

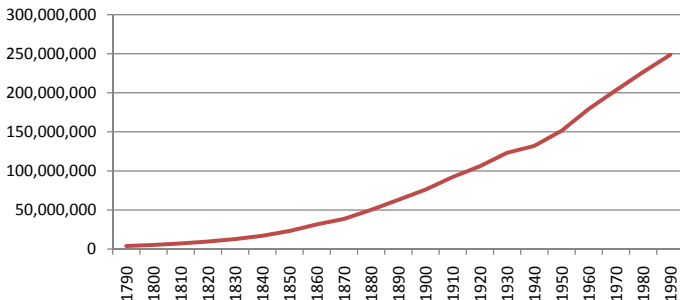
- Don't forget about the empirical project due November 30th
- Regular office hours today and Thursday (and email) for any last minute questions
- Readings for the last few lectures:
 - Abramitzky, Boustan and Eriksson (2014) on immigration (your referee report)
 - Collins and Wanamaker (2014) on the Great Migration

Population Growth and Redistribution



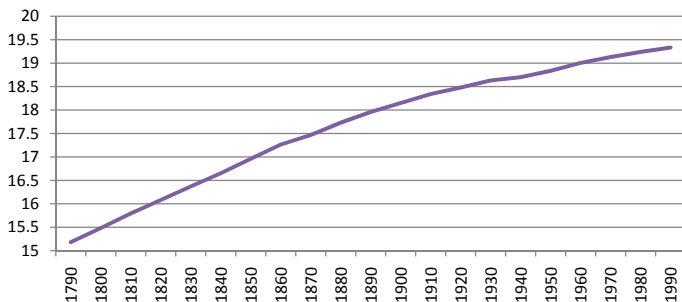
Population Growth in the United States

US Population, 1790-1990



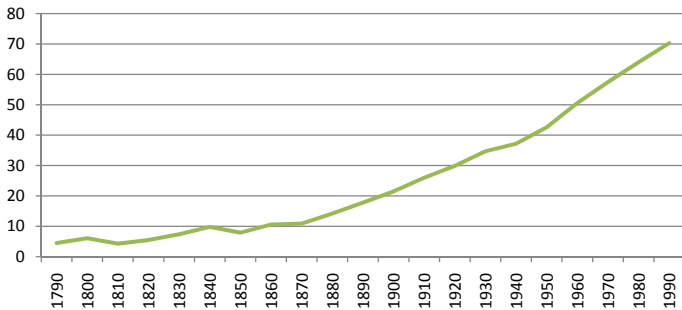
Population Growth in the United States

$\ln(\text{US Population})$, 1790-1990



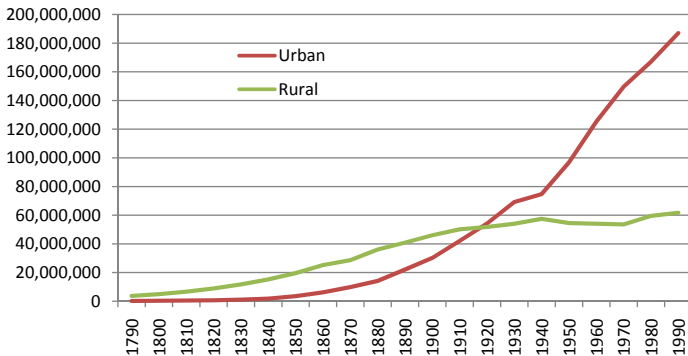
Population Growth in the United States

US Population per Square Mile, 1790-1990

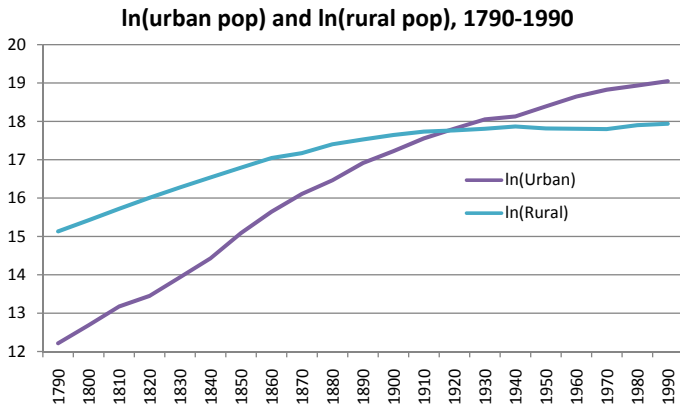


Population Growth in the United States

US Urban and Rural Populations, 1790-1990



Population Growth in the United States



Why Study Population Growth?

- Population growth has been one of the main forces driving the growth of the economy
- Patterns of population growth over time and across space can tell us a lot about economic conditions and how people respond to them
- Aspects of population growth, including birthrates and death rates, give us important measures of welfare
- Understanding how population growth has influenced the past gives us a sense of what to expect in the future for the US and other countries

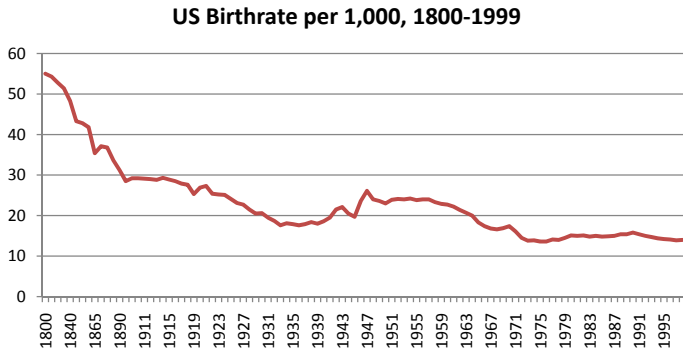
The Basics of Population Growth

- At the most basic level, population growth comes down to the birthrate and death rate for an economy
- The population will grow if the number of people born each year exceeds the number of people that die
- The bigger the gap between the birthrate and the death rate, the faster the population growth
- Anything that increases the birthrate (changes in marriage patterns, changes in fertility decisions, etc.) will tend to speed up population growth
- Anything that decreases the death rate (better nutrition, less war, etc.) will also tend to speed up population growth

Immigration and Population Growth

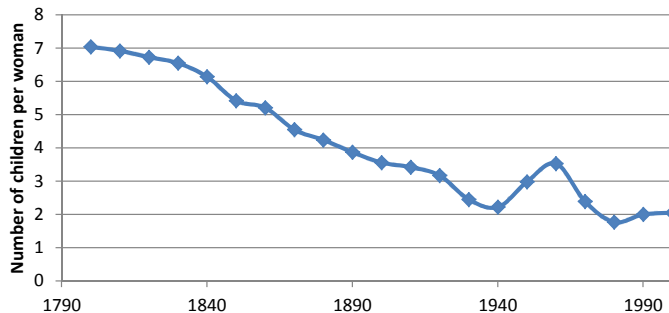
- For a closed economy, population growth is purely a function of birth and death rates
- However, most countries have either a net flow of people into the country or out of the country
- Immigration levels will influence population
- Immigration is going to have different effects on population change than simple birth and death rates:
 - The gender ratio of immigrants isn't necessarily 1 to 1
 - The age distribution of immigrants will alter the age profile of the population differently than changes in birthrates and death rates
 - Immigrants may differ in characteristics and social norms compared to the native born population

The American Birthrate

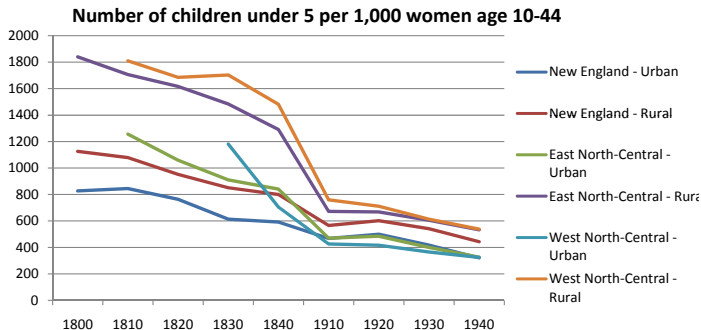


The American Fertility Rate

Total fertility rate, 1800-2000



The American Fertility Rate - Regional Differences



Why are fertility rates higher in rural areas and the frontier?

- A common explanation is that on the expanding frontier, the abundance of land meant that there was plenty of economic opportunity if you could provide enough labor
- Children could provide valuable labor on the farm
- In addition, the greater land wealth of farmers made them more likely to have several children if providing inheritances matters to parents (target bequest model)
- An alternative to this idea of a target bequest model is a strategic bequest model in which parents want their children to take care of them when they are older

Children as a Source of Labor



Were children valuable on the farm?

Contributions to Farm Family Income, 1860

Family Group	Northeast	Midwest	Frontier
Children, 0-6	(\$20.82)	\$8.59	(\$6.41)
Children, 7-12	\$22.81	\$27.76	\$27.12
Teenage females	\$22.95	\$39.75	\$17.53
Teenage males	\$111.03	\$47.45	\$49.03
Adult women	\$154.08	\$70.25	\$147.28
Adult men	\$294.77	\$186.44	\$193.66

Children and the Target Bequest Model

ESTATE PROPORTIONS BY BIRTH ORDER

Two-children families ($N = 31$)		
First born	Mean	Standard deviation
X_1/W_1	0.491	0.052
X_2/W_2	0.498	0.048
X_3/W_3	0.495	0.047
Three-children families ($N = 30$) Complete ordering ($N = 19$)		
First born	Mean	Standard deviation
X_1/W_1	0.329	0.127
X_2/W_2	0.342	0.090
X_3/W_3	0.339	0.091
<u>Second born</u>		
X_1/W_1	0.317	0.069
X_2/W_2	0.312	0.067
X_3/W_3	0.310	0.066

Children and the Strategic Bequest Model

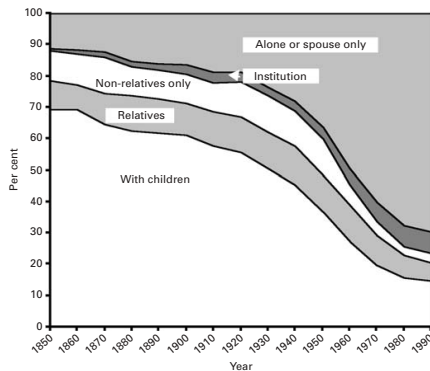


FIGURE 1. Distribution of living arrangements of white individuals and couples aged 65 or older, United States, 1850–1990. (Source: S. Ruggles, M. Sobek et al., *Integrated Public Use Microdata Series: Version 2.0*, Minneapolis, Historical Census Projects, University of Minnesota, 1997, hereafter IPUMS [available at <http://ipums.org>].)

