

Intergenerational Consequences of Wealth Inequality

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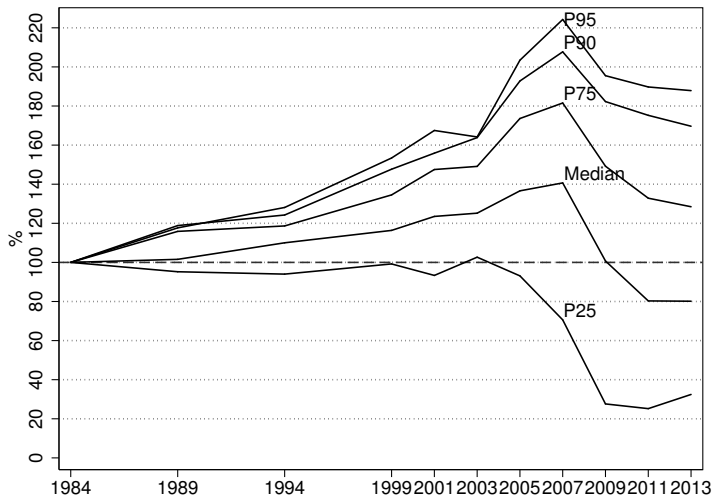
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Inequality in Wealth → Inequality in Opportunity

“From a recent report we learn that two thirds of the population do not own anything. Hence, equality of opportunity already seems to be accomplished for the great majority of people.”

Eulenspiegel (German Satirical Newspaper), December 19 2007

Wealth Inequality Across the Distribution



Outline

1. The transmission of wealth inequality across generations
2. Wealth gaps in education
3. The insurance function of wealth

Data and Measures

► Data

- **Panel Study of Income Dynamics (PSID)**
- National Longitudinal Study of Youth 1979 (NLSY)
- German Socio-Economic Panel (SOEP)
- Swedish register data (tax registers)

► Wealth Measures

- Family Net Worth = sum of all assets minus debts
- Averaged across two years to reduce measurement error
- Different specifications to reduce skew and assess non-linearities
 - ranks, quintiles, logs, inverse hyperbolic sine transformation, etc.

Transmission of Wealth Inequality Across Generations

1. How much?
2. How?

Intergenerational Correlations in Economic Status

- ▶ Large literatures on intergenerational correlations in
 - ▶ Occupational status / class (sociology)
 - ▶ Income (economics)
- ▶ One study on wealth correlations in the U.S. (Charles/Hurst 2013)
 - ▶ Wealth assessed for parents and their children – 15 years later
- ▶ More recent data allow addressing life-cycle bias
 - ▶ Parental wealth in 1984 \Leftrightarrow Children's wealth in 2011
 - ▶ On average, observed at the same age & into late adulthood

Intergenerational Correlations in Wealth

Intergenerational percentile rank correlation

$$W_c^P = \alpha + \beta_1 W_p^P + \beta_2 Age_c + \beta_3 Age_c^2 + \beta_4 Age_p + \beta_5 Age_p^2 + \varepsilon$$

- ▶ Includes zero & negative wealth
- ▶ Margin-insensitive

Intergenerational Correlations in Wealth

	Rank Slope	SE
Overall	0.370***	(0.014)
By Sex		
Male	0.378***	(0.021)
Female	0.363***	(0.018)
By Year		
Pre-Recession (2005-2007)	0.356***	(0.014)
Post-Recession (2009-2011)	0.370***	(0.014)
By Age		
Age 25-44	0.334***	(0.020)
Age 45-64	0.416***	(0.020)

Source: Pfeffer/Killewald (2015), Working Paper

Intergenerational Correlations in Wealth

Parental Wealth	Child's Wealth (Age 45-64)					Total
	QN1	QN2	QN3	QN4	QN5	
QN1 (lowest)	25.7	27.5	21.2	15.0	10.7	100.0
QN2	16.8	19.1	27.4	16.8	20.0	100.0
QN3	14.4	18.8	21.9	26.7	18.2	100.0
QN4	7.4	9.6	19.0	31.7	32.3	100.0
QN5 (highest)	5.2	4.0	9.9	24.4	56.5	100.0

