

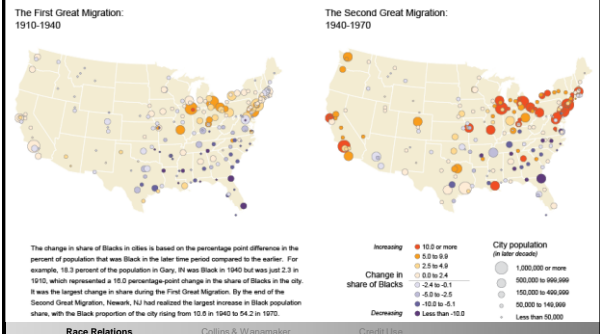
Econ 113: March 5, 2015

- Internal Migration: The Great Migration, continued
 - The 1910 & 1930 Census
 - Collins & Wanamaker paper
- Credit Markets in the 1920s

Midterm on Tuesday March 10
 One hand-written 4x6 card
 Dmitri's students: here
 Erik's students: 247 Cory Hall

The Great (Internal) Migration

- First wave of African American migration, South to North



Jim Crow

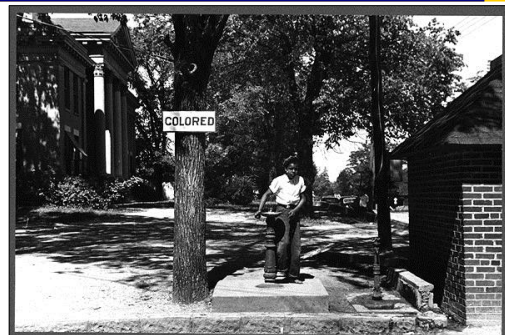
- “Jim Crow” or “Jim Crow Laws”
 - Laws or extra-legal behaviors/institutions that created and maintained racial segregation in the South
 - Examples:
 - Public Accommodations (private businesses offering services to public)
 - Stores
 - Hotels
 - Restaurants
 - Restrooms
 - Drinking Fountains
 - Government Services
 - Buses
 - Education
 - Create a culture that supports & perpetuates racism
- Over-ruled with Civil Rights Act of 1964 & Voting Rights Act of 1965
 - But not immediate change following 1965

Race Relations

Collins & Wanamaker

Dunning

Separate facilities, 1938



Race Relations

Collins & Wanamaker

Dunning

Cabins, 1939

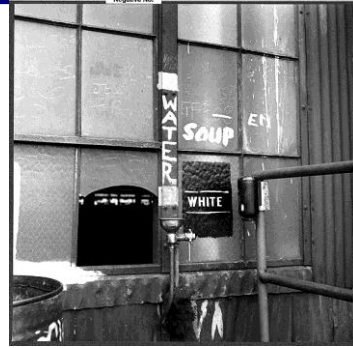


Race Relations

Culture & Warrameter

P144P-D

Water Fountain, 1943



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Interactive resource re Jim Crow

- Definitely worth checking out on your own:
- <http://www.pbs.org/wnet/jimcrow/themap/map.html>

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Culture & Warrameter

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Additional background

- Strike breakers
 - During the 1910-1930 period, use of African-American workers as strike breakers
 - Especially in Illinois
 - Recruited, first from the South and later from local area
- Good background article: Warren Whatley, "African-American Strikebreaking from the Civil War to the New Deal," *Social Science History* 17 (Winter 1993). Accessible at <http://www.jstor.org/stable/1171303>

Race Relations

Culture & Warrameter

P144P-D

Collins & Wanamaker

- Question: Did migration increase African American income?
- Challenge: Migrants aren't a random selection of population, so comparing migrants and non-migrants gives skewed results
- Solution: Use 1910 & 1930 censuses to create a panel

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Collins & Wanamaker

Census Data

What's in the Census?

- 1910 Census Questions
 - <https://usa.ipums.org/usa/voliii/items1910.shtml>
- 1930 Census Questions
 - <https://usa.ipums.org/usa/voliii/items1930.shtml>
- Generally, this source:
 - <https://usa.ipums.org/usa/voliii/tEnumForm.shtml>

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Census Data

Measuring Income

- Don't have income in 1910 or 1930 census
- C&W create "earnings scores"
 - Occupation
 - Industry
 - Employment status, 1930
 - Southern-born black men
- Two different sources of earnings data
 - Lebergott (1928) & IPUMS (1960)
- Two measures: nominal & real
- **Dependent variable: $\ln(\text{earnings score})$**
 - With those four variants (nominal vs real, 1928 vs 1960)

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Census Data

Are there 1910 differences in income?

