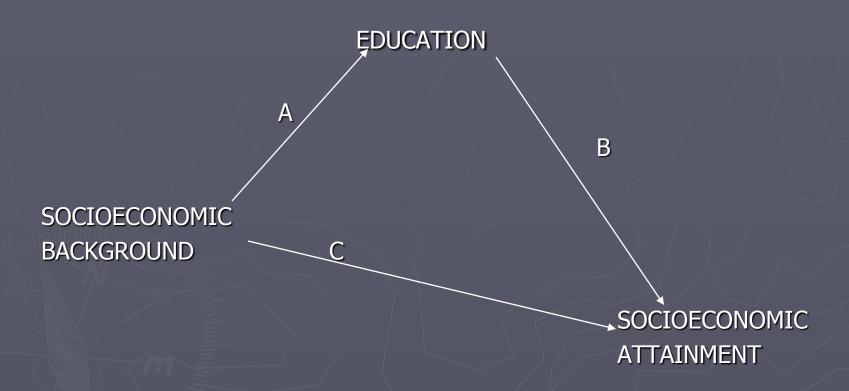
Qualifications, Transitions, and Trust across Societies and Over Time

David B. Bills University of Iowa

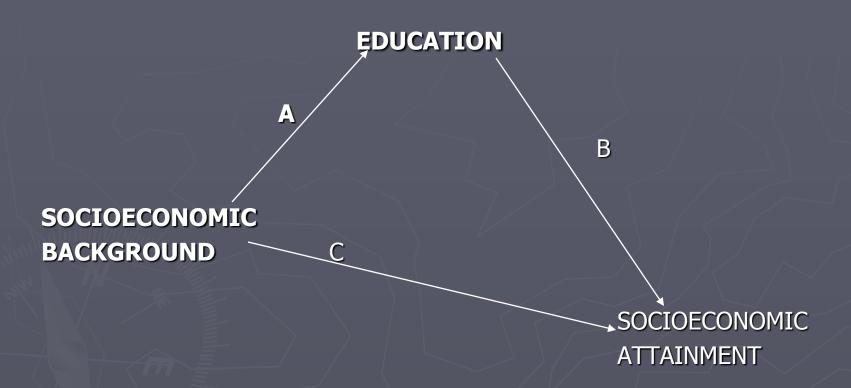
david-bills@uiowa.edu

Trajectories and Educational Choice 2016
National Research University Higher School of Economics,
Moscow September, 2016

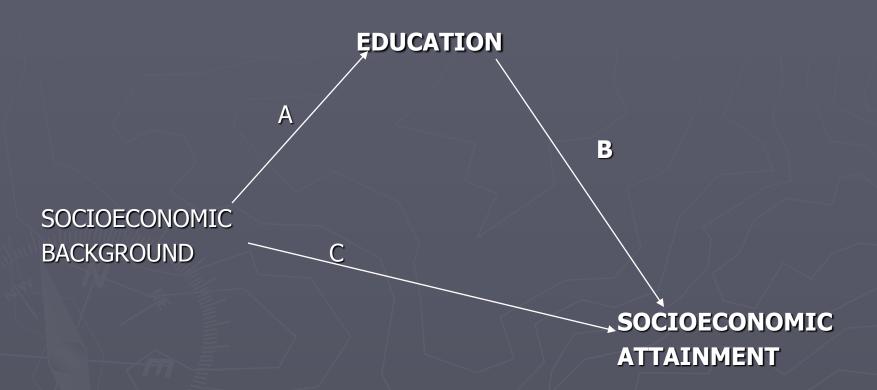
Some Background



Unequal Access to Schooling



Effects of Schooling

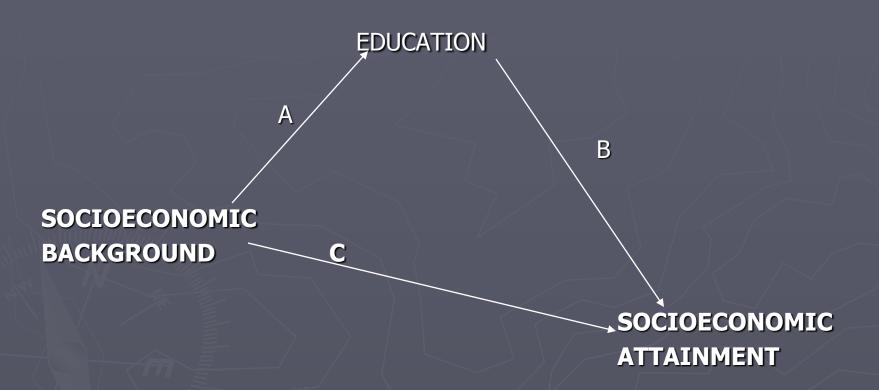


Where does B come from?

