



SORTING TO EXTREMES: AN ECONOMIC ANALYSIS

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Sorting and Education

- We sort before we educate
- Does sorting enhance educational outcomes?
- Does it improve outcomes for students?
- Does it improve outcomes for society?

THE BIG SORT

Sorting Model

Example of the California Master Plan

- University of California: top 12.5%
- Cal State: top 33%
- Community Colleges: anybody capable of benefiting

Why This Makes Sense

- Efficient to allocate more resources to those who will make the most of them
- Different students have different interests, preparation, motivation, intellectual engagement
- Equitable if the benefits of higher education are distributed across society – people benefit from contributions of those with more education
- Rawls: justification for inequality

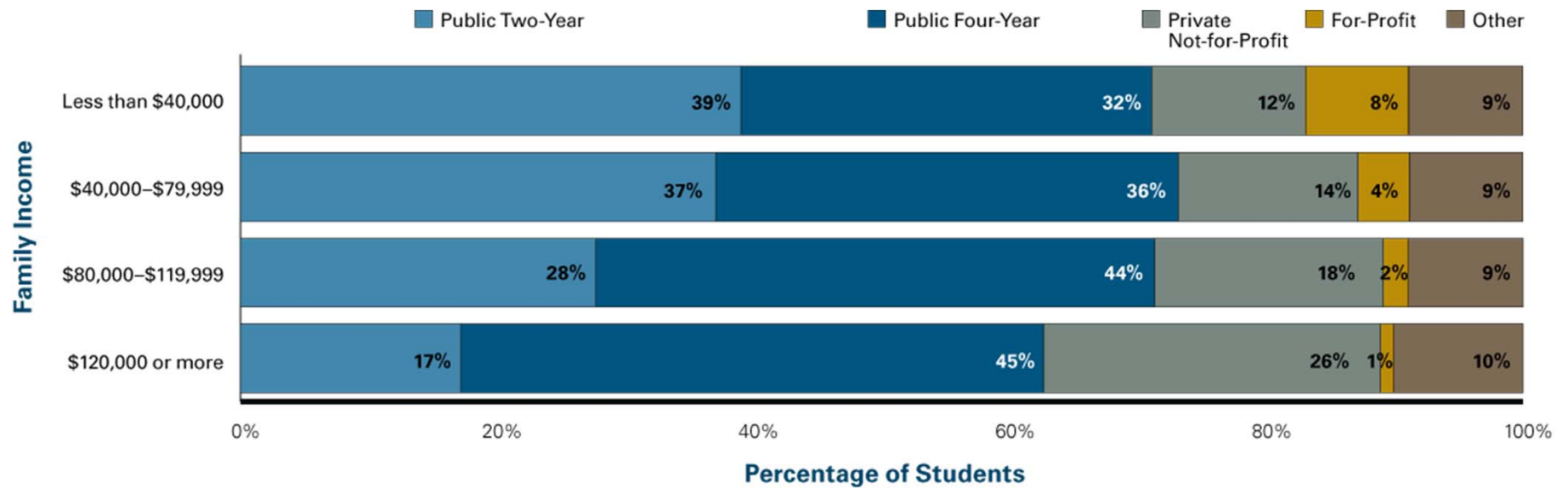
The Perfect World

- Equal educational resources pre-college
- Recognize different capacities to learn and different interests, motivations and habits
- Differentiating is equitable and efficient



BUT

Dependent Students' Postsecondary Sector by Family Income, 2007–08



Sources: The College Board, *Education Pays 2010*, Figure 2.4a; National Center for Education Statistics, 2008a.

Resource Allocation

Expenditures per FTE, 2008

	Instruction	Student Services	Academic Support
Public Research	\$9,732	\$1,318	\$2,775
Public Masters	\$6,209	\$1,365	\$1,490
Community College	\$5,216	\$1,234	\$982
Private Research	\$19,520	\$3,200	\$5,471
Private Masters	\$7,056	\$2,654	\$1,711
Private BA	\$8,172	\$3,740	\$2,017

