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?
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

<table>
<thead>
<tr>
<th>Institution</th>
<th>Instruction</th>
<th>Student Services</th>
<th>Academic Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Research</td>
<td>$9,732</td>
<td>$1,318</td>
<td>$2,775</td>
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<tr>
<td>Public Masters</td>
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<td>$1,365</td>
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<td>Community College</td>
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<td>$1,234</td>
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<td>Private Research</td>
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<td>Private BA</td>
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<td>$3,740</td>
<td>$2,017</td>
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</table>

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