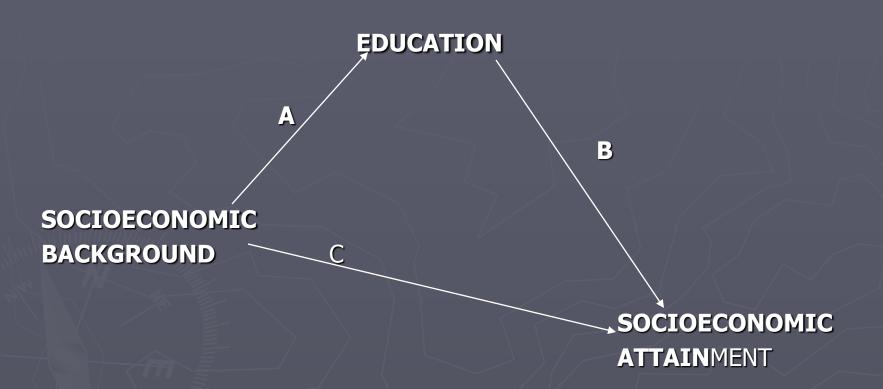
- People learn things, and schooling pays off (Human Capital Theory)
- People don't learn things, but schooling pays off anyway, but that's ok (Signaling Theory)
- People don't learn anything, but schooling pays off anyway, and that's not ok (Credentialism, Rent Collection)

There are also people who argue that schooling does not pay off. These people have not read the literature.

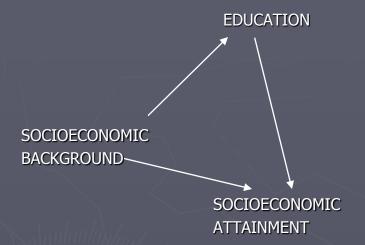
Intergenerational Mobility



Reproduction or Opportunity?

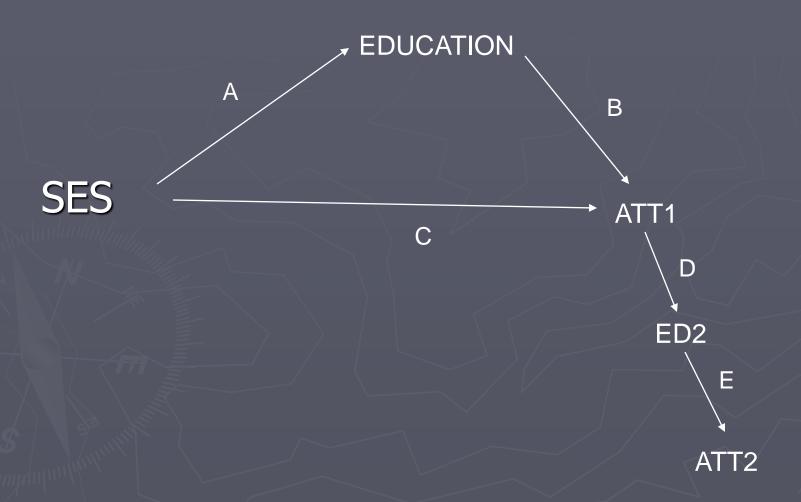


A, B, C, and AxB are not fixed in time or place



RE-ENTRY EDUCATION

CAREER PROGRESSION



But what of adult education and training?

- Increasingly important as a source of human capital acquisition
- "Nearly two-thirds of the 30 occupations with the largest expected numerical increase have short-, moderate-, or longterm on-the-job training as their most significant source of education or training."

- Training has a growing allocative role in labor markets
- Increasing share of education is now reentry education

E is more HC than is B

- Employers learn
- ► Workers learn
- ▶ Instruction is more focused
- ▶ In at least some contexts, credentials are ceding ground to competencies

D and E become both empirically and theoretically interesting

**As do the paths I haven't drawn in

How does D differ from A?