Children and the Strategic Bequest Model



FDR signing the Social Security Act of 1935

Children and the Strategic Bequest Model

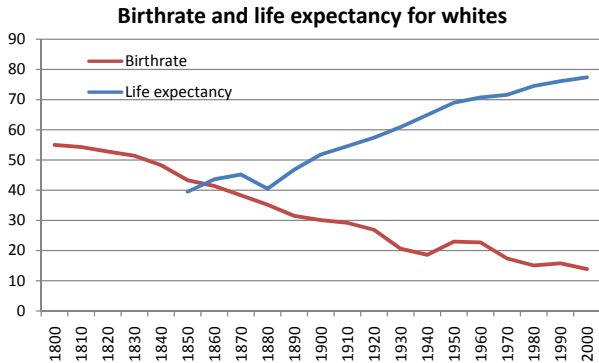


Ernest Ackerman

Alternative Explanations of Fertility Decline

- Rising cost of children due to urbanization
- Growth of incomes and nonagricultural employment
- Increased value of education
- Rising female employment
- Child labor laws and compulsory education
- Declining infant and child mortality
- Changing attitudes toward large families and contraception (and improved contraception)

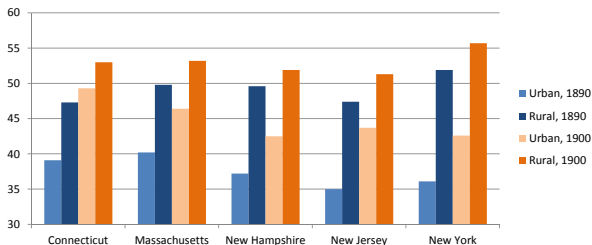
The Decline in American Death Rates



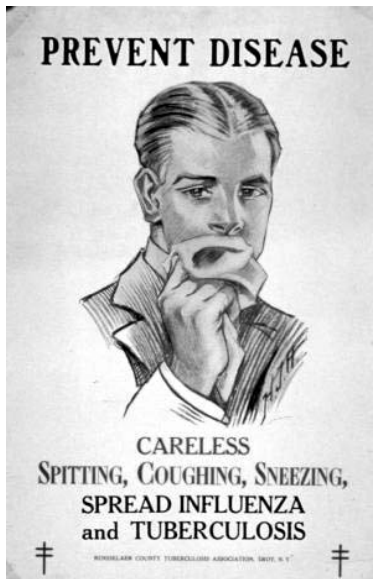
The Decline in American Death Rates

- Despite rising incomes in the early 1800s, life expectancies were actually falling but eventually death rates fell dramatically
- The drop in birthrates was a result of decisions over family size, the drop in death rates was not a result of preferences over deaths
- Death rates are a function of health, nutrition, disease, and the likelihood of dying an unnatural death
- Medical science was improving, basic hygiene practices were spreading, sanitation was improving
- All of these factors above increased life expectancies
- Working in the opposite direction was urbanization

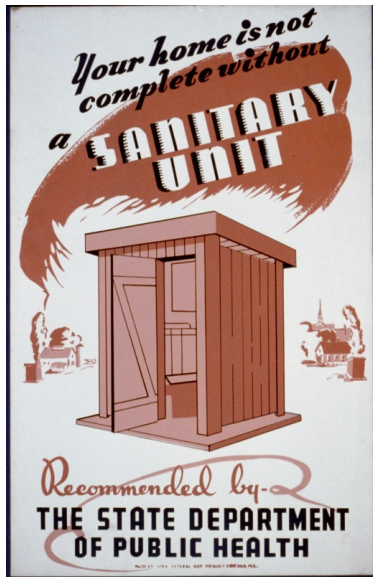
Urban-Rural Differences in Life Expectancy



Improvements in Public Health



Improvements in Public Health

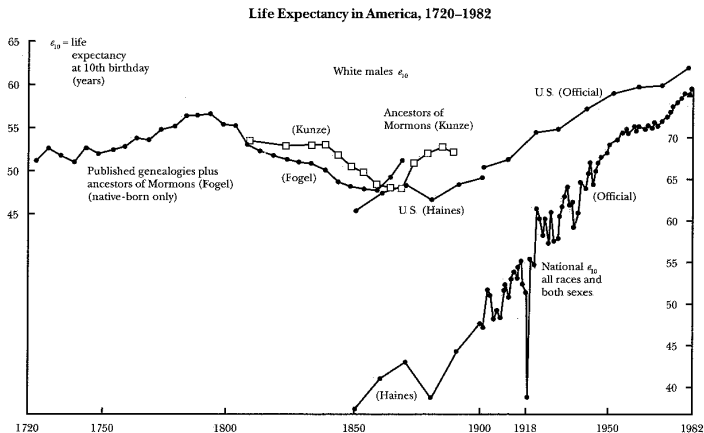


Improvements in Public Health

Slogans promoted by the Ohio State Board of Health:

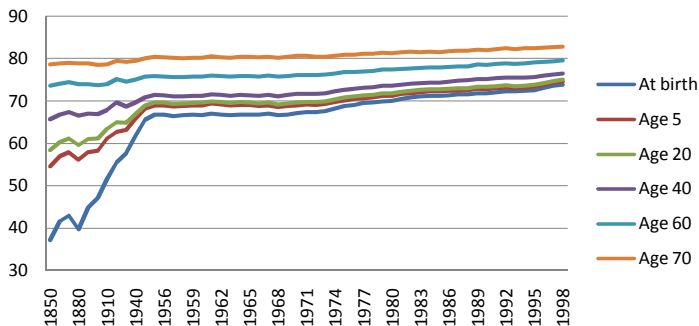
- “Treat your body to an occasional bath. It may not be entitled to it, but it will repay you with better service.”
- “A fly in the milk may mean a member of the family in the grave.”
- “There is less danger in vaccinating a person than in cutting his corn.”

The Decline in American Death Rates



Source: Peter Lindert, "Comment," in National Bureau of Economic Research, *Long Term Factors in American Economic Growth*, vol. 51, ed. Stanley L. Engerman and Robert E. Gallman (Chicago: University of Chicago Press, 1986): 530

The Decline in American Death Rates



Life expectancy for American males

The Decline in American Death Rates

Leading Causes of Death in the United States, 1900

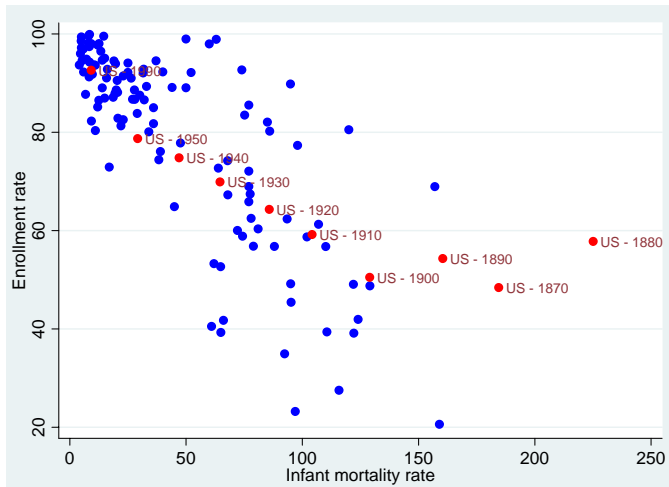
Rank	Cause	Rate per 100,000 people
1	Pneumonia and influenza	202.2
2	Tuberculosis	194.4
3	Diarrhea, enteritis, and ulceration of the intestines	142.7
4	Diseases of the heart	137.4
5	Intracranial lesions of vascular origin	106.9
6	Nephritis	88.6
7	Accidents	72.3
8	Cancer and other malignant tumors	64
9	Senility	50.2
10	Diphtheria	40.3

The Decline in American Death Rates

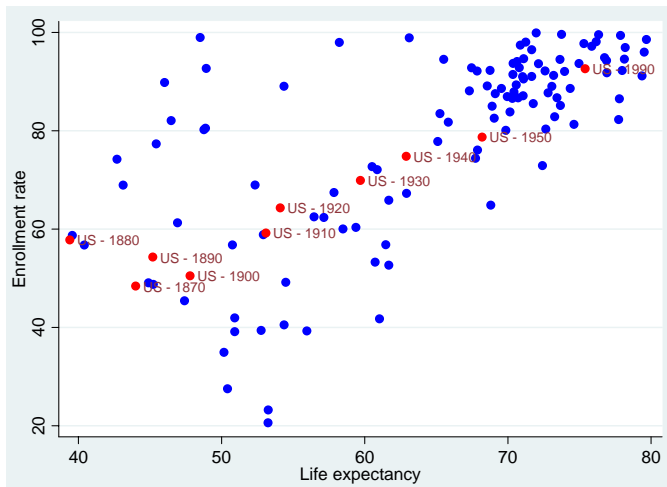
Leading Causes of Death in the United States, 1998

