Social Mobility: What Are We Trying to Measure?

2019 Social Mobility Symposium
Old Dominion University

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Topics

• Social mobility from an individual perspective
• Social mobility from an institutional perspective
• The challenges of measuring social mobility
• Concluding thoughts
• Questions and discussion
Social mobility and postsecondary education

• Roots in human capital theory:

  “. . .high school and college education in the United States greatly raise a person’s income, even after netting out direct and indirect costs of schooling, and after adjusting for the better family backgrounds and greater abilities of more educated people.”

• *Ceteris paribus*, on average more education = higher earnings

• Education is only one contributor to social mobility – others include ability, health care, family formation, social capital, and informal education
Individual perspective

% of high school completers enrolled in PSE by following October*

- High income (top 20%)
- Middle income (middle 60%)
- Low income (bottom 20%)

* 3-year moving averages

NCES, Digest of Education Statistics 2017, 302.30
Individual perspective

- What these data mask:
  - PSE enrollment is highly stratified

Postsecondary enrollment of 2009 9th graders by family income, as of November 2013

Author's calculations from NCES HSLS:2009
Individual perspective

- What these data mask:
  - PSE attainment is also highly stratified

Postsecondary attainment of 2004 high school seniors by SES* quartile, as of 2012

* Composite of family income, and parental education and occupation

Author's calculations from NCES ELS:2002
Institutional perspective

- Institutions have very different student bodies
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Institutions offering 2-year and 4-year degrees

Author's calculations from NCES College Scorecard & IPEDS data
Institutional perspective

- Institutions have very different outcomes as well
The relationship between proportion of Pell students and alumni earnings

- USF: 26%, $62,300
- ODU: 35%, $43,700
- NSU: 61%, $35,800
- VMI: 15%, $65,700

$r = -0.66$

*Public and private NFP, non-special focus institutions offering 4-year degrees

Author’s calculations from NCES College Scorecard data
Challenges of measuring social mobility

Sticker and net* tuition prices (in 2018 $) by sector

* After grant aid and tax benefits

College Board, Trends in College Pricing
Challenges of measuring social mobility

Blue = public, red = private NFP (non-special focus institutions)
Author’s calculations from NCES College Scorecard data

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Net price for students with income <$48K as % of COA

Cost of attendance

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# Challenges of measuring social mobility

## College Scorecard
- Pulls income data from tax forms
- Consistent definition of income
- Cohort-based data
- Limited to Title IV recipients

## PayScale
- Self-reported data from self-selected respondents
- Dependent on respondent interpretation of income definition
- Varying coverage, depending on institution - # of respondents, all years, all degrees
  - USF: 1,134
  - Oberlin: 20
  - ODU: 2,630
- Funky matching algorithm
Challenges of measuring social mobility

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One last comment about earnings data

Average earnings in first year after receiving bachelor’s degree

Average by institution, Virginia

- Emory & Henry C. $27,129
- Ferrum C. $27,806
- Virginia State U. $28,820
- Bridgewater C. $28,913
- Virginia Wesleyan C. $31,036
- Longwood U. $31,073
- Christopher Newport U. $31,191
- Radford U. $31,825
- Lynchburg C. $32,003
- Mary Baldwin C. $32,523
- U. of Mary Washington $34,271
- William and Mary $34,571
- James Madison U. $35,224
- Old Dominion U. $36,571
- Shenandoah U. $37,467
- Eastern Mennoite U. $38,763
- Virginia Tech $38,957
- Marymount U. $39,549
- U. of Virginia $39,648
- George Mason U. $41,153
- U. of Richmond $44,920

Ave: $34,448 SD: $4,853

Average by major, U. of Virginia

- Biology $27,209
- Anthropology $27,914
- Art $28,175
- African American studies $28,879
- Religion $29,404
- English $31,388
- Environmental science $32,267
- Psychology $32,392
- Political science $32,393
- History $32,478
- Sociology $33,154
- Spanish $33,516
- International relations $34,425
- Architecture $35,329
- Interdisciplinary studies $39,822
- Economics $42,895
- Math $45,777
- Civil Engineering $47,017
- Nursing $48,649
- Mechanical engineering $50,917
- Business $53,222
- Computer engineering $53,324
- Electrical engineering $53,443
- Computer & info. sciences $59,739
- Systems engineering $60,300

Ave: $39,768 SD: $10,708

Author’s calculations from CollegeMeasures.org, 2015
Concluding thoughts

• Social mobility is complex, and affected by many factors – institutional and individual
• Whether a college student is able to rise in social class is dependent as much on what he or she does, as what the institution does
• Ranking institutions on their contributions to social mobility is fraught with challenges, and tends to place an inordinate amount of focus on pecuniary returns to college
• The best way to measure social mobility is with unit record data
• Even given all this, there are differences in outcomes across institutions, and we need to identify and implement best practices
Questions and discussion