Source: The Delta Cost Project

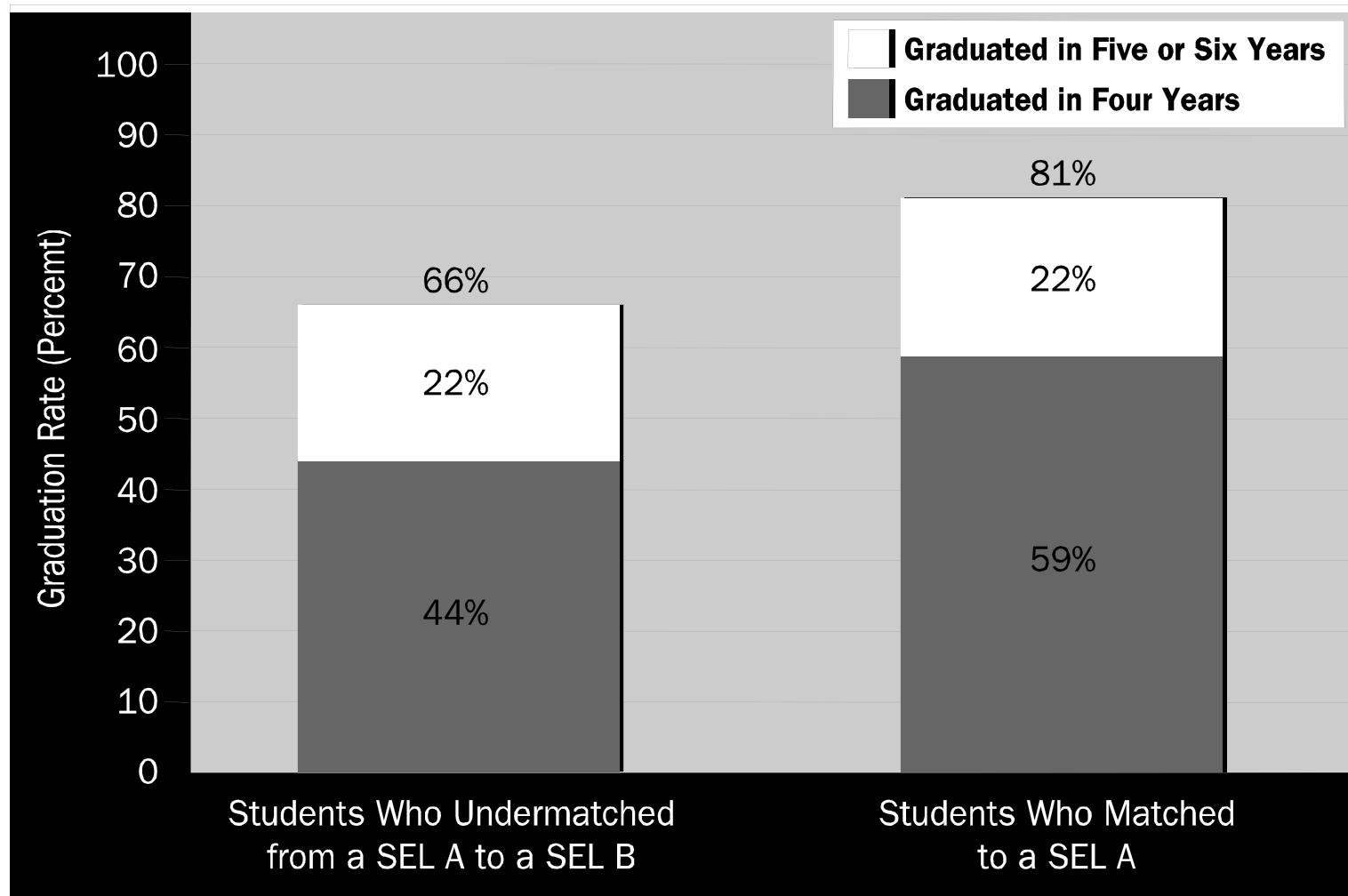
Questions to Pose

- Inequity of K-12 opportunities
- Adequacy of funding for lower end
- Marginal productivity of last dollar in each type of institution
- Causes of low success rates:
 - Inadequate funding
 - Mismatch of students with goals/capacities
 - Where would the dollars do more?

