A Comparative Look at Stratification and Inequality in U.S. Higher Education

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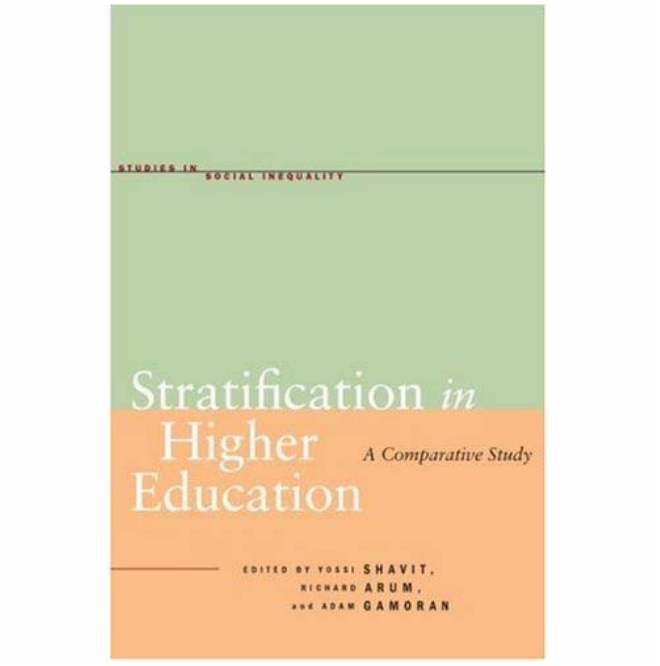
Adapted from two chapters in:



"Changes in higher education and social stratification in the United States"

by Josipa Roksa, Eric Grodsky, Richard Arum, and Adam Gamoran

and

"More inclusion than diversion: Expansion, differentiation, and market structure in higher education"

by Richard Arum, Adam Gamoran, and Yossi Shavit

…the book is about…

- Trends in inequality in enrollment in higher education in 15 countries…

…this presentation is about

- Trends in inequality in enrollment in higher education in the U.S., with an eye towards comparative insights

The Comparative Project on Stratification in Higher Education

- Western Europe: France, Italy, Germany, Netherlands, Sweden, Switzerland, UK
- Eastern Europe: Russia, Czech Republic
- East Asia: Japan, Korea, Taiwan
- Others: Israel, US, Australia

Higher Education Expansion

- The 20th century: an era of educational expansion
  - More people staying in school longer and longer
  - World-wide expansion, involving developed and developing countries

Higher Education Expansion

- This is true of the U.S.
  - However, much of our expansion occurred earlier than that of other nations
  - Rapid rise following World War II
  - Slower growth since the 1970s
  - Most of our recent growth has occurred in the 2-year sector

Figure 1. Postsecondary Enrollment

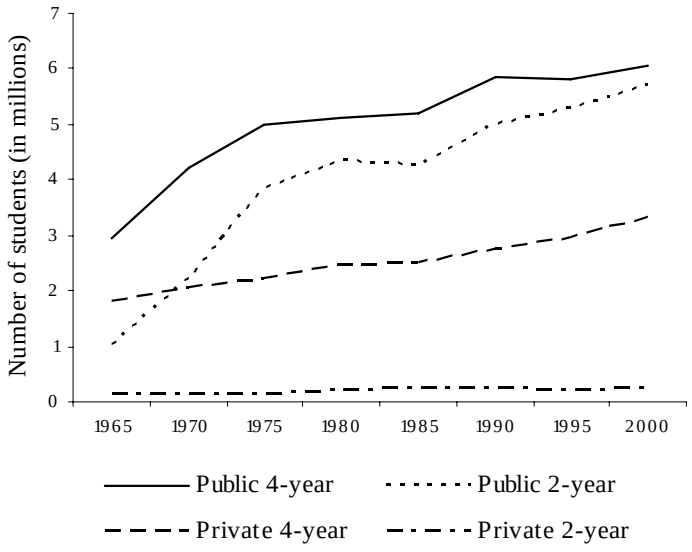
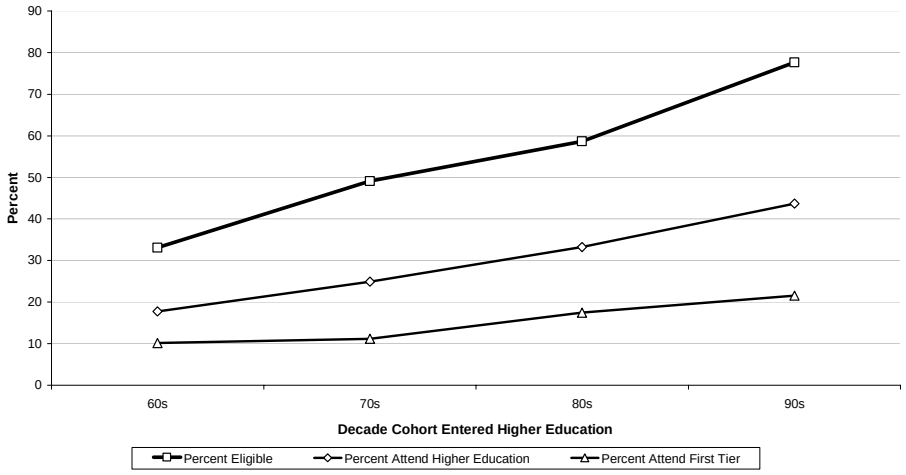