Rank	Cause	Rate per 100,000 people
1	Diseases of heart	268.2
2	Malignant neoplasms	200.3
3	Cerebrovascular diseases	58.6
4	Chronic obstructive pulmonary diseases	41.7
5	Accidents	36.2
6	Pneumonia and influenza	34
7	Diabetes	24
8	Suicide	11.3
9	Nephritis	9.7
10	Chronic liver disease	9.3

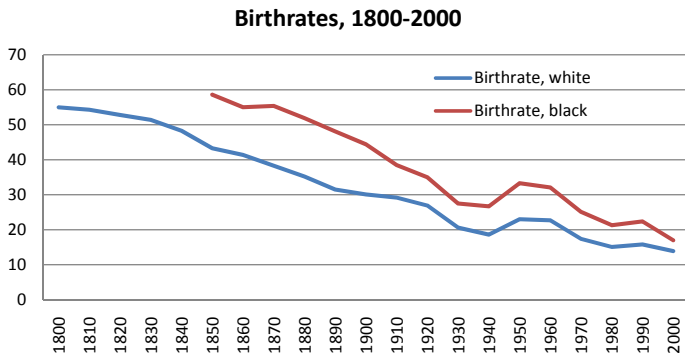
Putting American Health in Perspective



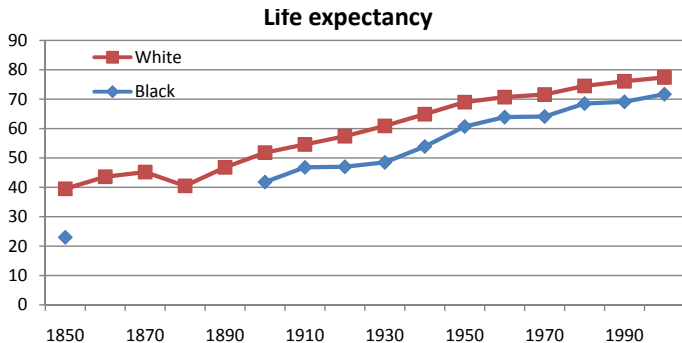
Putting American Health in Perspective



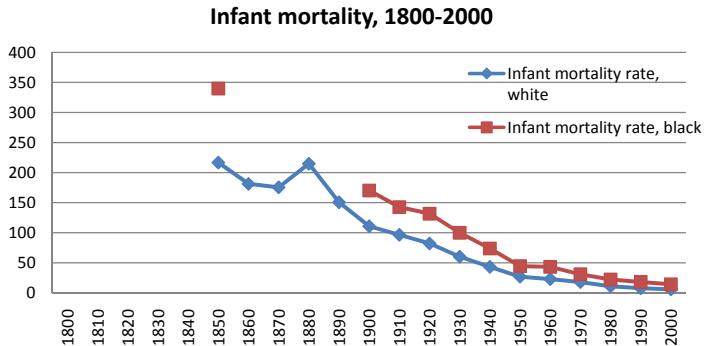
The Different Experiences of the White and Black Populations



The Different Experiences of the White and Black Populations



The Different Experiences of the White and Black Populations



The Different Experiences of the White and Black Populations

Fertility and Mortality in the United States

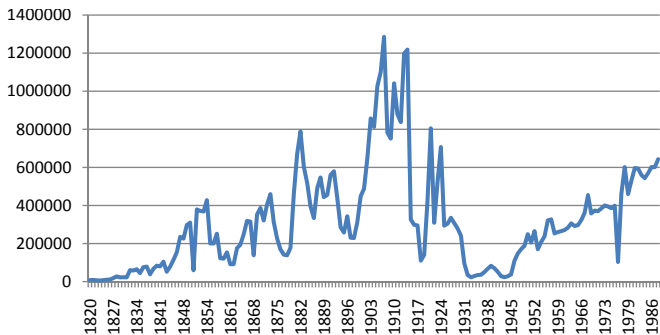
	1850		2000	
	White	Black	White	Black
Birthrate	43.3	58.6	13.9	17.0
Infant mortality rate	216.8	340.0	5.7	14.1
Life expectancy	39.5	23.0	77.4	71.7

Possible Contributions to Racial Gaps

- Differences in average socioeconomic status
- Differences in location
- Differences in access to medical care
- Discrimination in medical care

Immigration and the Demographics of the United States

Number of immigrants entering the United States,
1820-1988

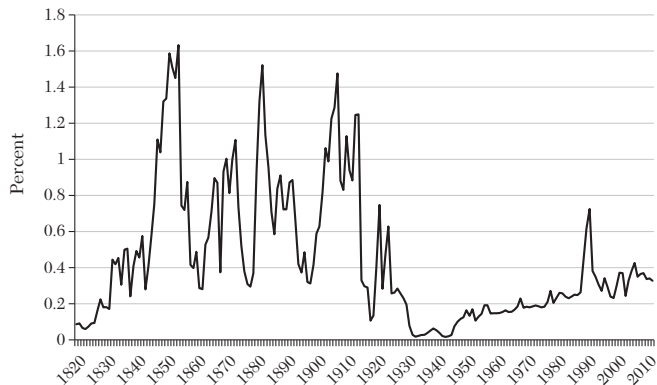


Announcements

- Don't forget about the empirical project due tomorrow at 5pm
- Due to a meeting with the Dean, today's office hours are pushed back to 2:30pm to 3:30pm
- I'll keep trying to give useful responses to emails throughout tonight and tomorrow morning (I won't be able to respond after 12:30pm tomorrow)
- Readings for the last lectures:
 - Abramitzky, Boustan and Eriksson (2014) on immigration (today)
 - Collins and Wanamaker (2014) on the Great Migration (Tuesday)

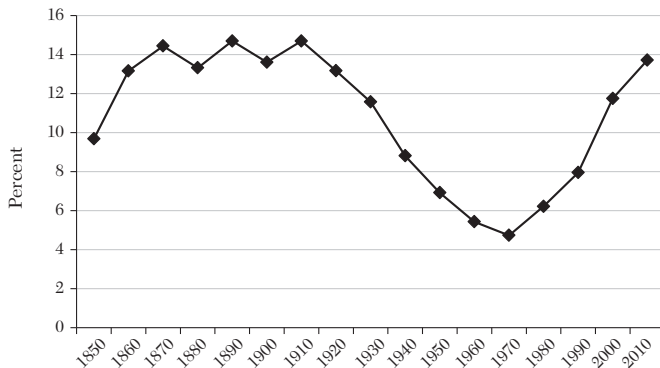
Immigration Over Time

Panel A. Foreign-born flow as percentage of the US population (1820–2010)



Immigration Over Time

Panel B. Foreign-born stock as percentage of the US population (1850–2010)



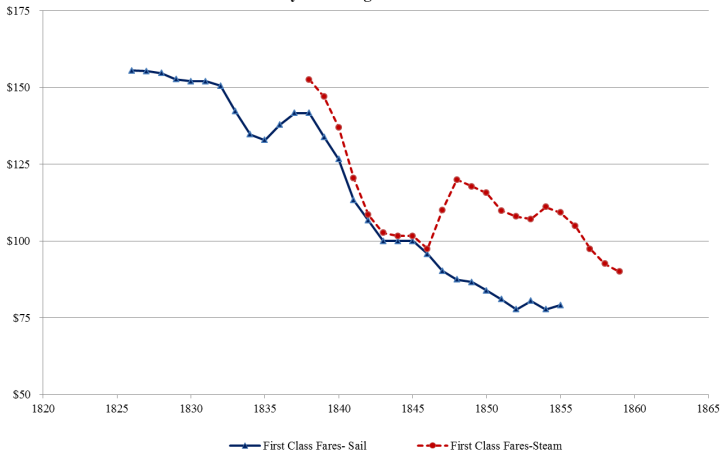
A Timeline of Immigration Policy



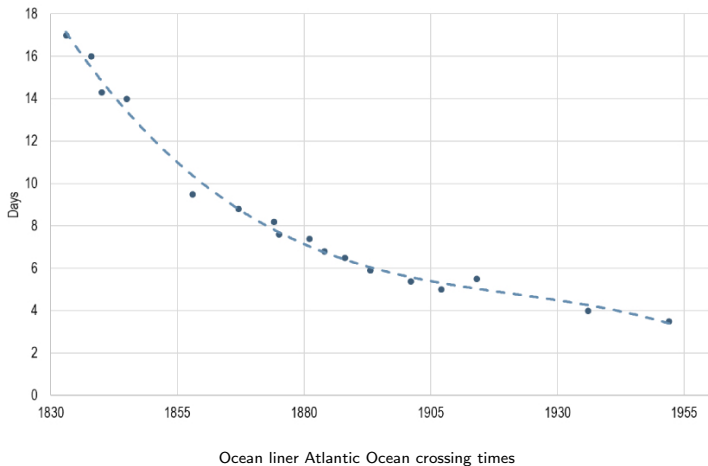
Early 1800s - No Major Restrictions

Migration in the Nineteenth Century

Figure 8
Advertised First Class Fares on Sailing and Steam Ships
3 year averages 1826-1859



Migration in the Nineteenth Century



Migration in the Nineteenth Century



Migration in the Nineteenth Century



1850s - Rise of Nativists

Chinese Exclusion Act - 1882



Chinese Exclusion Act - 1882



The Immigration Act of 1917

*Sec. 3. That the following classes of aliens shall be excluded from admission into the United States:
All idiots, imbeciles, feeble-minded persons, epileptics, insane persons...persons of constitutional psychopathic inferiority; persons with chronic alcoholism; paupers; professional beggars; vagrants; persons afflicted with tuberculosis...*

The Immigration Act of 1917

...persons who have been convicted of or admit having committed a felony or other crime or misdemeanor involving moral turpitude; polygamists; anarchists...[persons] who advocate or teach unlawful destruction of property; ...persons coming to the United States for the purpose of prostitution or for any other immoral purpose...

