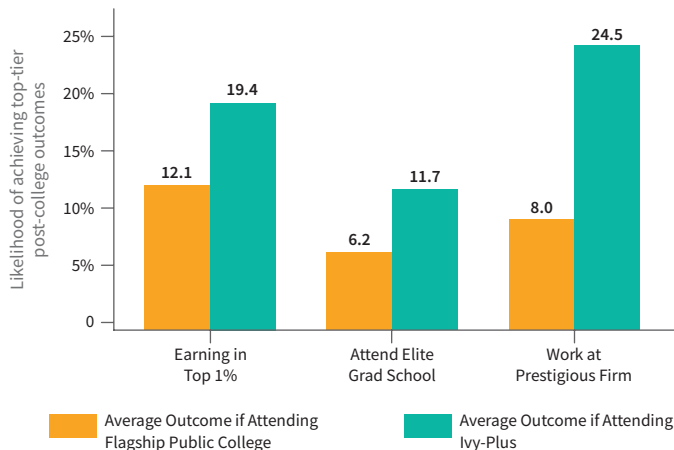


Figure 7 shows how attending an Ivy-Plus college instead of a highly selective flagship public college affects a given student's chances of earning in the top 1%, attending a top graduate school, and working at a prestigious firm. We estimate these effects by comparing outcomes for students admitted vs. rejected from waitlists at Ivy-Plus colleges.

[Download Figure](#)

FINDING 5

By changing their admissions policies, Ivy-Plus colleges could significantly diversify the socioeconomic backgrounds of America's highest earners and leaders.

Eliminating legacy preferences, evaluating non-academic characteristics in better context to account for the effects of privilege, and recruiting athletes more uniformly across the parental income distribution would increase the share of students from the bottom 95% of the parental income distribution who attend Ivy-Plus colleges by 8.8 percentage points—about 145 students in a typical Ivy-Plus college class. This increase is similar in size to the reduction in the number of Black and Hispanic students that would arise from ending race-based affirmative action. In other words, eliminating or adjusting admissions policies that benefit high-income applicants—even stopping short of class-based affirmative action policies that favor lower-income applicants—would increase socioeconomic diversity by a magnitude comparable to the effect of racial preferences on racial diversity.

Importantly, the increase in socioeconomic diversity would not come at the cost of reducing class quality as judged by post-college outcomes: the share of students from Ivy-Plus colleges who obtain leading positions would, if anything, increase because the factors leading to admissions advantages for students from high-income families are not predictors of better outcomes.

We conclude that even though they educate a small share of students overall and therefore cannot change rates of social mobility by themselves, Ivy-Plus colleges could meaningfully diversify the socioeconomic origins of society's leaders by changing their admissions practices. To this end, we release new college-level data on the parental income distributions of applicants and enrolled students (controlling for SAT/ACT scores) for 139 selective public and private colleges in America. We hope these data can be used to re-evaluate admissions and student recruitment practices at selective colleges and expand access to opportunities.

Want to learn more?

[Read the Paper](#) ↗

[See Presentation Slides](#) ↗

[Download Figures from this Summary](#) ↗

All materials are freely available for use with citation

NEW COLLEGE-LEVEL DATA

To inform decision-making and expand opportunity across a wide range of selective colleges, we release new college-level statistics on the college pipeline across the parental income distribution for 139 public and private selective colleges in America that includes attendance and application rates for each school by parental income.

[Explore this data](#) ↗



Based at Harvard University, **Opportunity Insights** identifies barriers to economic opportunity and develops scalable solutions that will empower families throughout the United States to rise out of poverty. [opportunityinsights.org](https://www.opportunityinsights.org)