Source: Pfeffer/Killewald (2015), Working Paper

Channels of Intergenerational Wealth Transmission

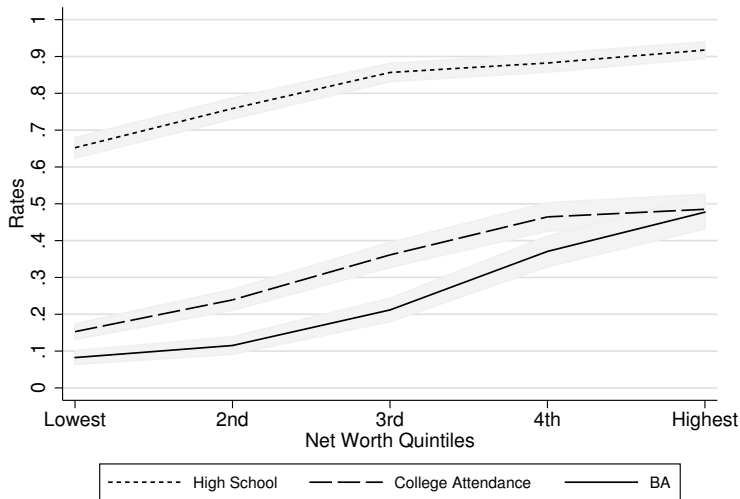
		% of correlation explained
Inheritance/Gift	[cumulative size (ihs)]	12.3%
Education	[highest degree attained]	23.7%
Marriage	[whether ever married]	6.0%
Home Ownership	[whether ever owned home]	11.7%
Jointly		43.9%

Wealth Gaps in Education

The Wealth Gap in Education

- ▶ Association between parental wealth and children's educational attainment (Conley 2001, Morgan/Kim 2006, Haveman/Wilson 2007, Belley/Lochner 2007, Pfeffer 2011)
- ▶ Increasing concern about growing socio-economic inequality in educational outcomes focused on parental income (Reardon 2011, Bailey/Dynarski 2011)
- ▶ Here: Following children born in 1970s and 1980s
 - ▶ Parental wealth in childhood (age 10-14)
 - ▶ HS attainment & College access by age 20
 - ▶ College graduation by age 25

The Wealth Gap in Education



Source: Pfeffer (2015), Working Paper

The Wealth Gap in Education

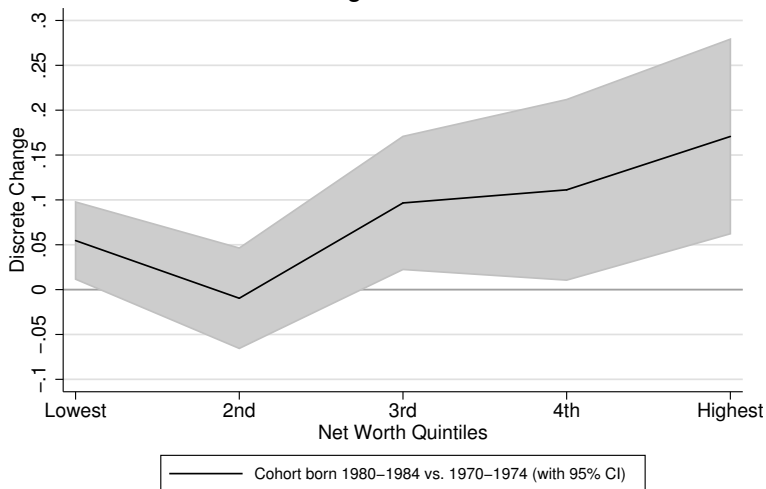
<i>Wealth Quintile</i>	Change in Probability Compared to lowest quintile (standard error)					
	Unconditional			Conditional		
	High School Graduation			College Graduation		
2nd	0.1064	(0.0204)	***	0.0141	(0.0193)	
3rd	0.2043	(0.0191)	***	0.0820	(0.0208)	***
4th	0.2301	(0.0191)	***	0.0758	(0.0252)	**
Highest	0.2651	(0.0184)	***	0.1034	(0.0277)	***
College Graduation						
2nd	0.0328	(0.0154)	*	-0.0142	(0.0228)	
3rd	0.1293	(0.0188)	***	0.0276	(0.0239)	
4th	0.2883	(0.0232)	***	0.0832	(0.0276)	**
Highest	0.3950	(0.0251)	***	0.0941	(0.0300)	**