Figure 1.1: Average Trends in Higher Education Eligibility and Attendance in 15 Countries



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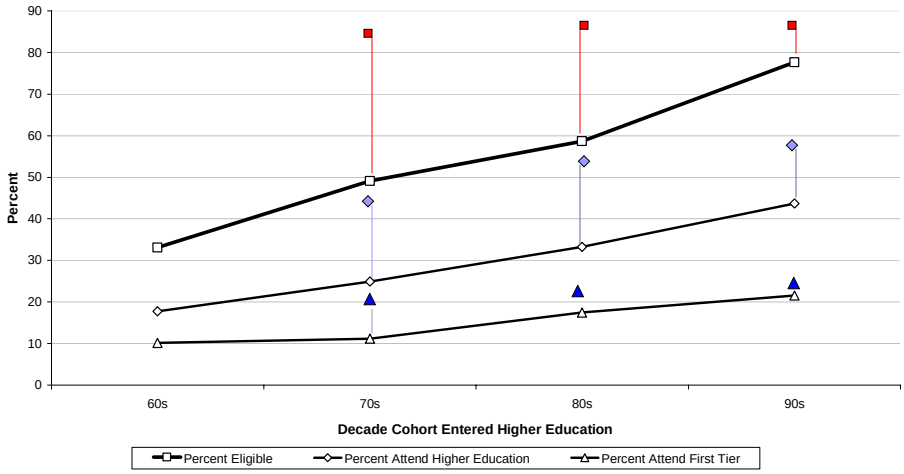


Higher Education Expansion

- The key question for sociologists:
  - How does expansion affect inequality?
    - Does expansion reduce inequality by providing more opportunities for the disadvantaged?
    - Or does expansion exacerbate inequality by creating more opportunities for the privileged?

Higher Education Expansion

- Higher education is transformed as it expands
  - Expansion is accompanied by differentiation
  - Development of less selective colleges
  - Much of the growth occurs in the second tier
- Expansion creates new opportunities, but possibily of diminished value

Higher Education Expansion

- This pattern of expansion and differentiation holds for the U.S.
  - Mass expansion of higher education
  - Diversified system of higher education
    - Highly selective (elite) universities
    - Other universities
    - 2-year colleges

Higher Education Expansion

- How has this pattern of expansion affected inequality in the U.S.?
- We examine three dimensions
  - Socioeconomic status
  - Race/ethnicity
  - Gender

Theories of Educational Stratification

- Maximally Maintained Inequality (MMI) (Raftery and Hout, 1993)
  - Inequality is preserved until the privileged class reaches saturation
  - That is, virtually all members of the privileged class attain a level of education
  - Only then does inequality in attainment of that level decline

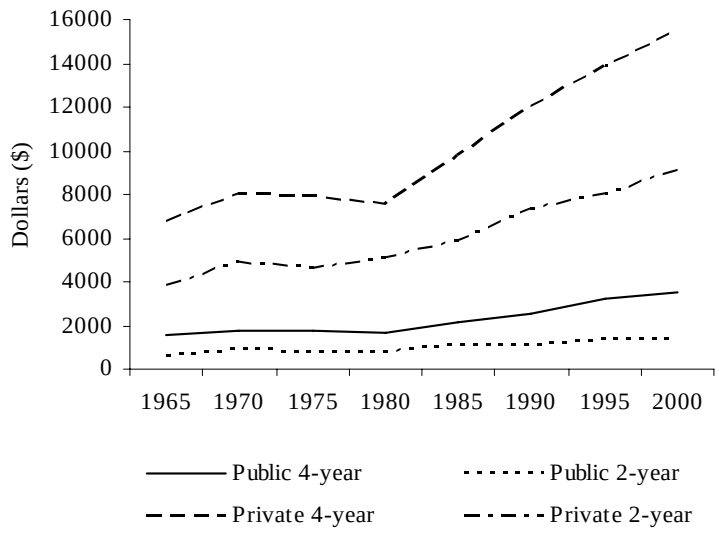
Theories of Educational Stratification

- Effectively Maintained Inequality (MMI) (Lucas, 2001)
  - When inequality declines at some particular level, qualitative differences within that level may emerge that preserve inequality
  - Differentiation preserves inequality

Social Class and Higher Education in the U.S.

