More Inclusion than Diversion: Expansion, Differentiation, and Market Structure in Higher Education

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......with thanks to our colleagues from 15 countries

From Chapter 1 and selected chapters in...

Available from Stanford University Press and amazon.com
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

- 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

- Expansion of higher education deserves special attention
  - Primary and secondary education are nearly universal in advanced societies
  - Tertiary education continues to expand
  - Higher education is the gateway to professional and management positions

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 possibility of diminished value
Higher Education Expansion

- One view: Higher education expansion is a process of *diversion*
  - Working class are diverted to the second tier
  - Elite institutions remain the bastion of the privileged
- Another view: Expansion reflects *inclusion*
  - Working class have a chance for the top tier
  - Even the second tier enhances opportunity

The Comparative Project on Stratification in Higher Education

- How are expansion and stratification linked in 15 countries?
  - Western Europe: France, Italy, Germany, Netherlands, Sweden, Switzerland, UK
  - Eastern Europe: Russia, Czech Republic
  - East Asia: Japan, Korea, Taiwan
  - Others: Israel, US, Australia
Expansion and Stratification

- Educational attainment as a sequence of transitions (Mare, 1980, 1981)
- Expansion brings many advantages (e.g., economic development), but it does not necessarily reduce inequality
  - Middle class families take advantage of new opportunities
  - Relative differences between classes are preserved

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
Expansion and Stratification

- With some exceptions, observed trends are consistent with MMI
  - Persistent Inequality (Shavit and Blossfeld, 1993)

Expansion and Differentiation

- Most studies of educational transitions ignore differentiation
- In fact, educational choices often involve more than two options
  - E.g., drop out of high school, or remain in an academic or a vocational track
  - Or attend 2-year, 4-year, or no college
  - These distinctions have implications for inequality
Differentiation and Stratification

- Organization theory: growth is accompanied by differentiation
- Educational expansion tends to follow this path
- Differentiation may be a consequence of expansion, but it may also contribute to expansion

Expansion and Differentiation

- Modes of differentiation
  - Unified: No differentiation
    - Tend to be rigid, controlled by professorial elites who tend not to encourage expansion
    - Italy, Czech Republic
  - Diversified: multiple tiers, e.g. U.S., Japan
  - Binary: two tiers – academic and vocational
    - Most of western Europe
Expansion and Differentiation

- Link between expansion and differentiation suggests a process of diversion
- But if lower-tier opportunities bring students into higher education who otherwise would not have continued, then it may represent inclusion

Expansion and Market Structure

- Studies of expansion and stratification assume expansion is a result of demand
  - Holds for some cases, e.g. the U.S.
- But not others
  - Western Europe – state regulation
  - Sweden – quotas
  - Japan – shifting patterns of demand and supply
Expansion and Market Structure

- One view: inequality may be greater in demand than in supply systems
  - Supply systems may limit inequality through state sponsorship
  - Demand systems may exacerbate inequality due to family differences in the ability to pay

- Another view: Inequality may be less in demand systems than in supply systems
  - In supply systems, institutions are status-seekers
    - They seek to preserve privileges for the elite
  - In demand systems, institutions are client-seekers, because funding depends on enrollment
    - More emphasis on bringing students into the postsecondary system
  - By this logic, demand-based systems may be increasingly inclusive, while diversion occurs in supply systems
Propositions

- Expansion and stratification
  1. Expansion is not associated with inequality, unless saturation is approached (MMI).

- Expansion and differentiation
  2. Tertiary expansion and differentiation are related, with causal effects in both directions.
  3. Differentiation of higher education diverts students away from first-tier enrollment.

Propositions

- Expansion, differentiation, and market structure
  4. Enrollment rates are higher in systems with more funding from private sources.
  5. Systems with more funding from private sources are more likely to be diversified.
  6. Reliance on private funding is associated with inequality, but the direction of the association cannot be determined \textit{a priori}. 
Methods

- Collaborative comparative method
- Countries that vary in:
  - Extent of expansion
  - Mode of differentiation
  - Degree of privatization

Methods

- Logit regressions on
  - Eligibility for higher education
  - Entry into higher education
  - Entry into first-tier higher education
Methods

- Independent variables
  - Parents’ education
  - Father’s occupational class
  - Sex
- Supplementary analyses with additional predictors as appropriate

Methods

- Comparative analyses
  - Mode of differentiation: Taken from country-specific chapters
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**Methods**

- **Comparative analyses**
  - Mode of differentiation: Taken from country-specific chapters
  - Extent of privatization: From OECD reports and supplementary reports
  - Measures of inequality: average logit coefficients
    - Father's occupation: classes I/II vs. V/VI
    - Parents' education: Higher education vs. secondary education
  - We focus on changes over the last two cohorts
Results

- Expansion occurred at all levels
  - Eligible for higher ed, entered higher ed, attended higher ed
  - All countries experienced expansion, except Russia in the post-Soviet era

Figure 1.1: Average Trends in Higher Education Eligibility and Attendance in 15 Countries
See chapter 7, Roksa, Grodsky, Arum, and Gamoran, “Changes...U.S.”