Conditional associations are Average Marginal Effects (AME) + $p < .10$, * $p < .05$, **

$p < .01$, *** $p < .001$

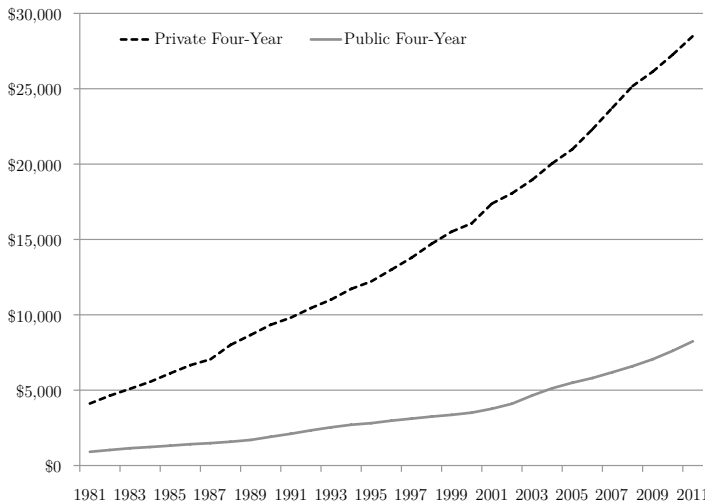
The Growing Wealth Gap in Education

College Graduation



Source: Pfeffer (2015), Working Paper

The Growing Wealth Gap in Education



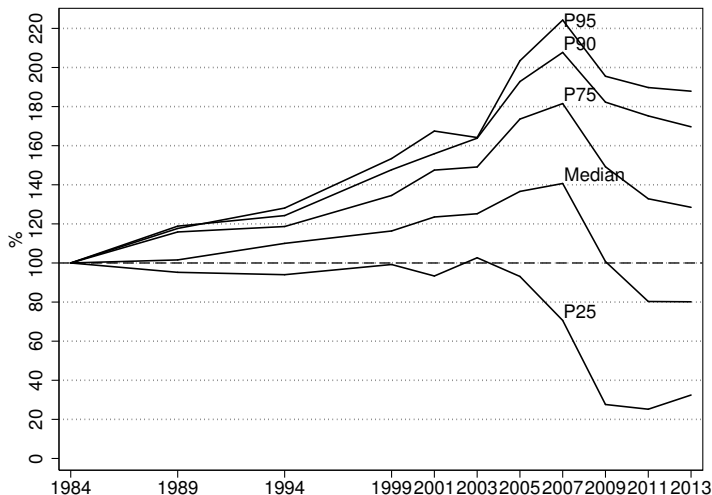
Source: College Board (2011); Average published tuition and fees in 2011 dollars, enrollment-weighted

The **Growing** Wealth Gap in Education

Potential sources of growing gap

- ▶ increasing importance of parental wealth (effect)
- ▶ increasing distance in wealth available to different students (distribution)
- ▶ Findings
 - ▶ Effect has remained stable
 - ▶ Increasing wealth inequality accounts for ~half of growing gap
- ▶ What does that imply for the future?