- Checks for selection bias in who migrates
- $M = 1$ for migrants, 0 for non-migrants
- Suppose $\ln(Y) = \ln(1,000) = 6.908$ for migrants
and $\ln(Y) = \ln(800) = 6.685$ for non-migrants
- Then "log earnings score difference" = 0.223
 $e^{0.223} = 1.25$, a 25% difference (1,000 is 25% more than 800)
- And a regression of $\ln(Y)$ on M would yield
coefficient estimate of 0.223 for M
- C&W control for observables & also county fixed effects

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Census Data

Collins & Wanamaker, Table 4

TABLE 4—1910 LOG EARNINGS SCORE DIFFERENCES BETWEEN SUBSEQUENT MIGRANTS AND NONMIGRANTS

	(1)	(2)	(3)
<i>Panel A. Earnings score based on Lebergott (1928)</i>			
Nominal	0.126 (0.0249)	0.0468 (0.0198)	0.0221 (0.0225)
Real	0.115 (0.0238)	0.0443 (0.0200)	0.0230 (0.0227)
<i>Panel B. Earnings score based on IPUMS (1960)</i>			
Nominal	0.152 (0.0287)	0.0519 (0.0228)	0.0160 (0.0264)
Real	0.142 (0.0277)	0.0495 (0.0230)	0.0169 (0.0265)
Controls for personal, household and county characteristics in 1910	No	Yes	Yes
1910 County fixed effects	No	No	Yes
Observations	2,079	2,079	2,079

Basic Relations

Collins & Wanamaker

Panel A

Interpretation: Table 4

- With no controls, appears there was positive selection of migrants
 - Migrants had 12% higher 1910 income than non-migrants
- But add observable characteristics, *ceteris paribus*
 - Migrants had just 4.5% higher 1910 income than non-migrants
- And control for unobservables with county FE
 - Difference is just 2% and no longer statistically significant
- Therefore: weak evidence for positive selection of migrants

Basic Relations

Collins & Wanamaker

Panel A

Does migration affect occupation?

TABLE 6—OCCUPATIONAL TRANSITION MATRIX FOR MEN WORKING IN 1910 AND 1930

	Distribution in 1910	Professional/ clerical in 1930	Farm in 1930	Crafts/ semi-skill in 1930	Nonag. laborer/operative in 1930
<i>Panel A. Full sample (N = 1,829)</i>					
Professional/clerical	1.5	0.4	0.7	0.2	0.3
Farm	56.8	1.8	33.1	4.7	17.2
Crafts/semi-skill	8.0	0.9	2.5	1.1	3.5
Nonag. laborer/operative	33.8	1.6	13.8	4.3	14.1
<i>Panel B. Nonmigrants (N = 1,548)</i>					
Professional/clerical	1.6	0.5	0.8	0.1	0.3
Farm	59.1	1.7	38.8	4.4	14.3
Crafts/semi-skill	7.6	0.8	3.0	1.0	2.8
Nonag. laborer/operative	31.7	1.3	15.9	3.0	11.6
<i>Panel C. Migrants (N = 281)</i>					
Professional/clerical	0.7	0.0	0.0	0.4	0.4
Farm	43.8	2.5	1.8	6.1	33.5
Crafts/semi-skill	10.3	1.4	0.0	1.4	7.5
Nonag. laborer/operative	45.2	3.2	2.5	11.4	28.1

Basic Relations

Collins & Wanamaker

Panel A

Do migrants see increased income?