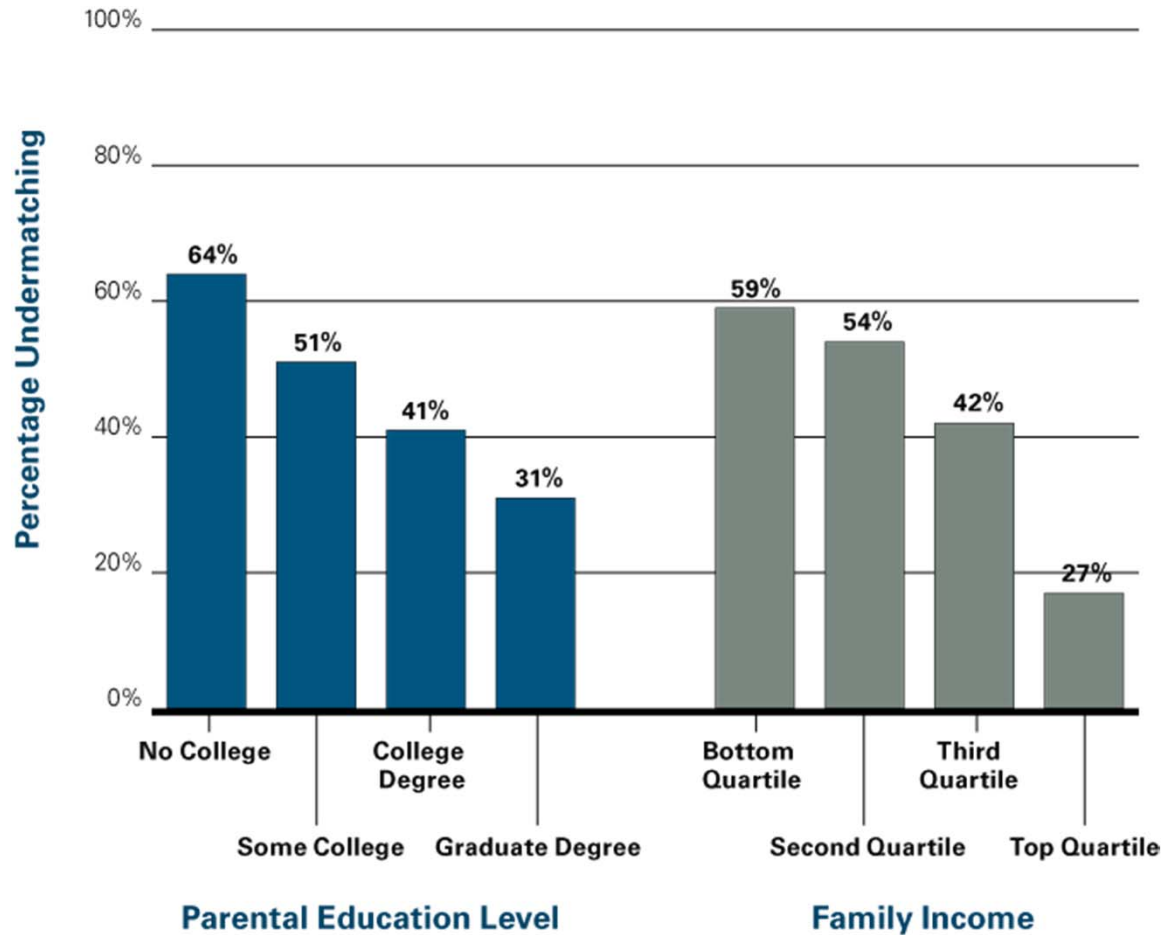
Does Sorting (the Big Sort) Matter?

- *Crossing the Finish Line*: Under-matching reduces probability of earning a bachelor's degree
- Arum: students learn more at selective colleges controlling for characteristics (using CLA as a measure.

Comparison of Overall Graduation Rates for Students Who Under-matched to a SEL B Institution and Students Who Did Not Under-match



Percentage of 1999 Entrants at North Carolina Public Universities Enrolling in Less-Selective Institutions than Those for Which They Were Eligible, by Socioeconomic Factors



Sources: The College Board, *Education Pays 2010*, Figure 2.5b; Bowen et al., 2009.

What can Selective Colleges Do?