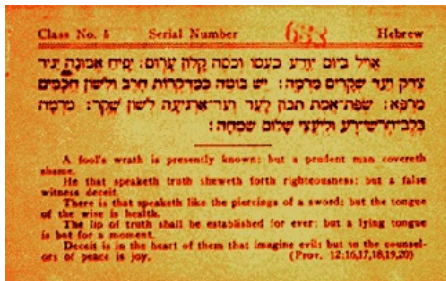
The Immigration Act of 1917

...[The provision] shall not apply to the persons of the following status or occupations: Government officers, ministers or religious teachers, missionaries, lawyers, physicians, chemists, civil engineers, teachers, students, authors, artists, merchants, and travelers for curiosity or pleasure...

The Immigration Act of 1917

All aliens over sixteen years of age, physically capable of reading, who can not read the English language, or some other language or dialect, including Hebrew or Yiddish...That for the purpose of ascertaining whether aliens can read the immigrant inspectors shall be furnished with slips of uniform size...each containing not less than thirty nor more than forty words in ordinary use, printed in plainly legible type of some one of the various languages or dialects of immigrants.

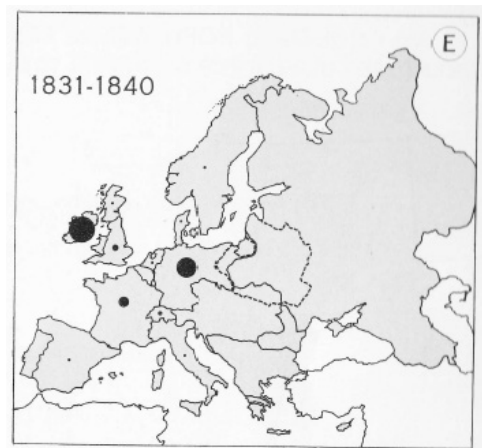
The Immigration Act of 1917



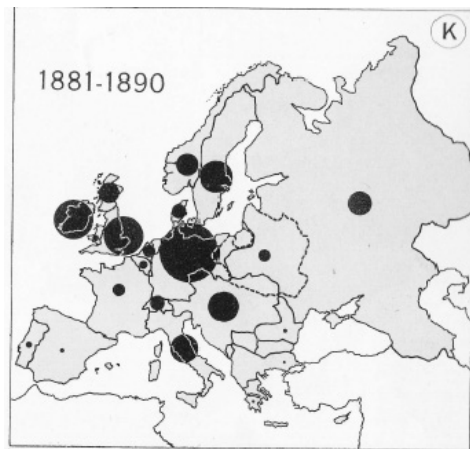
Quota Act and National Origins Act - 1920s



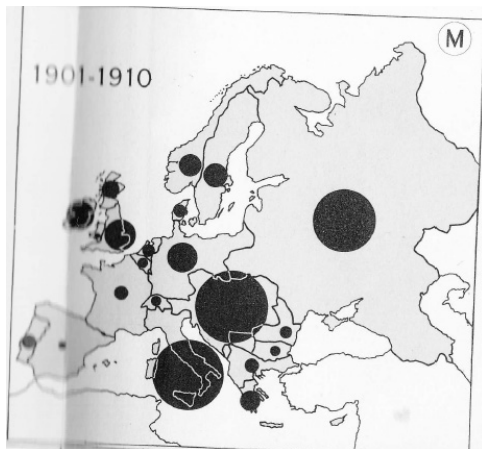
Quota Act and National Origins Act - 1920s



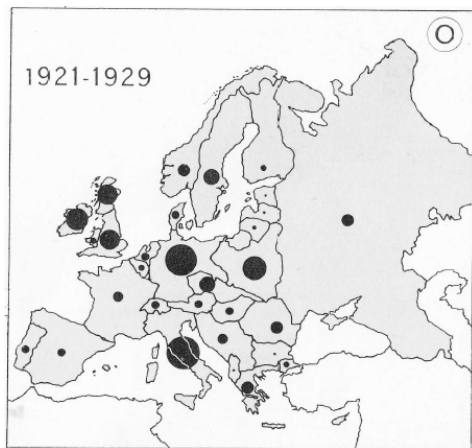
Quota Act and National Origins Act - 1920s



Quota Act and National Origins Act - 1920s



Quota Act and National Origins Act - 1920s



Immigration and Nationality Act - 1965



The Forces of Immigration

- Push factors - conditions in a person's home country encouraging emigration
 - Bad economic conditions, military conflict, religious persecution, natural disasters, ...
- Pull factors - conditions in the destination country attracting immigrants
 - Economic opportunity, religious/political freedom, presence of social networks, ...

Immigration Over Time

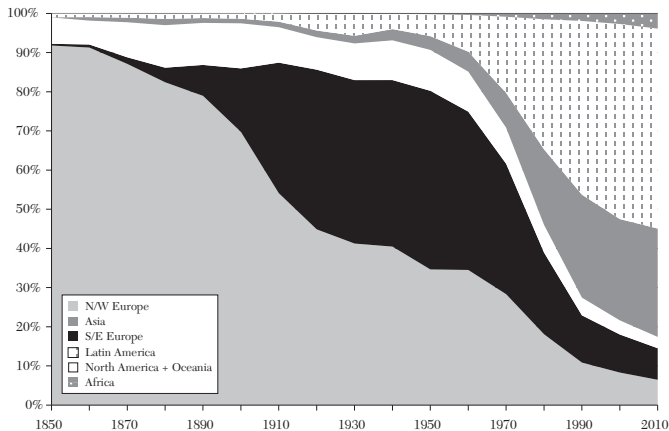
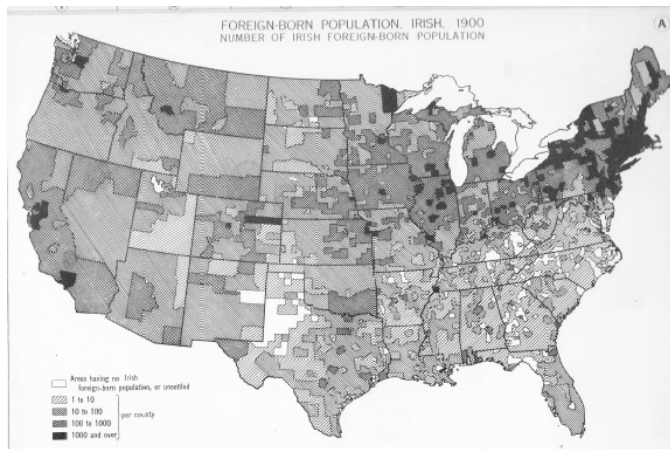
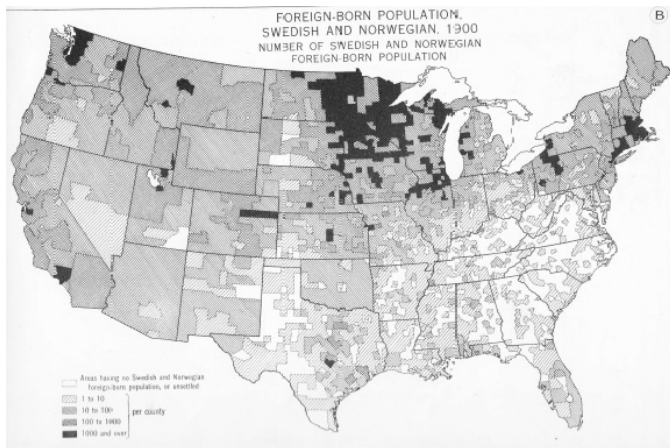


Figure 2. Sending Regions within the Foreign-Born Population, 1850–2010

Destinations of European Migrants



Destinations of European Migrants



The Economic Impacts of Immigrants

- So levels of immigration were incredibly large historically
- Many of these immigrants were pushed by poor economic conditions in their home countries
- Many were pulled by the promise of good economic conditions in the United States
- But what influence did the immigrants themselves have on economic conditions?
- Clearly they increased the size of the labor force, but that isn't the only way they impact the economy

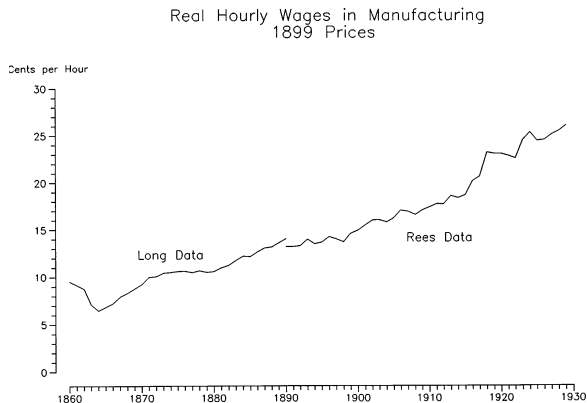
Immigration and the Capital-Labor Ratio

- Immigrants add to the stock of labor in the US but not the stock of physical capital
- This would imply that immigrants lead to a decrease in the capital-labor ratio
- Less capital per worker makes capital relatively more productive/valuable and labor relatively less productive/valuable
- So we could see the price of capital rise and the price of labor fall

Immigration and the Capital-Labor Ratio

- In the modern economy, estimates put the gain to native capital owners at 2% of GDP and the loss to native workers at 1.9% of GDP
- Why might this be different historically?
 - Immigrants were often capital owners (self-employed farmers, shop owners, or manufacturers)
 - Workers owned capital assets through insurance policies (basically pension funds)
 - It seems that the influx of immigrants did not lead to lower capital per worker

