

African American Intergenerational Economic Mobility Since 1880

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Overview

► Main questions:

- How has intergenerational upward mobility differed between black and white children since the U.S. Civil War?
- Can purely racial factors explain disparities in mobility? (“Inheritance of race”, Duncan 1968a)

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► Relevance:

“[O]ur results show a sharp disadvantage for black men relative to white men in the likelihood of escaping the bottom ranks of the income distribution throughout US history”

Historical background

- ▶ 1865: slavery abolished in the U.S.
 - 92% of African Americans lived in South
 - Mostly illiterate; no property/wealth redistribution
 - Exclusion from education and skilled jobs
- ▶ 1910s-1960s: “Great Migration” out of the South
- ▶ Civil Rights Movement in 1960s
- ▶ Persistent earnings gap has closed but remains high
 - black-white income ratio: 28% → 64% from 1970 to 2010 (Margo, 2016)

Data

5 cohorts of sons matched to fathers in U.S.

1. **1880** → **1900**

- 1880/90 Census of Population
- Farmers: 1880 Census of Agriculture & Ancestry.com

2. **1910** → **1930**

- Same as above

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- OCG, 1973

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5. **1970 → 1990/2000**

- National Longitudinal Survey of Youth (NLSY), 1979
- Follows participants annually/biannually through 2000

Empirical approach

How do they measure mobility?

Two main steps:

1. Assign income scores by cell
 - Cell: occupation, region, race, gender
 - Score based on average earnings by cell
2. Rank income using nationally representative cross-sections
 - IPUMS¹ for historical data
 - Peers within OCG and NLYS for later data

¹Integrated Public Use Microdata Series

Ranking results

TABLE 1: NATIONAL INCOME SCORE RANKINGS AND SHARES BY OCCUPATION, BLACK AND WHITE FATHERS

PANEL A: FATHERS' AVERAGE INCOME SCORE RANKS BY OCCUPATION CATEGORY

Sons' Cohort Year	1900		1930	
	White	Black	White	Black
Farmer, owns	56.6	8.4	53.9	8.0
Farmer, does not own	42.4	3.9	42.0	3.9
Farm laborer	13.0	2.3	14.6	2.5
White collar	91.4*	28.2	88.7	33.0
Blue collar, skilled	65.5	16.4	66.5	20.3
Blue collar, semi skilled	52.9	21.4	52.1	21.7
Blue collar, laborer	21.7	11.5	23.8	12.6
<i>AVERAGE</i>	57.1	7.1	56.4	8.0
<i>N</i>	282,980	25,119	1,415,312	82,223

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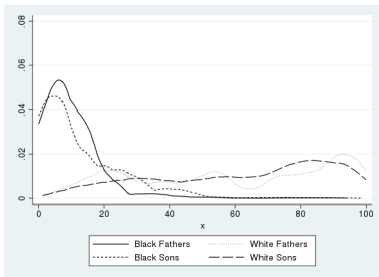
Ranking results (cont.)

	1962		1973		1990	
	White	Black	White	Black	White	Black
Farmer	43.5*	3.3	45.5	4.7	60.3	4.0
Farm laborer	8.4	1.7	10.6	2.1	18.6	1.4
White collar, professionals	87.7	38.1	86.8	41.0	80.8	42.0
White collar, managerial and clerical	64.0	23.0	60.4	24.7	50.3	20.7
Blue collar, skilled	61.1	20.7	59.8	23.9	54.2	23.0
Blue collar, semi skilled	39.3	14.0	41.3	16.0	32.6	14.5
Blue collar, laborer	16.3	8.29	19.4	10.0	17.7	7.1
<i>AVERAGE</i>	53.7	10.2	55.6	15.3	56.4	17.9
<i>N</i>	8,950	719	13,849	1,175	2,233	826