See chapter 8, Cheung and Edgerton, “Great Britain...”
Results

- Inequality is stable except in the context of saturation
  - Eligibility
    - Inequality declined in 5 countries, of which 4 had eligibility > 80 percent (near saturation)
    - Inequality did not decline in 10 countries; all but one or two had lower enrollment rates

See chapter 6, Tsai and Shavit, "Higher education in Taiwan."
Figure 1.2: Association between Percent Eligible for Higher Education and Percent Change in Inequality of Eligibility
Results: Expansion and Stratification

- Inequality is stable except in the context of saturation
  - Attendance at higher education
    - Three cases of saturation, two experienced declining inequality

Figure 1.3: Association between Percent of Eligibles Who Continued to Higher Education, and Change in Inequality in the Log Odds of Continuation
Results:
Expansion and Stratification

- Inequality is stable except in the context of saturation
  - Attendance at higher education
    - Inequality declined in four cases
      - Two were near saturation (Israel and Italy)
      - Japan and Taiwan are exceptions
        - Rapid expansion in the 1990s after a period of retrenchment in the 1980s
Results:
Expansion and Stratification

- Inequality is stable except in the context of saturation
- In general, MMI is supported
Results: Expansion and Differentiation

- Eligibility rates vary by mode of differentiation

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Results:
Expansion and Differentiation

- Eligibility rates vary by mode of differentiation
- Proposition 2 is supported: Differentiation and expansion are related
- Proposition 3 is largely refuted: Differentiation does not necessarily lead to diversion

Results:
Expansion and Market Structure

- Countries with larger private sectors have higher levels of enrollment
  - Consistent with Proposition 4
Results:
Expansion and Market Structure

- Market structure is also related to differentiation
  - More privatized systems tend to be more differentiated
  - Consistent with Proposition 5
Mode Of Differentiation | Tertiary Education Reliance On Private Sector Funding
--- | ---
**Low** | **Moderate** | **High**

*Unified*
- Italy
- Czech Republic

*Binary*
- Germany
- Russia
- Switzerland
- Britain
- Netherlands
- France

*Diversified*
- Sweden
- Israel
- Taiwan
- Japan
- Korea
- United States

Results: Expansion and Market Structure

- How does privatization relate to inequality?
  - Proposition 6: We could not predict the direction of association
  - Zero-order correlation = .03
  - Absence of correlation masks contradictory patterns of association
Inequality in Higher Education Attendance

Percent Private Sector Funding

Percent Higher Education Attendance

Private Sector Funding

.67

.31
Results:
Expansion and Market Structure

- So the direct effects of privatization are to increase inequality, presumably due to family differences in the ability to pay
- But this is mitigated because privatization also stimulates growth, which is associated with lower levels of inequality
Summary of Results

- Proposition 1 (MMI): Supported
- Proposition 2 (Expansion and differentiation): Supported
- Proposition 3 (Differentiation and diversion): Supported for binary systems but not for diversified systems.

- Proposition 4 (Privatization and expansion): Supported
- Proposition 5 (Privatization and differentiation): Supported
- Proposition 6: Privatization and inequality: The relationship is complex
Summary of Results

- Overall: We find more evidence of inclusion than diversion
  - Expansion leads to declining inequality when saturation is approached
  - Differentiation can be inclusive, without a corresponding increase in inequality
  - Expansion is itself a form of inclusion, even when odds ratios are stable

Inclusion and “persistent inequality”

- The claim that expansion is inclusive even with stable odds ratios gives a new interpretation to familiar findings
  - Not just “persistent inequality”
  - Other things being equal, expansion should result in greater inequality due to increased heterogeneity
  - In this sense, stable odds ratios are inclusive
Inclusion and “persistent inequality”

- Empirically, our findings generally mirror those of *Persistent Inequality*
  - Only post-Soviet Russia exhibited increasing inequality
  - Of four cases of declining odds ratios, two may be explained by saturation (Israel and Italy) and two by rapid expansion following consolidation (Taiwan and Japan)
  - These findings post-date *Persistent Inequality*

Inclusion and “persistent inequality”

- Education is not merely a positional good, whose value depends on relative allocation
- Value also lies in human capital, civic participation
- And in absolute level relative to other countries
- Educational expansion increasingly offers those from disadvantaged backgrounds national and global citizenship
Key References