The Growing Wealth Gap in Education



Source: Pfeffer et al. (2013, 2014)

The **Growing** Wealth Gap in Education

- ▶ Interpolating the wealth gap in college graduation (top vs. bottom wealth quintile)
 - ▶ Children growing up in 1970s: 40 percentage points
 - ▶ Children growing up today: 70 percentage points

The Insurance Function of Wealth

- ▶ Theoretical framework
- ▶ Evidence from cross-national comparisons
- ▶ Within-country evidence

Why parental wealth should matter

Purchasing Function

- Advantageous neighborhoods & schools
- Alleviation of credit constraints for PSE

Insurance Function

- Educational decision-making
- Labor market transitions

Unobserved Heterogeneity

- Time preferences, risk aversion, etc.

The insurance function of parental wealth

Definition Potential to buffer the socio-economic and socio-psychological consequences of negative outcomes in offspring's attainment process



See also “real and psychological safety nets” (Shapiro 2004)
“income feeds stomachs, assets change heads” (Sherraden 2001)

Challenge No actual transfer needed for effects to emerge

Analyses & Other Research

- ▶ Adding credibility to the purchasing function in the U.S.
 - ▶ Direct measures of transfers (PSID 2013)
 - ▶ Identification of credit constraints for college access: Higher Education Act of 1992 (also: Lovenheim 2011)
 - ▶ Mediating role of neighborhood quality
- ▶ Adding credibility to the insurance function
 - ▶ **Cross-national comparison (US, GER, SWE)**
 - ▶ **Choice of field of study (SWE)**
 - ▶ Choice of safe-haven educational pathway (GER)
 - ▶ Mediating role of educational aspirations (US)
- ▶ Reducing worries about unobserved bias
 - ▶ Conceptual defense
 - ▶ Econometric approaches: Future Treatments
 - ▶ Quasi-natural experiments [▶ Link](#)

Cross-national Comparison

Institutional context

	United States	Germany	Sweden
Secondary education	comprehensive local funding	differentiated vocational	no dead-ends standardized
Post-secondary	costly	mostly free	free
Inequality & segregation	high	low	lowest
Social insurance (labor market)	low	strong	strongest
Wealth Inequality			
- Gini Coefficient	0.84	0.81	0.89
- Share of top 10%	64%	55%	58%

Why parental wealth should matter ... differently

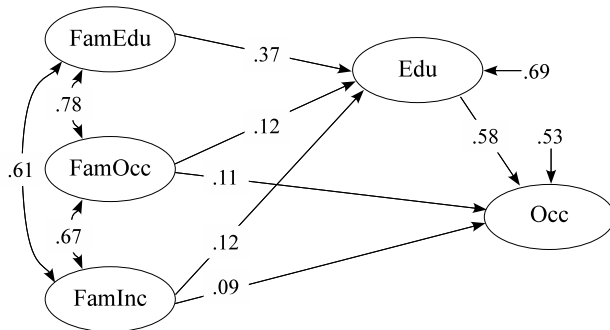
	US	GER	SWE
Purchasing Function			
Advantageous neighborhoods & schools	✓		
Alleviation of credit constraints for PSE	✓		
Insurance Function			
Educational decision-making	✓	✓	✓
Labor market transitions	✓		

The insurance function of wealth ...

- ▶ ... for (later) labor market careers: **Context-dependent**
 - ▶ Dependent on extent of public insurance schemes:
US < GER < SWE (DiPrete 2002, Esping-Andersen 1990)
- ▶ ... for education: **Universal**
 - ▶ Educational decision-making is inherently risky (e.g. Breen/Goldthorpe 1997)
 - ▶ Risk = failure to graduate (sunk opportunity costs, stigma)
 - ▶ No existing institutional arrangements provide insurance
 - ▶ Risk may be even higher in European context
 - ▶ SWE&GER: High opportunity costs of university attendance (higher foregone earnings due to longer time to degree & lower income returns compared to vocational route)
 - ▶ GER: Higher uncertainty of success (since decision points at earlier ages)

