

Basing College Admission on High School Class Rank

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I. Introduction

Over the past three decades, selective colleges and universities have struggled to maintain high standards of academic selectivity, while seeking some semblance of racial diversity on campus through their admission policy. Many have done so-- with the blessing of Justice Powell's opinion in the Bakke case-- by explicitly using race or ethnicity as a factor in college admissions.

The passage of Proposition 209 in California and the Hopwood decision in Texas upset that balance, forcing selective public institutions to seek alternative ways of achieving racial diversity without using race explicitly. In their effort to preserve social diversity on campus, both states have opted to give much greater weight to high school class rank: Texas is granting automatic admission to those students in the top ten percent of their high school class to any public 4-year college in the state and California guarantees eligibility for admission to one of the University of California campuses to those ranking in the top four percent of their high school class. Seeking to head off a skirmish over race-based college admissions in his state, Governor Jeb Bush in Florida has proposed to replace race-conscious admissions with guaranteed admission to at least one public 4-year institution to those who ranked in the top twenty percent of their class and took certain required courses.

However, one rarely finds opportunities to get more of something valuable (such as race-blindness) without having to sacrifice something else of value. The trade-offs

faced in college admissions are unlikely to be any more forgiving. The goal of this paper is to clarify some of those tradeoffs.

I use data from samples of high school graduates in 1982 and 1992 to explore some of those tradeoffs empirically. In the first section of the paper, I compare the role played by SAT score and high school rank in predicting admission to selective (top quintile) four-year college to the role played by both factors in determining college performance at those schools. Relative to the weight given to high school class rank, there is some evidence that SAT scores are given more weight in the admission process than in the prediction of college GPA (grade point average). The ratio of the coefficient on a student's SAT score to a student's high school rank is roughly twice as large when predicting admission than when predicting college GPA. However, the analysis suggests two further findings: First, selective four-year colleges do not appear to use a purely mechanistic admission rule based upon class rank and SAT score. Relative to all those factors that are orthogonal to high school rank and SAT score-- such as motivation, commitment, admission officers' own idiosyncracies, even luck-- both SAT score and high school rank receive generally comparable weight in the admission process as such factors play in predicting college performance. When normalized by the standard deviation of these orthogonal factors, the coefficients on both SAT score and high school rank in admissions are generally comparable to the weights attached in predicting college performance. Second, although high school class rank is generally thought of as a

"substitute" for SAT scores in the admission process, they also provide complementary information. It seems that a 10 percentile difference in high school class rank provides more information for predicting college performance the higher is one's test score.

The second section of the paper analyzes the differences in the joint distribution of SAT scores and high school rank by race/ethnicity. Among whites and other non-Hispanics, there is considerable overlap in the group of students ranking in the top 10 percent of their high school class and with SAT scores in the top 10 percent. Roughly half of those white and other non-Hispanic youth rank in the top 10 percent of their high school class also rank in the top 10 percent of the national SAT distribution. However, the relationship is very different for black and Hispanic youth. Only 18 percent of those blacks and Hispanics who are in the top 10 percent of their high school class are in the top 10 percent of the national SAT distribution. Indeed, 53 percent of minority youth ranking in the top 10 percent of their high school class had SAT scores *below* the 70th percentile of the national SAT distribution. As a result, the high-rank/low-test-score group-- the group that is added by so-called rank-based admission rules-- contains a disproportionate share of black and Hispanic youth.

Although the evidence noted above that the marginal impact of high school class rank on college performance rises with SAT scores suggests caution, it is difficult to predict how well these high-rank/low-test-score youth would perform in a selective college setting, given that there are so few of such youth attending selective colleges now.

However, the results in the last section of the paper suggest that these youth are not being excluded from postsecondary education entirely. Among those minority youth graduating in the top 10 percent of their high school class in 1992 who also had test scores outside of the top 20 percent, 88 percent had attended a postsecondary institution within 20 months after high school graduation and 70 percent had attended a four-year college. While few of these students attend selective 4-year schools, it would not be accurate to claim that they are being abandoned by the current higher education system.

In the sections that follow, I first briefly describe the data to be used, then analyze the role played by high school rank and SAT scores in selective college admissions and in predicting college performance. Subsequent sections analyze the differences in the joint distribution of SAT scores and rank by race/ethnicity and report on the characteristics of the high rank/low score youth. A final section concludes with the description of a supply/demand framework for understanding the outcomes of the college admission process.

II. Description of Data

In this paper, I rely upon two data sources: the High School and Beyond survey of the high school sophomores of 1980 (who graduated from high school in 1982) and the National Education Longitudinal Study (NELS), which followed a sample of eighth grade students graduating ten years later, in 1992. Because the HSB collected post-secondary