- Cost of higher education has risen
- More prestigious types of postsecondary education are more costly
- Increasing costs may result in increasing inequality overall, and/or between types

Figure 2. Postsecondary Tuition and Fees



Race/Ethnicity and Higher Education in the U.S.

- 1964 Civil Rights Act mandated desegregation in higher education
  - Yet in 1970, blacks represented only 4.3% of enrollments in predominantly white institutions
- Affirmative action in the 1970s and 1980s aimed to change that pattern
- By the 1990s, affirmative action began to be rolled back

Gender and Higher Education in the U.S.

- Increasing participation of women in all levels of education is a prominent trend

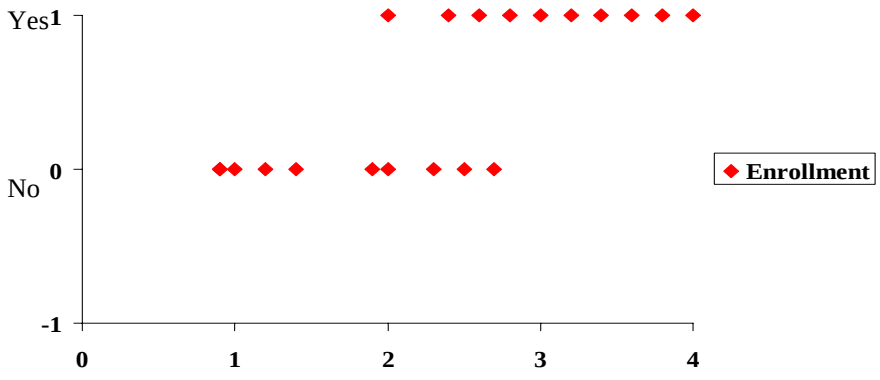
Theories of Stratification in Higher Education

- Maximally maintained inequality may not hold for race and gender in the U.S.
  - Political mobilization
  - Legal challenges
  - Labor market changes
- "Trendless fluctuation" (Sorokin, 1927)
  - Educational access reflects historically specific political and institutional conditions

Methods

- Logistic regressions on
  - Eligibility for higher education
  - Entry into higher education
  - Entry into first-tier higher education

College enrollement predicted by SES



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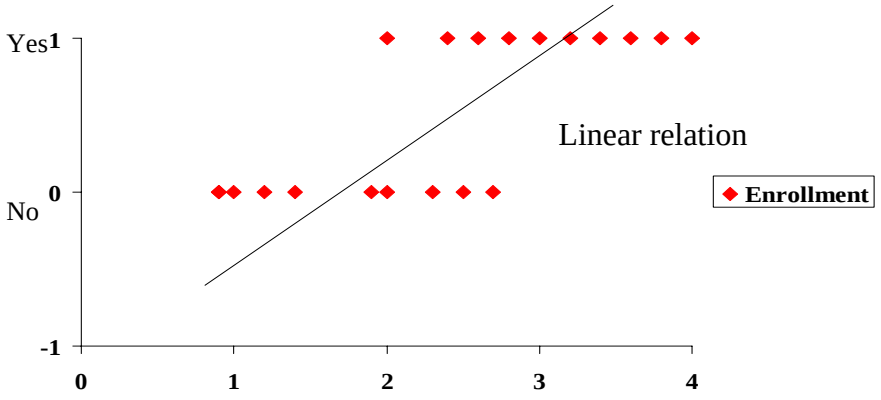
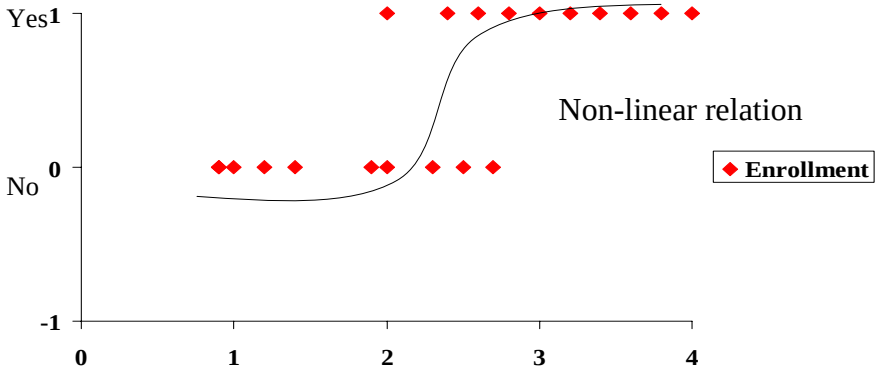