- First, cross-section analysis

$$Y_{i,1930} = \text{constant} + (\text{coeff}) * M + (\text{lots of coeff's}) * (\text{lots of controls})$$

Or as they write it

$$Y_{i,1930} = \lambda + \tau_i * M_{i,1930} + X_i * \tau_2 + u_i$$

- Different types of controls
 - Observables (the X_i variables)
 - County FE
 - Household FE (for sets of brothers)
- Last equation: panel approach
 - “differenced dependent variable”

Basic Relations

Collins & Wanamaker

Panel A

TABLE 7—LOG EARNINGS SCORE DIFFERENTIALS IN 1930 BY MIGRANT STATUS

	(1)	(2)	(3)	(4a)	(4b)	(5a)	(5b)
<i>Panel A. Earnings score based on Lebergott (1928)</i>							
Nominal	0.891 (0.00981)	0.869 (0.0100)	0.860 (0.0124)	0.788 (0.0795)	0.789 (0.0982)	0.878 (0.0177)	0.832 (0.0273)
Real	0.685 (0.00950)	0.667 (0.00968)	0.661 (0.0119)	0.604 (0.0759)	0.595 (0.0935)	0.680 (0.0167)	0.636 (0.0268)
<i>Panel B. Earnings score based on IPUMS (1960)</i>							
Nominal	0.900 (0.0135)	0.873 (0.0138)	0.860 (0.0166)	0.788 (0.0996)	0.786 (0.121)	0.889 (0.0249)	0.829 (0.0345)
Real	0.694 (0.0133)	0.671 (0.0136)	0.661 (0.0161)	0.604 (0.0993)	0.592 (0.121)	0.691 (0.0243)	0.633 (0.0342)
Controls for personal, household, and county characteristics in 1910	No	Yes	Yes	Yes	Yes	Yes	Yes
1910 County fixed effects	No	No	Yes	Yes	No	No	No
1910 Household fixed effects	No	No	No	No	Yes	No	No
Differenced dependent variable (1930–1910)	No	No	No	No	No	No	Yes
Observations	5,055	5,055	5,055	403	403	1,935	1,935

Interpretation: Table 6

- Fairly consistent coefficient on M of ~ 0.6 to 0.65
 - Note: $e^{0.6} = 1.822$ (82% gain), $e^{0.65} = 1.916$ (92% gain)

David Robinson Collins & Wamaker David Robinson

But what about . . .

- Is the study telling us why people migrated?
- What are other ways of framing the question?

David Robinson Collins & Wamaker David Robinson

Migration: Goal?	Migration: Push & Pull factors?		
<ul style="list-style-type: none"> seek wealth (max wealth) → financial freedom political, religious → physical educational opps escape famine → want food/life more max income adventure/adrenalin family unity 	<table border="0"> <tr> <td> Push forced migration <ul style="list-style-type: none"> discrimination/oppression epidemic war income gov. policies famine lack of natural resources cost of living </td> <td> Pull cost of living <ul style="list-style-type: none"> ease of travel to certain cities [harrop's costs] family/community connections mobility jobs/wages citizenship possibilities costs of running business gov. policies quality of technology </td> </tr> </table>	Push forced migration <ul style="list-style-type: none"> discrimination/oppression epidemic war income gov. policies famine lack of natural resources cost of living 	Pull cost of living <ul style="list-style-type: none"> ease of travel to certain cities [harrop's costs] family/community connections mobility jobs/wages citizenship possibilities costs of running business gov. policies quality of technology
Push forced migration <ul style="list-style-type: none"> discrimination/oppression epidemic war income gov. policies famine lack of natural resources cost of living 	Pull cost of living <ul style="list-style-type: none"> ease of travel to certain cities [harrop's costs] family/community connections mobility jobs/wages citizenship possibilities costs of running business gov. policies quality of technology 		
Migration: Behavioral Assumptions? <ul style="list-style-type: none"> means of migrating access to info. goal max (something) ↔ rationality choice legal afford cost of moving healthy enough 			

Race and Economics: Credit

- Olney article, "When Your Word is Not Enough"
- Installment credit
 - Purchase of particular durable good
- Merchant in-store credit
 - Grocer, doctor, soft goods, and so on

Race Relations Culture & Wages/Ineq. Credit Use

Installment Credit

- Goods purchased on installments, 1918-1919
 - Pianos
 - 80 % of white and 95% of black families used credit
 - Phonographs
 - About 50% of both white & black families used credit
 - Furniture
 - 20% of white and over 50% of black families used credit
 - Appliances
 - 15% of white and 25 % of black families used credit

Race Relations Culture & Wages/Ineq. Credit Use

Who used credit?