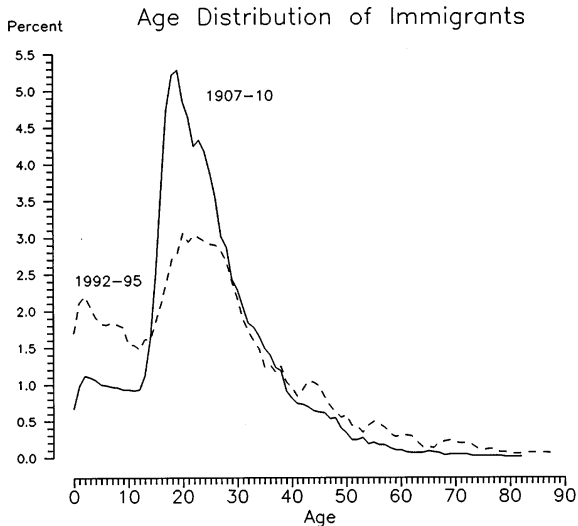
Immigration and the Capital-Labor Ratio



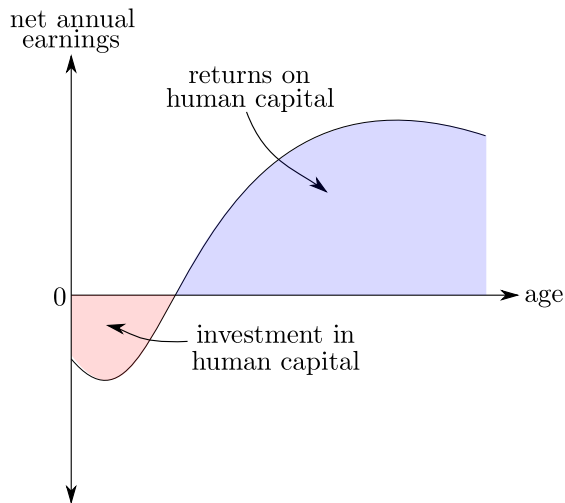
Immigration and the Human Capital Stock

- Immigrants weren't just additional workers identical to domestic workers
- They were typically young adults who had already made investments in human capital
- They also had a higher labor force participation rate
- These characteristics increased their contribution to American economic growth

Immigration and the Human Capital Stock



Immigration and the Human Capital Stock



Immigration and the Human Capital Stock

- Other countries took care of the costly investment in human capital (the costs of caring for and educating children)
- America received the benefits of that investment without having to pay for it
- Neal and Uselding calculated the benefits of being able to use those resources that would have been needed for human capital investment on physical capital investment instead
- By their estimates, immigration contributed as much as 9% of the capital stock in 1850 and up to 42% by 1912
- Now a different question, how did the immigrants themselves fare?

Immigrant Outcomes

- To think about how immigrants fared, we can't just look at comparing immigrant wages to those of natives (or something similar)
- The problem is that differences in immigrant and native outcomes will differ for several reasons, each with different implications:
 - Differences in characteristics between the typical immigrant and typical native worker
 - The process of assimilation (as economists use the word)
 - Discrimination
- Let's start with the first one, who decides to immigrate (and stay)?

Immigrant Outcomes

- To understand immigrant outcomes, it is important to identify whether the typical immigrant is negatively or positively *selected*
- Is the US generally drawing unskilled workers with little human capital from other countries?
- Or are the best and brightest, the overachievers, coming to the US?
- This selection issue is often evaluated through a Roy model, dating back to Roy's original paper "Some Thoughts on the Distribution of Earnings" and extended to immigration by Borjas in 1987
- Keywords for Roy's paper: hunting, rabbits, fishers, occupations, productivity, trout, logarithms, communities, industrial productivity, relative prices

Immigrant Outcomes

- The basic things that will determine immigrant selection are the mean earnings in both countries and the returns to skill in each country
- Highly skilled workers will prefer countries with higher returns to skill
- Low skilled workers will prefer countries with more compressed wage distributions
- Everyone prefers higher average wages
- We'll save the details for Econ 451 with Professor McHenry, for now we'll focus on empirical evidence of selection, focusing on Abramitzky, Boustan and Eriksson (2014)

Announcements

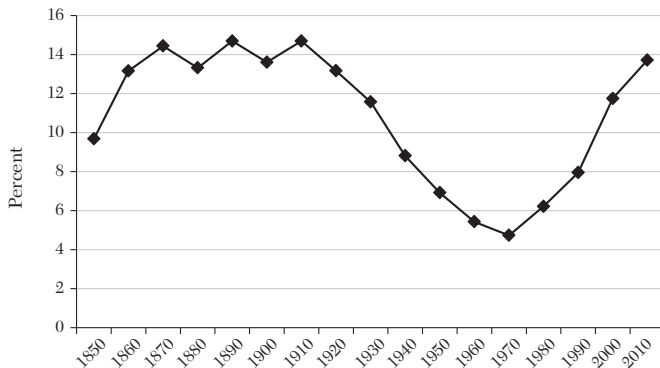
- Empirical projects will be returned on Thursday
- Regular office hours this week
- Next week I will have office hours on Tuesday and Wednesday from 12 to 2
- Today we'll wrap up internal migration and Collins and Wanamaker (2014)
- Thursday we'll do review and I'll leave some time to fill out evaluations if you haven't already

Final Exam Details

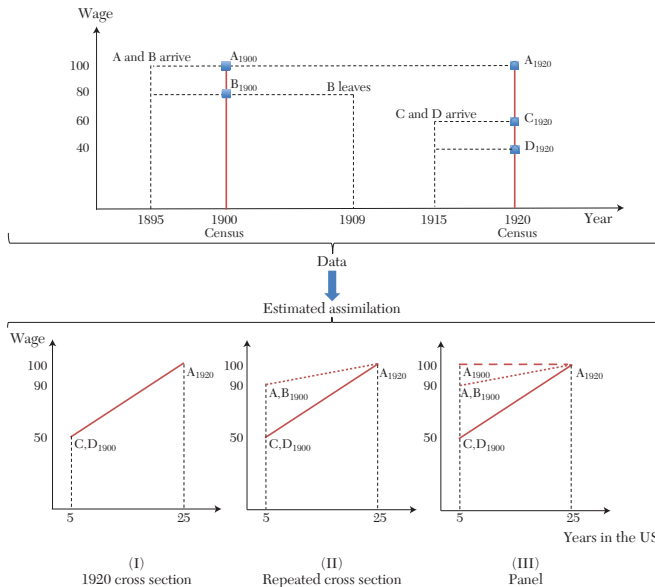
- The final is Thursday, December 13th from 2pm to 5pm
- It is written to be the same length and style as the midterm (1 hour, 20 minutes) but you'll have the full final period
- It is not cumulative except to the extent that some midterm material is related to material since the midterm
- It covers all lecture material from the first lecture on transportation (10/18/18) and the following readings:
 - Donaldson and Hornbeck (2016) (skip Sections IV.A and IV.B entirely)
 - Galenson (1981)
 - Logan (2018)
 - Abramitzky, Boustan and Eriksson (2014)
 - Collins and Wanamaker (2014)

Immigration Over Time

Panel B. Foreign-born stock as percentage of the US population (1850–2010)



Immigrant Outcomes in the Age of Mass Migration



Immigrant Outcomes in the Age of Mass Migration

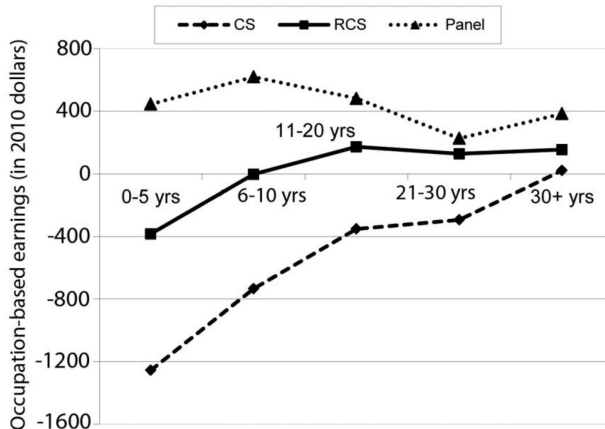


Fig. 2.

—Convergence in occupation score between immigrants and native-born workers by time spent in the United States, cross-sectional and panel data, 1900–1920. The graph plots coefficients for years spent in the United States indicators in equation (1). Note that for the panel line, we subtract the native-born dummy from the years in the United States indicators (because the omitted category in that regression is natives in the panel sample). See table 4 for coefficients and standard errors.

Immigrant Outcomes in the Age of Mass Migration

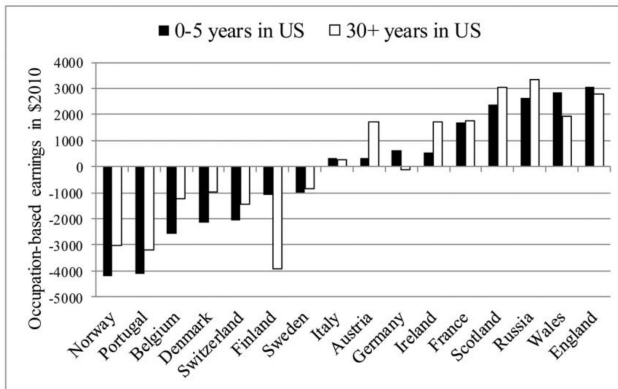


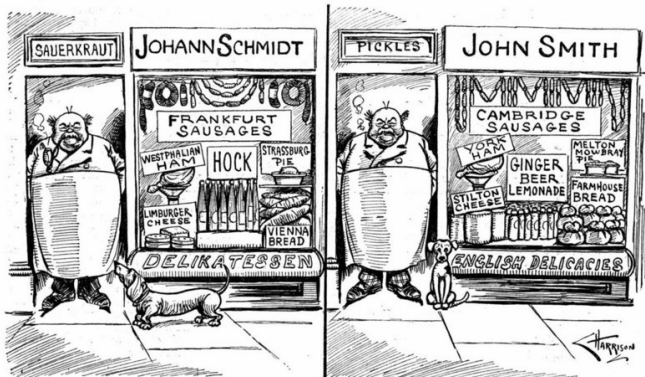
Fig. 3.

