

# Fairness In Need-Blind Admissions: A Problem of Averages

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Explain Problem, bring in anecdotes like Perez, hint at structure and results

Quotes from Books that may be useful:

- *Interesting Quote about Destabilization of Equilibria (Do robustness checks on solution?)*

Because of the pandemic, many colleges have fallen short of filling their freshman class in the fall of 2020. To make up for that shortfall, they'll need to admit and enroll more students from the Class of 2021 (and maybe even in the classes beyond)

(Selingo Preface)

- *Universities use statistical models to predict acceptances*

the high school seniors have been admitted, tentatively, but statistical models the university uses to predict who will actually enroll indicate that too many of the record thirty thousand applications for regular decision have been accepted so far.

(Selingo 1)

- *Two main types of universities: Buyers and Sellers*

One way to think about the difference between buyers and sellers is that the sellers – at the most basic level – don't have to cut pieces or massage the deals to get the lion's shar of their students to enroll. Instead, they have a sizeable percentage of students paying the full price. And when they make an admission offer, odds are decent that students will say yes.

Sellers make up a fairly small number of four-year colleges and universities, less than 10 percent. The vast majority of schools are somewhere on the spectrum of buyers. On average, sellers admit just 20 percent of applicants, while colleges as a whole admit two-thirds. When sellers make an offer, nearly 45 percent of students accept, compared with a quarter for buyers. And only 7 percent of the financial aid sellers give out to students is a merit-based discount, compared with nearly one-third of aid at buyers.

(Selingo 49,50)

- *Turning people into metrics for admissions decisions*

Admissions people have their own language. They read "files" instead of applications, they "pull up" applicants and "shape them down," and they have a dizzying array of acronyms: IC (intellectual curiosity), LTE (likelihood to enroll), HSI (high school index).

(Selingo 85)

- *Holistic Admissions may cause greater inequity*

But in practice, holistic admissions raises questions about fairness when admissions officers review tens of thousands of applications under the pressures of rigid deadlines. The more selective the institution, the murkier its process often is. Although it has the veneer of numerical precision, holistic admissions is pretty subjective. While colleges like the flexibility the process gives for a rough sorting of applicants, to a skeptical public, holistic admissions is confusing and secretive at best, and nefarious and illegal at worst.

(Selingo 86)

- *Uncertainty in each acceptance, though knowledge of making the goal.*

At most selective colleges, only one-third to half of applicants accept an offer – and admissions deans don't really know which one-third or half despite sophisticated models that tell them whether they'll hit their enrollment target. In the end, it's unclear if an incoming class would be that much different if admissions officers worried less about shaping a class in making their decisions.

(Selingo 94)

- *Model objective function as a linear scoring rule over covariates?*

Because UW is banned by state law from considering an applicant's race and ethnicity in admissions, the personal score allows creativity in improving racial diversity by using criteria that are often alternatives to race – students' socioeconomic profiles and the hardships they have overcome. For Washington applicants, the personal score is mostly about ticking off points on the way to 9. First-generation college students receive a point. So do low-income applicants, as well as those who note in their application that they participated in the university's array of college-prep programs, which are mostly aimed at underrepresented students. Check off all three? That's three additional points on the personal score.

(Selingo 97)

- *Numbers that determine likelihood to pay for merit aid*

The higher a school's yields, the less likely it is to spend money on merit aid to attract students. The second number is the percentage of institutional aid spent on non-need-based aid.

(Selingo 232)

- *Multiple yield periods leading to inefficient matching*

For too many teenagers, ED has turned into little more than a strategy, a trick to help them get into a super selective school. They don't necessarily love the college, they just love their chance of admission.

(Selingo 261)

## **Related Academic Literature**

Discuss place in published literature, find articles related to either method or subject

## **Model Fundamentals**

Explain programming approach, identify key elements and their economic interpretations

## **Theoretical Results**

Indicate what should occur, outline preliminary theories

## **Available Data**

What data sources on admissions are available, what are their structures and size, do they have any costs or frictions associated to using them

## **Empirical Testing Design**

How can we combine the data available and our theory to develop some hypotheses to test against admissions data

## **Implications**

If empirics verify theory what are our prescriptions? If there is a disagreement, what alternatives should we suggest that explains the disconnect between the theory and data?