- More or less meritocratic?
- More or fewer constraints (i.e., more or less agency)
- D is probably more information-infused than is A
- Likely Matthew Effects

But ED2 is different from ED1

- ► ED1 is driven primarily by individuals
- ► ED2 is jointly driven by individuals and employers

- ► ED1 is (mostly) cumulative
- ► ED2 is (mostly) episodic

➤ Wolbers (2005) — ED1 and ED2 can be either complements or substitutes, depending on country's vocational orientation

heterogeneity in training

- -employer-initiated training as deficit compensation
- -worker-initiated training as investment in career advancement

Variety of ED2's: NHES

- English as a second language (ESL)
- Basic skills courses
- Credential (degree or diploma) programs
- Apprenticeships
- ► Work-related courses
- Personal interest/personal development courses
- ► Informal learning at work

► Informational value of ED2 is greater than that of ED1

jobs and credentials vary in their signal to noise ratio

Evidence of this for jobs

Brynin 2013 - some occupations (i.e., those whose incumbents have a mix of qualifications, so they are neither graduate nor non-graduate) send noisy signals to prospective students

Evidence of this for credentials

Arcidiacono et al. - ability is observed nearly perfectly for college graduates, but is revealed to the labor market more gradually for high school graduates. Or more anecdotally but probably accurately, degrees in hotel management probably have a higher signal to noise ratio than do degree in fine arts

- Might expect re-entry education and training to be a relatively noiseless signal
- But might also expect women and men to have jobs and degrees with different signal to noise ratios

- ▶ "B" has normally been measured using supply-side data. That is, observe the educational characteristics of workers in given jobs and infer the processes that got them there.
- Employers are the missing link
- Research on employer decision making

- Limitations of this demand-side approach
- Employers have some discretion, but in many ways their hands are tied.
- For example,
 - Negotiated job descriptions (whether bargained or imposed)
 - Certification and licensure
 - Broader cultural understandings of the "appropriate" linkages between education/credentials and job placement

School-to-work scholars don't regularly look at these (largely non-statistical) things, but they should.

- Employer behavior, then, is embedded in systems of *credentialism*.
- So is the behavior of job seekers, labor market intermediaries, parents, and educators

But what are credentials?

Nock − Societies of strangers need to establish trust. They do this with credentials (e.g., credit cards, educational degrees, drivers' licenses) and/or ordeals (e.g., lie detector tests, drug tests, integrity tests)

Three Meanings of Credentialism

- Credentialist Hiring
 - the propensity of employers to select candidates on the basis of the educational qualifications that the candidates present at the point of hire

Credential Inflation

- persistent trend towards ever-increasing educational requirements for jobs
- Higher hiring standards does not by itself indicate credential inflation
- "Credential inflation occurs where jobs that were previously carried out by non-graduates are now graduatised or colonised by graduates without any changes in work content, or necessarily as part of a professional project" (Chillas 2010)

- ► Sheepskin Effects.
 - non-linear wage returns to schooling

On to Systems of Credentialism

- Let's think of "system of credentialism" as how societies generate, recognize, reward and otherwise use educational (and other) credentials
- Need to consider both variations in educational systems and variations in employment systems and how these are inter-related

- Every reason to think that systems of credentialism will vary across:
 - Labor market segments
 - Time
 - Societies

Germany and the United States

- Qualificational Space
 - employers use vocational qualifications to organize jobs and allocate persons among them.
- Organizational Space
 - education is less closely related to the workplace and vocational skills are mainly obtained on the job

Major Findings

- Credentialist Hiring
- a tighter articulation between educational credentials and occupational placement in Germany than in the US. This is far more evident among those who completed apprenticeships than among those with academic degrees.
- signs of convergence toward a common pattern

- Credential Inflation
- Educational inflation has been more rapid in the US than in Germany
- In both nations, educational credentials are more important for schoolto-work transitions than they are for either promotions or changes of employer

What is a system of credentialism, and why should school-to-work scholars be thinking about it?

- ► Who are the actors and what are the structures and institutions that make up systems of credentialism?
- How would we know credentialism if we saw it?

- My micro-foundational concept is ultimately the transaction – the point at which supply, demand, and institutions come together to produce a hiring decision.
- At more macro level, how societies organize themselves to create skill, rationally allocate talent and rewards, or control exclusion and closure.

3 kinds of (uncoerced) labor market transactions

- School-to-Work Transition
- Promotions
- Change of Employer

These vary along dimensions of information and trust.

Our conception of "school-to-work transition" is too narrow.

No single transition

People shift roles all the time, and hold multiple roles

Roksa and Velez – "When studying schooling is not enough: Incorporating employment in models of educational transitions"

Actors

- Job seekers ("at risk," but no assumption of intentionality)
 - >Students
 - Workers
 - ▶ Unemployed
 - Class-specific aspirations
- Employers
 - Employers are specific people (e.g., hiring managers), but they are also job descriptions, ILMs and FLMs, licensure, custom, and so on.