—Earnings gap between the native- and foreign-born in the panel sample: natives versus immigrants upon first arrival (0–5 years in the United States) and after time in the United States (30+ years in the United States), by country of origin. The graph reports co-efficients on the interaction between country-of-origin fixed effects and dummy variables for being in the United States for 0–5 years or for 30+ years from regression of equation (1) in the panel sample. All coefficients for the 0–5 year interaction are significant except those for Austria, Germany, Ireland, Italy, and Sweden. None of the differences between the 0–5 year and 30+ year coefficients are significant except for those of Finland and Ireland.

Immigrant Outcomes

- So what do we take away from Abramitzky, Boustan and Eriksson?
- First, cross-sectional data hides a lot about immigrant outcomes, selection into return migration and trends in cohort quality matter quite a bit
- Using panel data shows there is far less convergence than we thought
- Second, that doesn't mean that all immigrants fair poorly
- Some immigrants groups did well upon arrival and continued to do well, others did poorly and continued to do poorly (think back to our Roy model discussion)

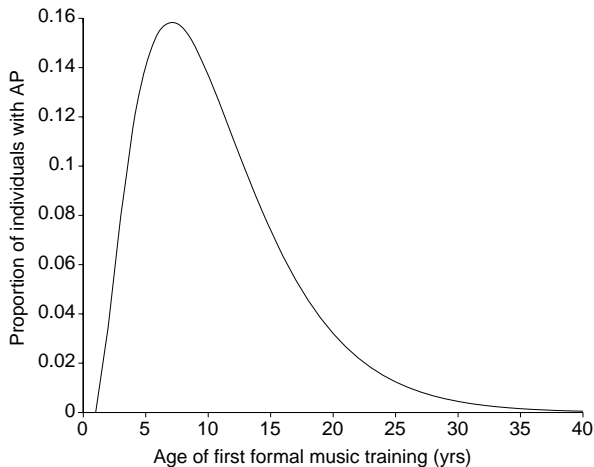
What Aids Assimilation?



What Aids Assimilation?

- Economic historians have looked at the mechanisms of assimilation along a few different dimensions: name changes, names of kids, marriage patterns, geographic mobility,...
- One really critical thing may be language
- Certainly fluency in English likely helps in the US labor market and may take time to achieve
- However, we have a pretty big identification problem
- English-speaking migrants are coming from a very different set of countries than non-English-speaking migrants
- How do we tell what's due to English and what's due to other factors that differ by these countries?

English Fluency and Assimilation

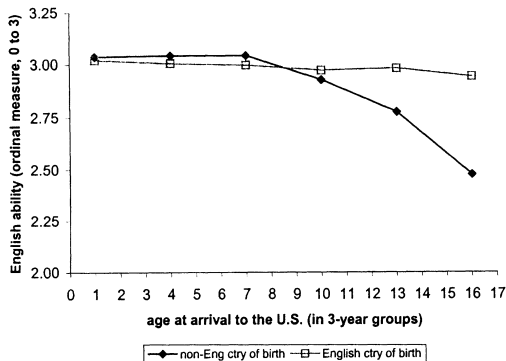


TRENDS in Cognitive Sciences

English Fluency and Assimilation

FIGURE 1.—ENGLISH-SPEAKING ABILITY BY AGE AT ARRIVAL

Panel A. Regression-Adjusted Means



English Fluency and Assimilation

FIGURE 2.—LOG ANNUAL WAGES BY AGE AT ARRIVAL

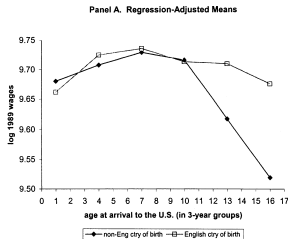
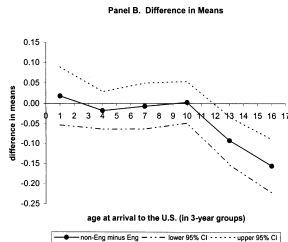
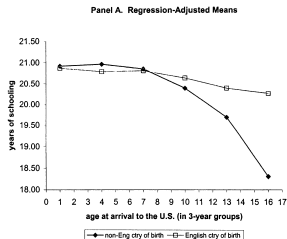
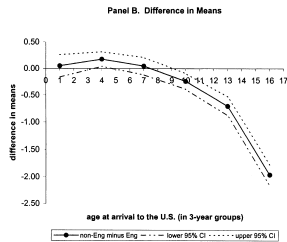


FIGURE 3.—YEARS OF SCHOOLING BY AGE AT ARRIVAL



Notes: Data from 1990 IPUMS weighted by IPUMS weights. Sample size is 47,422 (composed of individuals who arrived in the United States by age 17 between 1960 and 1974 and are currently aged 25 to 38). Means have been regression-adjusted for age, race, Hispanic, and female dummies.

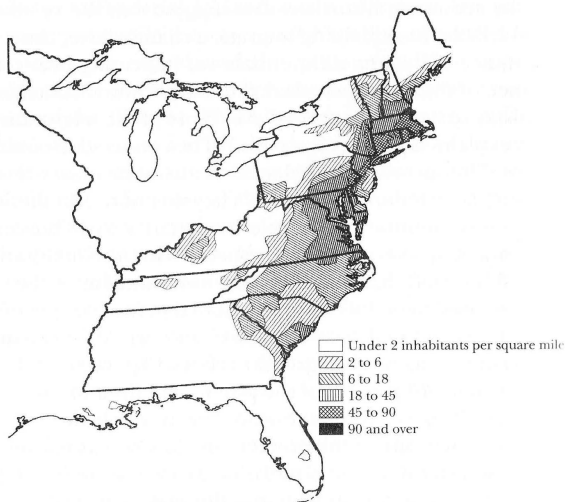


Notes: Data from 1990 IPUMS weighted by IPUMS weights. Sample size is 65,214 (composed of individuals who arrived in the United States by age 17 between 1960 and 1974 and are currently aged 25 to 38). Means have been regression-adjusted for age, race, Hispanic, and female dummies.

Internal Migration

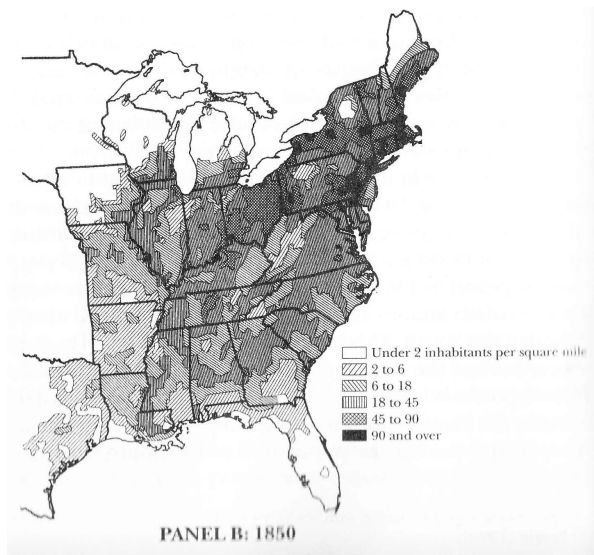


Internal Migration

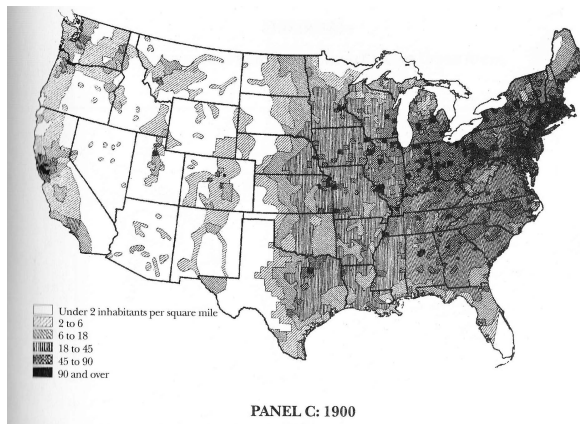


PANEL A: 1790

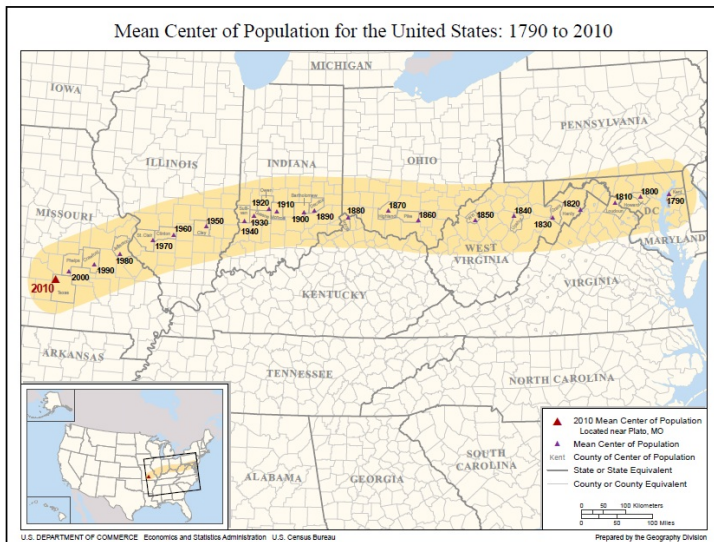
Internal Migration



Internal Migration



Internal Migration



Internal Migration

RSC

PROOF REQUIRED UNDER HOMESTEAD ACTS MAY 20, 1862, AND JUNE 21, 1866.