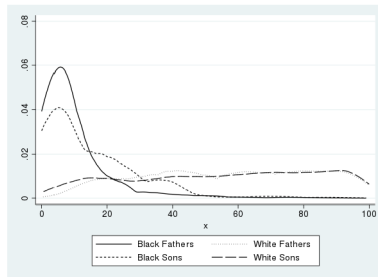
Kernel density estimates

**FIGURE 1: KERNEL DENSITY PLOTS: INCOME SCORE PERCENTILES,
BLACK AND WHITE FATHERS AND SONS BY COHORT**

PANEL A: 1900 COHORT

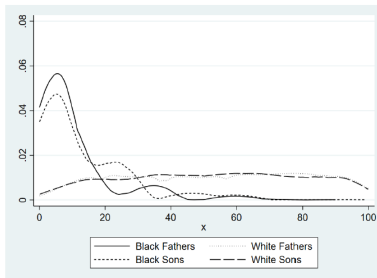


PANEL B: 1930 COHORT

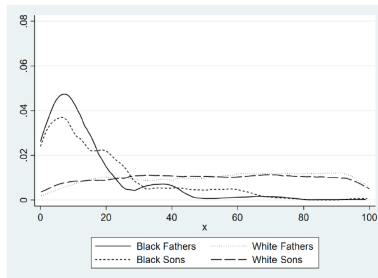


Kernel density estimates

PANEL C: 1962 COHORT

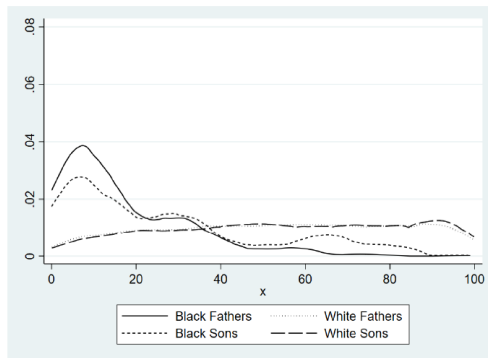


PANEL D: 1973 COHORT



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PANEL E: 1990 COHORT



Counterfactual distributions

What if black sons had the same mobility as white sons?

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Approach: re-weight following DiNardo, Fortin, & Lemieux (1996)

Joint distribution of father and son ranks by race:

$$F(\text{son}, \text{father}, r_s, r_f)$$

Marginal density:

$$f_{black}(\text{son}) = \int_f f(\text{son} | \text{father}, r_s = \text{black}) dF(\text{father} | r_f = \text{black})$$

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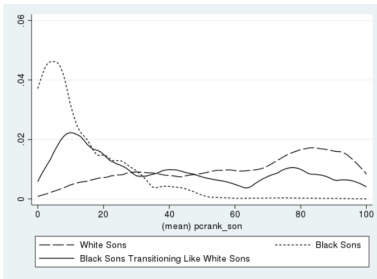
Counterfactual density: $\psi_{father} = \frac{dF(\text{father} | r_f = \text{black})}{dF(\text{father} | r_f = \text{white})}$

$$f_{cf}(\text{son}) = \int_f f(\text{son} | \text{father}, r_s = \text{white}) \psi_{father} dF(\text{father} | r_f = \text{white})$$

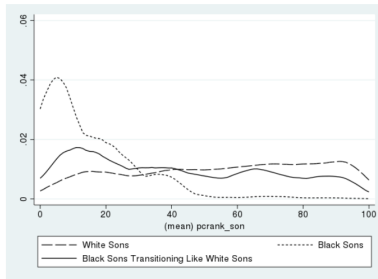
Counterfactual density estimates

FIGURE 4: COUNTERFACTUAL KERNEL DENSITY PLOTS FOR BLACK SONS INCOME SCORE RANKS UNDER WHITE SONS' TRANSITION RATES

PANEL A: 1900 COHORT

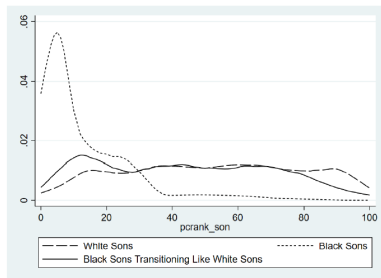


PANEL B: 1930 COHORT

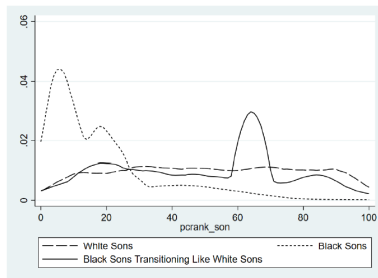


Counterfactual density estimates

PANEL C: 1962 COHORT

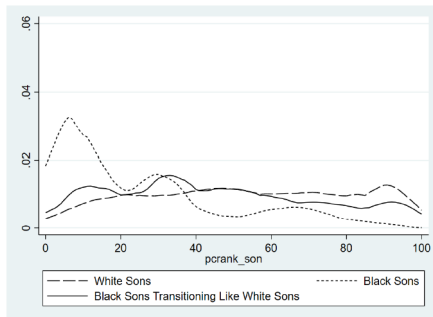


PANEL D: 1973 COHORT



Counterfactual density estimates

PANEL E: 1990 COHORT



Final thoughts

- ▶ Striking patterns across history suggest black males faced much greater difficulty escaping bottom of distribution
- ▶ Measures of mobility around a number of watershed events in African American history
- ▶ Issues:
 - Lack of between-group analysis
 - Glosses over role of father/mother figures
 - Usual caveats about wealth vs. income