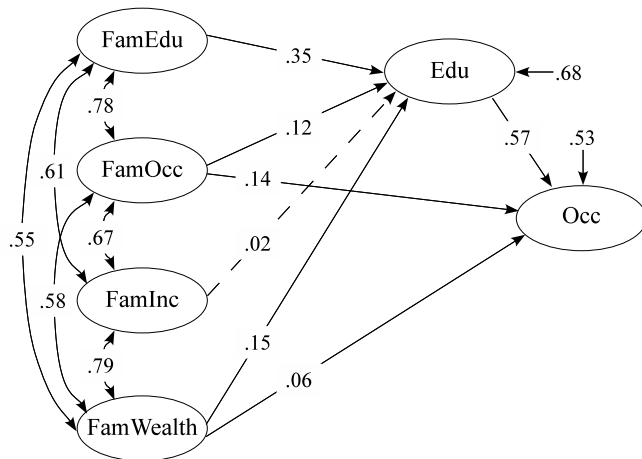
Status Attainment Model: U.S.

$\chi^2 = 25.9$, $df = 17$, $p = .076$, $RMSEA = .018$, $BIC = -100$



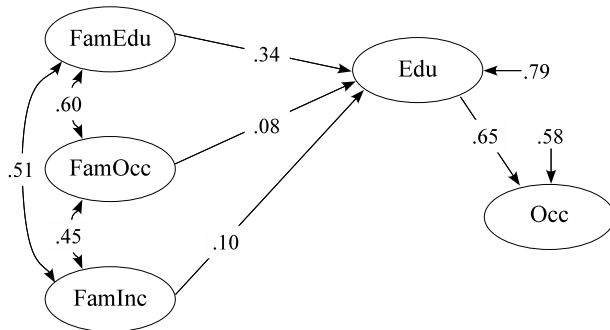
Status Attainment Model: U.S.