WE, *Joseph Graff* *Samuel Kilpatrick* do solemnly *swear*
that we have known *Daniel Herman* for *over five* years last past; that he
is *head of a family* consisting of *wife* and *two*
children and is — a citizen of the United States; that he is an inhabitant
of the *Sp. of Wm. & N. W. 1/4 of Sec. 26* of section No. *26* in
Township No. *4 N* of Range No. *5 E* and that no other person resided upon the
said land entitled to the right of Homestead or Pre-emption.

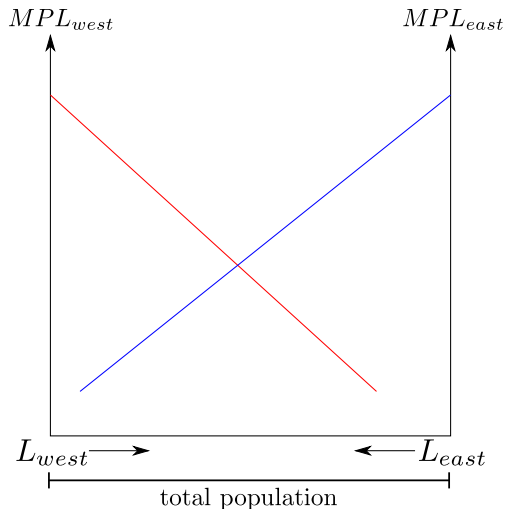
That the said *Daniel Herman* — entered upon and made settlement
on said land on the *1st* day of *January*, 18*68*, and has built a house
thereon *part log & part frame 14 by 20 feet one story with two doors*
100 windows. Shingle roof board floor and is a comfortable home
to live in

and has lived in the said house and made it his exclusive home from the *1st* day of
January, 18*68*, to the present time, and that he has since said settlement ploughed,
fenced, and cultivated about *30* — acres of said land, and has made the following improvements
thereon, to wit: *built a stable, a sheep shed 100 feet long*
corn crib, and has 40 apple and about 400
peach trees set out. *Enough grass*

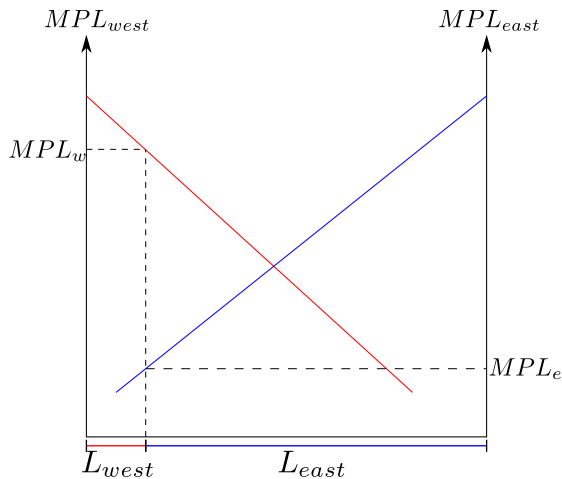
I, *Samuel Kilpatrick*
1. *Henry M. Atkinson* *Register* do hereby certify that the above affidavit was
taken and subscribed before me this *20th* day of *January*, 18*68*
Henry M. Atkinson
Register

WE CERTIFY that *Joseph Graff* *Samuel Kilpatrick* whose names
are subscribed to the foregoing affidavit, are persons of respectability.
Henry M. Atkinson , Register.
Josh. Carson , Recorder.

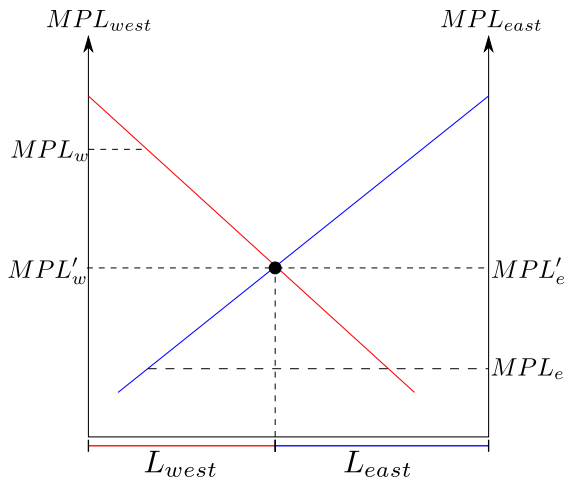
Why Encourage Westward Migration?



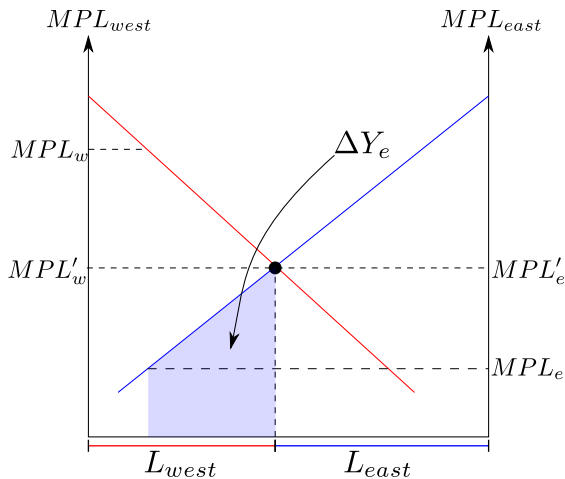
Why Encourage Westward Migration?



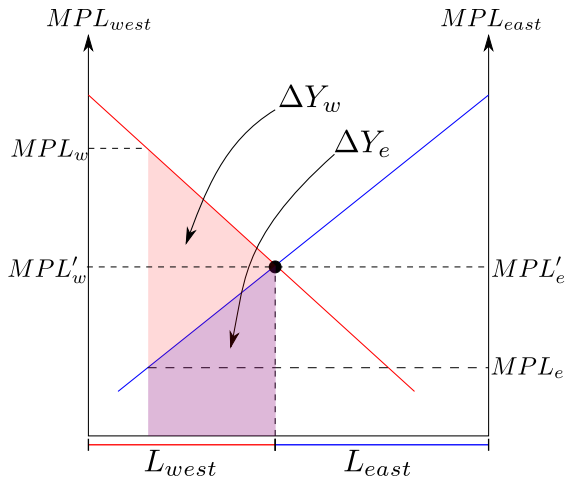
Why Encourage Westward Migration?



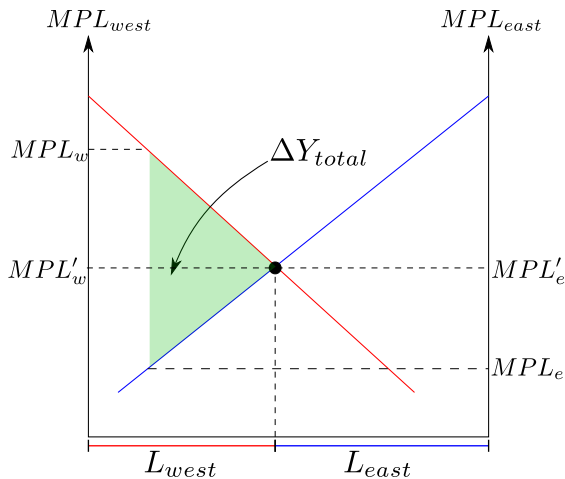
Why Encourage Westward Migration?



Why Encourage Westward Migration?

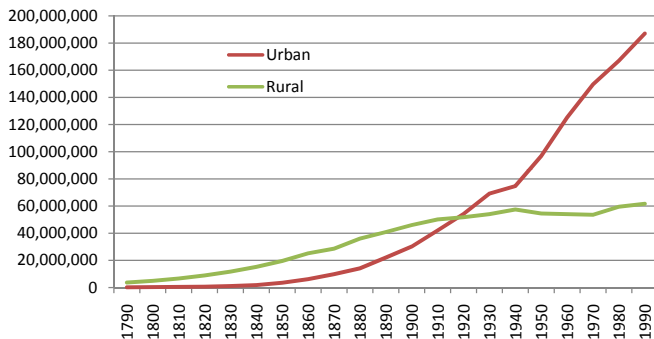


Why Encourage Westward Migration?



Internal Migration

US Urban and Rural Populations, 1790-1990



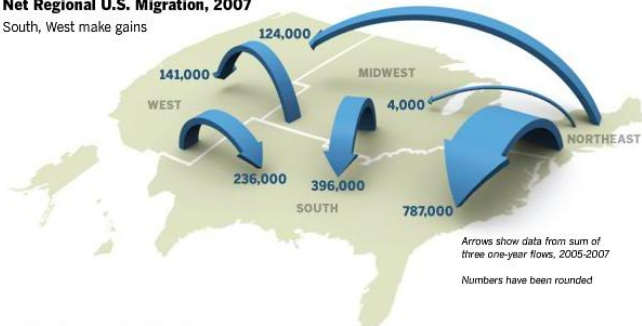
Historical Internal Migration

- The biggest trend in internal migration was the spread of the population westward
- The spread west was encouraged by the availability of land, higher potential incomes, and government programs (for example, the Homestead Act)
- In addition to the trend of people moving west, a strong trend in internal migration has been rural to urban migration
- Internal migration in general was driven by job opportunities, higher incomes, land availability, distance, and the similarity of new locations to old ones
- Over time, income and job opportunities have become more important in explaining migration flows, land availability has explained less and less

Internal Migration

Net Regional U.S. Migration, 2007

South, West make gains



Internal Migration



Generated from <http://www.pewsocialtrends.org/2008/12/17/u-s-migration-flows/>

Internal Migration



Generated from <http://www.pewsocialtrends.org/2008/12/17/u-s-migration-flows/>

Modern Internal Migration

- There is still a significant amount of internal migration in the United States
- People move for jobs, for education, cost of living considerations, etc.
- The historical flow of people out of rural areas has continued (to the extent that a new Homestead Act has been proposed)
- Internal migration has serious consequences for local economies (issues of brain drain, housing bubbles, etc.)