Additional results

**TABLE 2: SONS' INCOME RANK REGRESSIONS, INCLUDING FATHERS' INCOME SCORE
RANK AND RACE**

Sons' Cohort Year	1900	1930	1962	1973	1990
PANEL A: WITH FATHERS' INCOME RANK CONTROLS					
	Full Sample				
BLACK	-22.50*** (0.429)	-22.82*** (0.0711)	-27.46*** (0.799)	-25.19*** (0.700)	-18.84*** (1.546)
Parent's Income Rank	0.432*** (0.00663)	0.398*** (0.000890)	0.308*** (0.0109)	0.227*** (0.00882)	0.258*** (0.0238)
N	308,099	1,497,535	9,025	13,848	2,620
R-Squared	0.354	0.307	0.226	0.164	0.149
	Age 30-37 only				
BLACK	-29.19*** (0.750)	-27.04*** (0.119)	-27.02*** (1.381)	-26.94*** (1.335)	-20.23*** (2.547)
Parent's Income Rank	0.399*** (0.0113)	0.383*** (0.00136)	0.336*** (0.0178)	0.267*** (0.0152)	0.272*** (0.0391)
N	100,912	604,441	3,361	4,267	1,002
R-Squared	0.416	0.341	0.256	0.200	0.163

Additional results

PANEL B: ADD FATHERS' EDUCATION OR LITERACY, FARM, AND URBAN CONTROLS					
	Full Sample				
BLACK	-25.17*** (0.392)	-22.42*** (0.0714)	-28.18*** (0.781)	-25.62*** (0.697)	-19.67*** (1.563)
Parent's Income Rank	0.361*** (0.00678)	0.285*** (0.00090)	0.224*** (0.0120)	0.162*** (0.0099)	0.187*** (0.0269)
R-Squared	0.409	0.381	0.259	0.182	0.19
	Age 30-37 only				
BLACK	-31.22*** (0.702)	-25.93*** (0.121)	-27.84*** (1.357)	-27.16*** (1.359)	-20.79*** (2.597)
Parent's Income Rank	0.345*** (0.0114)	0.276*** (0.00137)	0.237*** (0.0198)	0.176*** (0.0171)	0.227*** (0.0456)
R-Squared	0.451	0.409	0.299	0.235	0.216

Additional results

PANEL C: ADD AGE AND STATE/REGION OF ORIGIN FIXED EFFECTS					
	Full Sample				
BLACK	-23.49*** (0.453)	-21.70*** (0.0751)	-26.83*** (0.776)	-22.98*** (0.677)	-18.94*** (1.569)
Parent's Income Rank	0.269*** (0.00393)	0.214*** (0.000939)	0.168*** (0.0120)	0.125*** (0.00981)	0.168*** (0.0273)
R-Squared	0.462	0.430	0.329	0.277	0.204
	Age 30-37 only				
BLACK	-28.89*** (0.836)	-24.84*** (0.128)	-28.20*** (1.278)	-25.30*** (1.323)	-19.54*** (2.634)
Parent's Income Rank	0.267*** (0.00646)	0.219*** (0.00146)	0.200*** (0.0202)	0.129*** (0.0178)	0.204*** (0.0461)
R-Squared	0.471	0.425	0.320	0.256	0.229

Additional results

PANEL D: ADD SONS' EDUCATION OR LITERACY CONTROLS + PARENTAL					
	Full Sample				
BLACK	-21.82*** (0.435)	-20.90*** (0.0753)	-26.75*** (0.778)	-23.37*** (0.619)	-20.61*** (1.489)
Parent's Income Rank	0.266*** (0.00393)	0.210*** (0.000938)	0.173*** (0.0126)	0.0787*** (0.00990)	0.113*** (0.0286)
R-Squared	0.465	0.433	0.329	0.368	0.308
	Age 30-37 only				
BLACK	-27.00*** (0.812)	-23.89*** (0.128)	-28.08*** (1.297)	-24.98*** (1.224)	-21.00*** (2.520)
Parent's Income Rank	0.264*** (0.00647)	0.211*** (0.00146)	0.206*** (0.0214)	0.0785*** (0.0176)	0.155*** (0.0492)
R-Squared	0.475	0.430	0.320	0.378	0.333