So on micro level of transactions, we need to understand the "narratives of action" of employers and "at risk" hirees

- Educational Inputs (supply side)
 - First schooling
 - Re-entry schooling
 - Training

- Occupational Outcomes (demand side)
 - First job (STW)
 - Current job (hires and promotions)
 - Trajectory
 - Pay

Structures (with examples of each)

Educational Systems

- US higher education is highly stratified but relatively unstandardized. High school diplomas are generally undifferentiated. Weak flow of information from schools to employers.
- Very different in Japan.
- US and Germany expanded their higher education system in very different ways

"The Role of Vocational Specificity of Educational Credentials for Labour Market Entry in Estonia and Slovenia" by Irena Kogan an Marge Unt (International Sociology 2008)

Really illustrates national differences in educational systems and their effects on STW

Work Organization

- Italian employers hire carefully, because it is hard to fire someone.
- US employers buy skills rather than make skills (i.e., underinvest in training).
- Rate at which labor-substitutable technology is adopted (can lead to obsolescence of specific credentials, or to alternative forms/sources of them such as industry certification)

Can't get at all of those with standard data sets

Need much better data on the employer side, especially on changes in the nature of work and how skills are actually used in the workplace.

Institutions, the Welfare State, and Social Closure

- Swedish institutional arrangements cushion job loss. British institutions do not.
- German apprenticeships control job placement via flexible coordination. Irish apprenticeships are weak.
- Rate of demographic aging
- Differences in family formation

Markets

- Hiring standards and educational enrollments rise and fall with labor market stringency.
- Inflow of foreign capital raises demand for skills in recipient country
- Weak unions = high monopsony

- ► Information Who has it and how good is it?
 - Information is asymmetric between buyers and sellers
 - What is the "signal to noise" ratio of an educational credential?
 - ► High school diplomas are noisy, Associate Degrees in Hotel Management probably aren't

Many interesting variations are more cultural or regional than national. For example, Catalonia is distinctive in Spain, Lombardy in France, and Silicon Valley in the US.

Again, we need entirely new and different kinds of data

- What is of interest is the interrelationships of these various factors
- Of course we need better data and better theory, but we also simply need more results
- I'll take all the results that I can get

Spasibo

Briefly, credential hiring is a story about standard deviations, and credential inflation is a story about means. Overeducation literature is relevant here as well

Each of these understandings of credentialism leads to specific hypotheses that can (data willing) be empirically tested Perhaps the basic difference between these two understandings of credentialism is that in the first (credentialist hiring), credentials and occupations are tightly linked, but the specific credential needed to get a specific occupation might not change over time. In the second version, in contrast, the empirical linkage between education and occupation may not be as strong (that is, proportionately more people without the credential may still get the job, or people with the credential may not get the job), but the general educational level associated with a specific occupation will rise over time. In other words, the incumbents of a given occupation will generally become more highly educated over time, even if the proportion of them who reach the occupation through means other than educational credentials does not significantly change.

Hypotheses

- ▶ 1.1 There will be more credentialist hiring in Germany than in the US.
- ▶ 1.2 Trends in credentialist hiring in the US and Germany have converged. This is because Germany has become less credentialist rather than the US has become more so.
- ▶ 2.1 There will be more credential inflation in the US than in Germany. This of course implies divergence between the US and Germany in this sort of credentialism.

Data and Methods

- **PSID**
- GSOEP
 - From Cross-National Equivalent Files

Ordered Probit Model

➤ This was interesting, but what I really wanted was repeated cross-sectional data, on many nations, that permitted an analysis of various kinds of labor market transitions

Next Stage: From Case-Oriented to Variables-Oriented

Credentialist Hiring Credential Inflation

Sheepskin Effects

NATIONS

US*

Germany*

Great Britain*

Canada*

Brazil

Korea

Spain

Mexico

Israel

Japan

Varieties of Credentialism

- From Varieties of Capitalism
 - Firms need to solve five coordination problems
 - ► Industrial relations
 - ► Vocational training and education
 - ► Corporate governance
 - ► Inter-firm relations
 - Coordinating employees

Over the past twenty years, a large literature in political economy suggests that national skills profiles are deeply rooted in domestic production strategies, bound to other national political economic institutions, and politically selfperpetuating. But the increase in international trade and the rise of globally disaggregated production since the 1980s has challenged traditionally dominant production strategies in all advanced economies. How have new production realities impacted skill-building politics?

McCaffrey 2009

STW researchers would benefit from looking at these large-scale trends and processes

Varieties of Capitalism model has been perhaps too stagnant and functionalist, but still....