$\chi^2 = 50.6$, $df = 28$, $p = .0055$, $RSMEA = .022$, $BIC = -157$



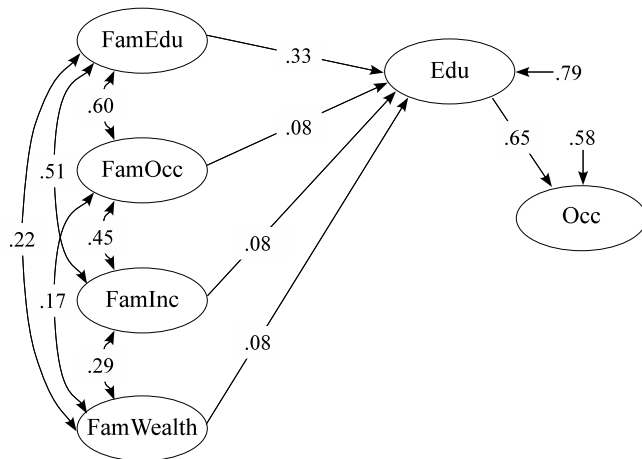
Status Attainment Model: Germany

$\chi^2 = 18.0$, $df = 18$, $p = .454$, $RSMEA = .001$, $BIC = -101$

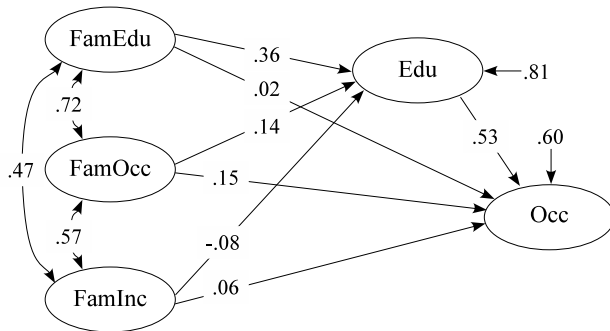


Status Attainment Model: Germany

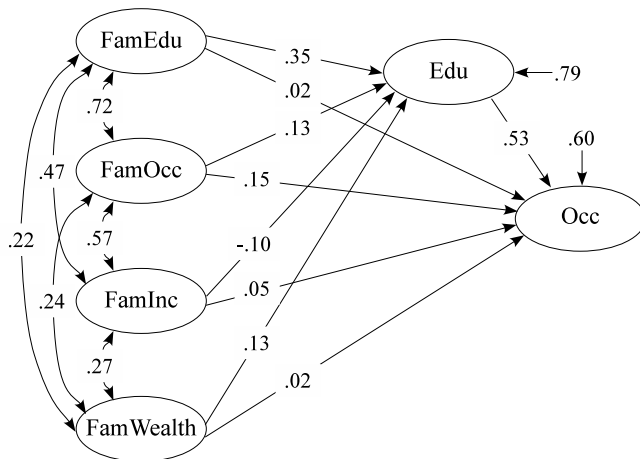
$\chi^2 = 33.4$, $df = 24$, $p = .097$, $RSMEA = .023$, $BIC = -125$



Status Attainment Model: Sweden



Status Attainment Model: Sweden



Summary

- ▶ Wealth effects independent of other background effects in all three countries
 - ▶ *Less* important than parental education
 - At least* as important as parental occupation
 - More* important than family income
 - ▶ Chiefly operate through structuring educational opportunities
- ▶ Further results (not shown)
 - ▶ Wealth impacts outcomes across most levels of education
 - ▶ Wealth shields against intergenerational downward mobility

Within-Country Evidence

The insurance function & choice of field of study

- ▶ Choice of a field of study with high expected earnings and high earnings variance (uncertainty)
 - ▶ Choice among 162 unique degrees in [Sweden](#) (676 when combined with university choice)
 - ▶ Currently: Actual choice
 - ▶ Forthcoming: Stated preferences (application registers)
- ▶ Parental wealth strongly predicts choice of fields with high earnings uncertainty
 - ▶ More so than other background characteristics

The insurance function & choice of educational safe-haven

- ▶ “Gap year apprenticeships” in [Germany](#)
 - ▶ Apprenticeships designed for those graduating from lower tracks of secondary education (Hauptschule & Realschule)
 - ▶ Increasing demand by those graduating from the highest track (Gymnasium) before going on to University
- ▶ Educational choice to reduce uncertainty
 - ▶ Conservative estimates (already positively selected)
 - ▶ Analyses ongoing

The insurance function & educational aspirations

- ▶ Educational aspirations as outcome of educational decision-making
 - ▶ Educational aspirations as causal pathways of intergenerational effects (Sewell/Haller/Portes 1969, Morgan 2005)
 - ▶ Relevance for wealth effects (Williams-Shanks/Destin 2009, Destin/Oysterman 2009)
- ▶ Mediating role of educational aspirations in the **United States**
 - ▶ Strong for HS attainment, particularly financial wealth (half of the effect mediated)
 - ▶ Even stronger for BA attainment, particularly financial wealth (nearly 3/4 of the effect mediated) [▶ Link](#)

Summary - I

- ▶ *High and rising wealth inequality across the distribution*
 - ▶ Particularly pronounced changes since the Great Recession
- ▶ *Strong intergenerational transmission of inequality*
 - ▶ Comes to full blossom during older adulthood
 - ▶ High rigidity at the top
 - ▶ Much of it transmitted early in life (esp. through education)
- ▶ *Large wealth gaps in education*
 - ▶ Independent associations with wealth at all levels (in particular, college persistence)
 - ▶ Increasing wealth gaps in college attainment (& bleak future)

Summary - II

- ▶ *Mechanisms behind intergenerational wealth effects*
 - ▶ Purchasing function AND insurance function
- ▶ *Insurance function as explanation of*
 - ▶ *Intergenerational wealth effects in other institutional contexts*
 - ▶ Choice of college majors with large variance in earnings
 - ▶ Choice of safe-haven educational pathways
 - ▶ Mediating role of aspirations

Thank you