College enrollment predicted by SES



Methods

- Independent variables
  - Parents' education
  - Father's occupational class
  - Sex
- Supplementary analyses with additional predictors as appropriate
  - Race/ethnicity
  - Single parent family
  - Track location } for some analyses
  - High school test scores }

U.S. Data

- Four national data sets
  - General Social Survey (GSS)
    - Semi-annual cross-sectional survey since 1972
    - 1,500-3,000 respondents per survey wave
    - Our sample: 40,000 individuals surveyed between 1972-2000
    - We construct cohorts from these cross-sections

U.S. Data

- The other three data sets come from the National Center for Education Statistics
  - National Longitudinal Survey of the High School Class of 1972 (NLS-72)
  - High School and Beyond (HSB)
  - National Educational Longitudinal Study (NELS)
- These are education cohort surveys
  - We use samples of around 13,000 respondents from each survey

Models

- Baseline model
  - Parents' education and occupation, gender, race/ethnicity, single-parent
- Achievement model
  - Baseline plus track location and test scores
  - To see whether high school achievement mediates background effects

Results: Parents' Education and Occupation

- Parents' education and occupation had consistent effects on high school completion and college enrollment
- These effects exhibited little change over time
- One exception: Significant *increase* in advantage of offspring of college-educated parents for entering 4-year colleges in the 1990s cohort

	Cohort 1	Cohort 2	Cohort 3
Entering higher education	1970s	1980s	1990s
Data set	NLS-72	HS&B	NELS
Parents' Education			
College and higher	1.168**	1.050**	**1.664****
	(0.091)	(0.094)	(0.090)
Some postsecondary	0.379**	0.247**	0.591**
	(0.083)	(0.081)	(0.074)
Less than high school	-0.208	-0.171	-0.381**
	(0.124)	(0.133)	(0.127)

Results: Parents' Education and Occupation

- Coefficient of 1.664 implies that students whose parents were college graduates were more than 5 times more likely than those whose parents did not go beyond high school to enroll in 4-year colleges

Results: Race/Ethnicity

- African American compared to white
  - High school completion reached parity (net of social class) in the 1970s cohort
  - Enter 4-year college: African-American advantage in the 1970s was gone by the 1980s
  - Enter elite college: No advantage, possible disadvantage

Any Postsecondary Enrollment (Net of Parents' Ed and Occup)

	1970s NLS-72	1980s HSB	1990s NELS
African American	.556** (.151)	.181 (.116)	-.484** (.167)

…from 75% more likely to 40% less likely over a period of 20 years…

Any Postsecondary Enrollment Controlling for Achievement

	1970s NLS-72	1980s HSB	1990s NELS
African American	.998** (.161)	1.051** (.121)	.228 (.159)

…from 2.7 times more likely to even odds over a period of 20 years…

4-year College Enrollment
Controlling for Achievement

	1970s NLS-72	1980s HSB	1990s NELS
African American	.855** (.163)	.745** (.125)	.815** (.128)

Persisting advantage for African Americans, net of test scores, in 4-year college enrollment

High school preparation is the key to reducing black-white inequality in college enrollment

Results: Race/Ethnicity

- Latinos
  - No consistent difference in 4-year college enrollment (net of social class)
  - More likely than other groups to enter 2-year college
- Asian Americans
  - Inconsistent patterns; generally more advantaged than disadvantaged

Results: Gender

- No gender differences in high school completion or in 2-year college enrollment
- Girls are more likely than boys to enter 4-year colleges
- An earlier disadvantage in elite college enrollment has disappeared

4-year College Enrollment

	1970s NLS-72	1980s HSB	1990s NELS
Female	-.133* (.067)	-.011 (.109)	.299** (.056)

…from 12.5% less likely to 35% more likely over a period of 20 years…

4-year College Enrollment Controlling for Achievement

	1970s NLS-72	1980s HSB	1990s NELS
Female	-.218** (.075)	-.199** (.077)	.112 (.074)

…high school achievement accounts for the female advantage in college enrollment…