- Examine admissions process
- Hill and Winston: 10% of elite students from bottom 40% of population. Compared to 12.5% with SAT/ACT > 1250. (SAT vs ACT, geographical recruiting practices, inadequate information about net prices)
- Devote resources to improving K-12 opportunities for students in the community not likely to make the cut

The Big Sort and the Little Sort

- How did we get from the big sort to the extreme sorting we are discussing here?
- 1940s and 1950s – elite schools reached out to broader population to find best students
- Goals: more open, more systematic, improving fit

Developing Competition

- Growth of competition in small segment of market
- Broader participation in higher education
- More schools entering the competition
- Increased geographical mobility and national market

Characterizing the Competition

- Competition among institutions and competition among students
- Matching market: more like labor market or marriage market than product market
- Excess demand: rising prices?
- Are those left out like the unemployed in the labor market?

Isn't Competition Supposed to be Good?

- Tendency for competition to spiral in match markets / tournaments (winner-take-all (are there losers?), status, etc: musicians, Bar Mitzvahs, arms race – and natural selection)
- Few constraints on the spiral
 - Positional goods
 - Fixed supply
 - Endowments
 - Imperfect information
 - Limited price rationing
 - Barriers to entry
 - Reputation
- Not much any one of you can do to change this

THE BIG SORT MATTERS:

DOES THE LITTLE SORT?



The Big Sort

- No college OR
- Non-selective college OR
- Selective college

The Little Sort

- Sorting **among** selective colleges ...
- ... and within subgroups of selective colleges
- Sorting of privileged students among privileged institutions
- Does this sorting really add value to society?

“Corruption” Within the Little Sort

- Legacy admissions
- Athletics
- Race (in the view of some)



BUT

Even if all that were fixed to your satisfaction ...

What are We Accomplishing?

- Amherst vs Williams
- Macalester vs Grinnell
- Berkeley vs UCLA

Institutional vs. Student (Self) Sorting

- Differences in students between Grinnell and Macalester
- But does the admissions office produce that?
- Self-selection among highly qualified students

The Social Purpose of Institutional Sorting

- Early aims
vs.
Present realities
- Have we lost the link between the educational function and the sorting function at this level?

Sorting within Subgroups

- Bigger and littler sorts
- Are you admitting different students from those at your biggest common admits?

Matching Games and Mating Games

- The Peacock's Tail
- The Great Elk's Antlers

Hypertrophy



The Social Costs of Extreme Sorting

- To colleges and universities
- To the educational efforts of secondary schools
- To tournament preparation (test coaching)
- To student learning and well-being



Solutions(?)

No Pain – No Gain

Opportunities

- Unlike elk, we can talk together
- We can change practices and institutions
- But not easily

Coordinating Admissions?

- Just an illustration – not a blueprint
- Consortium of similar schools

Joint early admissions program

Applicants rank choices

Applicants must exceed a publicly defined threshold

(SAT, GAP, no felonies,)

Required to attend top choice if admitted

The Consortium

- Must include at least one safe school (relative to threshold)
- Partners negotiate student allocation
- Schools:
 - Give up discretion
 - Gain reduction in uncertainty
- Students:
 - Give up discretion
 - Gain peace of mind

Lessons

- Just one quick example
- Many possible alternatives
- Unintended consequences
- For a solution to work:
 - Everyone must give up some freedom
 - Sets of schools have to coordinate decision

Expanding Capacity

- Excess demand, inequality in resources – even at the top
- 20 private colleges / universities with > \$250,000 endowment per student and low acceptance rates
- These schools enroll about 75,000 undergraduates – about 20,000 first-year students
- Increase enrollment by 50% - 10,000 extra freshmen per year

Consequences

- For students:
 - Noticeable decline in competition at top schools –
and in next tier
 - Peers would not be noticeably different
 - Institutions would be larger
- For top schools:
 - Lower endowment per student
 - Greater impact at small colleges than at universities
- For other schools:
 - Lower “quality” students
 - Less resource differentiation from top competitors



Consequences

- No change in prestige – or U.S. News Rankings
- Appease Sen. Grassley
- Make Lloyd Thacker happier

OUR DISCUSSION OF DESTRUCTIVE
COMPETITION (THE LITTLE SORT) IS
IMPORTANT

BUT WE SHOULDN'T FORGET THAT
THE BIG SORT IS WHAT MATTERS
MOST