Table 9. Percent of Households Using Credit, 1918-1919

	White		Black
	all cities	14-cities	14-cities
Installment Credit	21.0	22.7	37.0
Merchant Credit	25.0	24.0	21.7

Table 10. Average Values from Cost of Living Survey, 1918-1919

	White		Black
	all cities	14-cities	14-cities
Income	\$1,517	\$1,467	\$1,141
Labor Y as % of Total Y	96.2 %	96.7 %	96.1 %
% Wife in paid labor force	8.6	5.3	43.8
% Wife has income from any source	13.1	9.7	50.6
% Own home	24.1	18.6	10.3
Avg # rooms in owned home	5.5	5.3	5.2

- **Installment credit**
 - **greater** use by black families than white families
 - explained by **low** income and wealth
- **But a different pattern for merchant in-store credit**
 - **less** use by black families than by white families
 - even though black income and wealth **lower**

Race Relations Culture & Wages/Ineq. Credit Use

Analysis

- Dependent variable is dummy (indicator) variable
 - Use credit? (1 if yes; 0 if no)
- Econometric method: logit (or now, dprobit)
 - Logit: No simple interpretation of size of coefficients
 - Dprobit: coefficients show marginal effect
 - Signs and statistical significance matter

Table 11. Analysis of Credit Use, 1918-1919
(Partial results)
(T-stat in parentheses)

	installment credit	merchant credit	
		all cities	14-cities
white? (1 if white; 0 if black)	-0.56 (5.75)	+0.67 (6.58)	+0.44 (3.37)

Source: Olney, "When Your Word is Not Enough," Table 7

Updated analysis using dprobit (these coeffs show % difference)

White?	installment credit	merchant credit	
		all cities	14-cities
	-0.146 (6.83)	+0.070 (4.16)	+0.064 (3.32)

Race Relations Culture & Wages/Ineq. Credit Use

Blinder-Oaxaca method

- But what if credit use responds differently to many of the independent variables for black families than for white families?

Table 12. Predicted Likelihood of using credit
1918-1919

	White means & White coefficients	Black means & Black coefficients	Black means & White coefficients
Installment	25.2	77.4	79.9
Merchant	16.6	15.8	30.1

- One approach
 - Race-specific regressions
 - Use to predict “What’s chance family uses credit?”
 - Distinguishes between “different treatment” and “different characteristics”

Race Relations

Collins & Wainwright

Credit Use

Explanation: Collateral

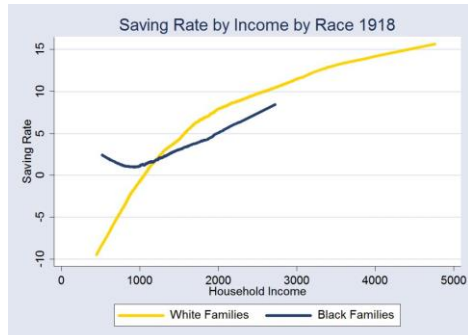
- Installment credit
 - collateral (good being purchased) could be repossessed
- Merchant credit
 - no physical collateral
- Implication for saving
 - Low income black families **saved more** and **saved more often** than low-income white families

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Credit Use

Saving Rate by Race

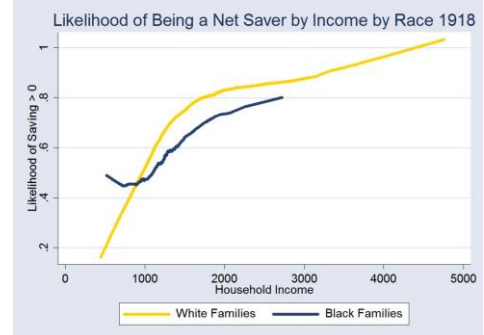


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Credit Use

Likelihood of Saving by Race



Race Relations

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Credit Use

Income summary stats

	Mean (S.D.)	25 – 75 percentile	10 % cutoff	90 % cutoff
All white families	\$1,517 (420)	\$1,222 - \$1,746	\$1,050	\$2,064
In 14 city subsample				
White families	\$1,467 (397)	\$1,188 - \$1,696	\$1,028	\$1,973
Black families	\$1,132 (273)	\$950 - \$1,269	\$833	\$1,485