U.S. Results in Comparative Perspective

- Gender findings are like all other countries
- Race/ethnic findings are unique
- Both suggest "trendless fluctuation": Trends that respond to specific policies and institutions rather than MMI

Entering higher education	**Pre-WWII**	**Post-WWII**	**1960s**	**1970s**	**1980s**
Parental Education					
College and higher	1.891*	1.184**	1.421**	1.795**	1.727**
	(0.427)	(0.262)	(0.286)	(0.296)	(0.312)
Some Postsecondary	0.355	0.894**	0.513**	0.653**	0.795**
	(0.211)	(0.209)	(0.182)	(0.174)	(0.210)
Less than HS	1.255*	-1.272**	-1.316**	-1.299**	-1.240**
	(0.105)	(0.084)	(0.090)	(0.095)	(0.140)

U.S. Results in Comparative Perspective

- SES findings of persisting inequality are similar to most cases in our study
  - In general, MMI is supported
- Levels of inequality in an absolute sense are higher in the U.S. than in most other systems of comparable structure

Mode of Differentiation	n	(1) Percent Eligible	(2) Percent Attend	(3) Percent Attend First Tier	(4) Inequality in Eligibility	(5) Inequality in Higher Education	(6) Inequality in First Tier
U.S.		87.0	58.0	25.0	1.16	1.29	1.23
Diversified	6	86.3	51.8	24.2	.77	.80	1.3
		(9.9)	(10.0)	(2.2)	(.29)	(.26)	(.99)
Total	14	62.8	39.1	19.0	.90	.88	1.4
		(26.0)	(14.2)	(8.1)	(.43)	(.28)	(1.01)

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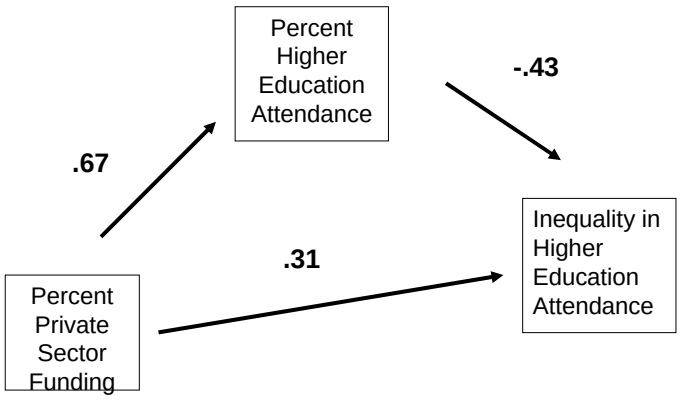
Conclusions

- Inequality in U.S. higher education is persistent
  - No longer counterbalanced by exceptionally high enrollment levels
- Affirmative action has made a difference for race/ethnic inequality
  - But affirmative action effects appear to have diminished

Conclusions

- Cross-national analyses indicates that larger private sectors are not linked to greater inequality
- But increases in tuition – public and private – may increase inequality overall, and across types of higher education
  - Especially when not ameliorated by need-based financial aid
  - Other countries are moving towards the U.S. model of charging tuition for “public” higher education



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Binary	6						
Diversified	6						
Unified	2						
Total	14						

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Binary	6	42.3	30.7	12.2	1.0	0.99	1.6
		(18.2)	(7.6)	(5.0)	(.49)	(.30)	(1.21)
Diversified	6	86.3	51.8	24.2	.77	.80	1.3
		(9.9)	(10.0)	(2.2)	(.29)	(.26)	(.99)
Unified	2	54.0	26.5	26.5	.92	.85	.85
		(24.0)	(10.6)	(10.6)	(.71)	(.33)	(.33)
Total	14	62.8	39.1	19.0	.90	.88	1.4
		(26.0)	(14.2)	(8.1)	(.43)	(.28)	(1.01)

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Father's Occupation					
Prof/managerial	0.98*	0.844**	0.764**	1.002**	0.893**
	(0.19)	(0.187)	(0.202)	(0.198)	(0.297)
Clerical/sales	1.08*	0.865**	1.115**	1.456**	1.013**
	(0.20)	(0.206)	(0.246)	(0.266)	(0.275)
Self-empl	0.60*	0.390**	0.414**	0.790**	0.604**
	(0.12)	(0.110)	(0.137)	(0.156)	(0.219)
Skilled	0.135	0.232*	0.165	0.424**	0.305
	(0.10)	(0.092)	(0.104)	(0.113)	(0.169)
Farmer	0.47*	-0.407**	0.291**	0.186	0.490
	(0.09)	(0.090)	(0.113)	(0.147)	(0.268)