States with greatest inflow of people

Top 10 States Receiving the Most Residents From Other States

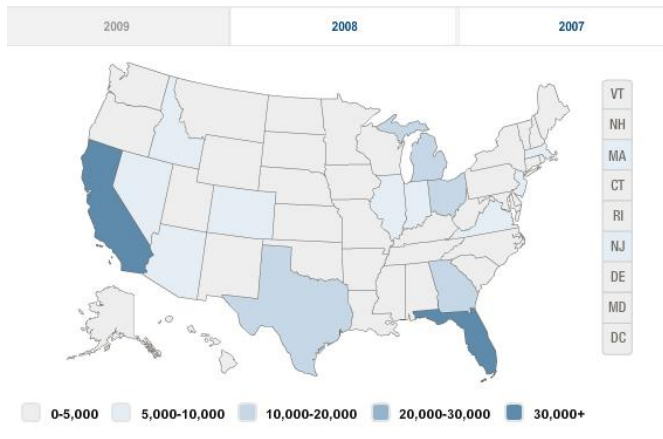
Click on a highlighted state to view inflows from other states.



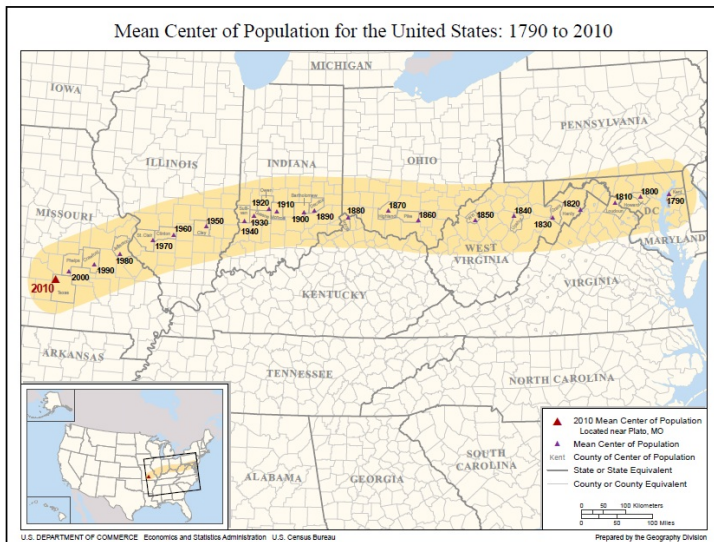
Foreclosures by state, 2009

U.S. foreclosures by state

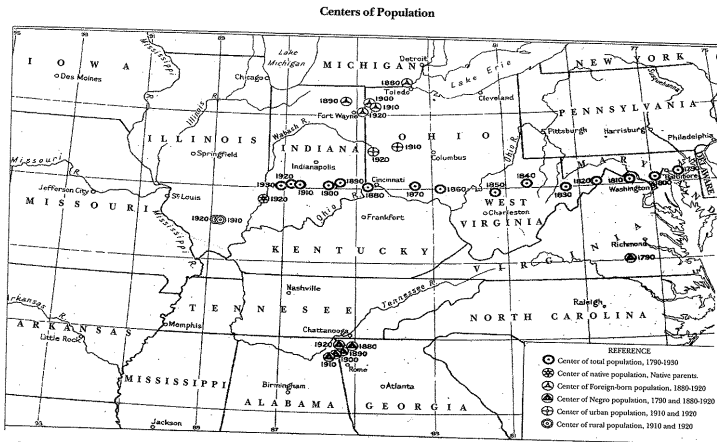
There were more than 2.9 million home foreclosures in the U.S. in 2008. The maps below show the state-by-state numbers of foreclosures in 2007, 2008 and through the end of January 2009.



Race and Internal Migration

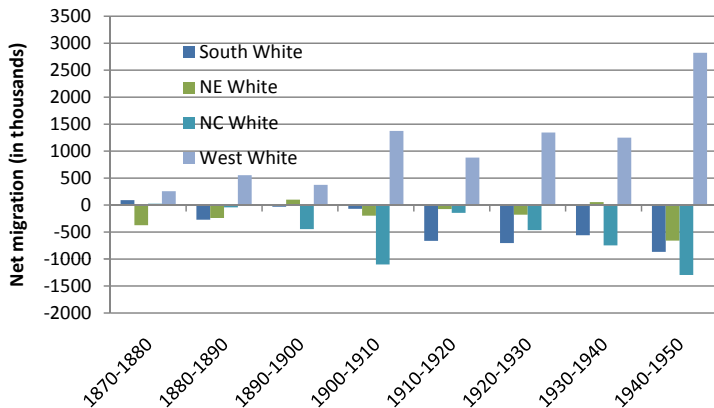


Race and Internal Migration

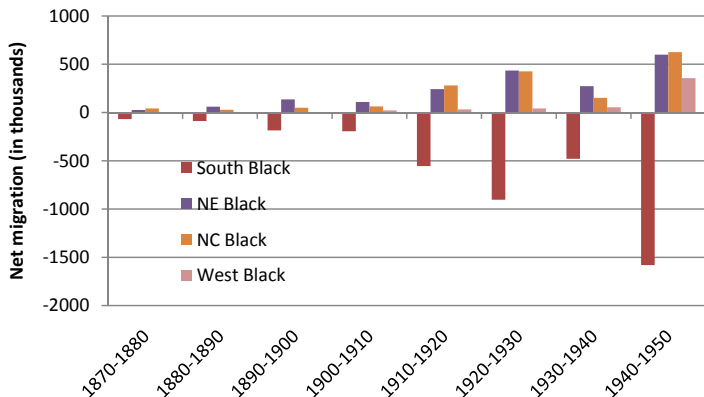


Charles O. Paullin, *Atlas of the Historical Geography of the United States* (Washington, D.C.: Carnegie Institution, 1932): Plate 80, Panel A.

Internal Migration of the White Population



Internal Migration of the Black Population



Race and Internal Migration

- Once again, the economic history of the black population looks quite different than that of the white population
- The black population went through a dramatic period of internal migration known as the Great Migration
- After emancipation, blacks did not immediately leave the South despite poor economic conditions
- Between 1870 and 1910, only 535,000 blacks left the South
- Between 1910 and 1940, 3.5 million blacks left the South
- In 1900, 4.3% of blacks born in the South lived outside of the South, by 1950 it's 20.4%

Why Was Black Migration Delayed?

Relative Wage Levels by Region, 1870-1898

	1870-74	1875-79	1880-84	1885-89	1890-94	1895-98
Northeast	100	100	100	100	100	100
Midwest	122.5	128	126.3	121.8	121.2	120.5
West	146.2	147.5	131.8	129.6	122.6	122.9
South	97.2	102	97.2	96.5	96.9	96.3

Why Was Black Migration Delayed?

Relative Wage Levels by City 1870-1898						
	1870-74	1875-79	1880-84	1885-89	1890-94	1895-98
New York	100	100	100	100	100	100
Chicago	123.1	118.7	117.5	120	123	126.9
Philadelphia	94.7	92	84.4	86.1	85.9	86.2
Richmond	85.6	87.9	81.2	81	81.7	80.6

Why Was Black Migration Delayed?

Term of Occupancy of Share Tenants, 1910

Years on farm	South Atlantic		East South Central	
	White	Black	White	Black
Less than 1	37.9%	33.9%	45.6%	39.9%
1 year	17.8	17.4	17.8	15.9
2-4 years	28.1	31.5	24.8	28.1
5-9 years	10.0	10.5	7.5	9.7
10 years and over	6.2	6.6	4.1	6.2

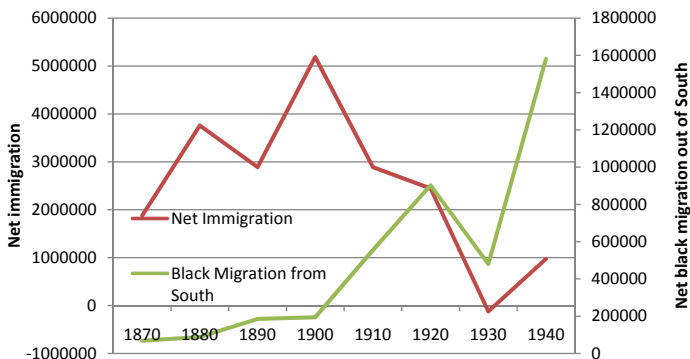
Why Was Black Migration Delayed?

- It doesn't look like Southern blacks were particularly averse to moving
- There is evidence of a fair amount of movement within the South
- Average wages and job opportunities certainly seemed better in the Northern cities
- Eventually, blacks would move to take advantage of those economic opportunities
- So why the 50 year delay?

Why Was Black Migration Delayed?

- One possible explanation is the influence of immigration
- From emancipation up until the early 20th century, there were large flows of immigrants into Northern cities
- More immigrants could do two things to the economic prospects of blacks:
 - Drive down wages by increasing overall labor supply
 - Decrease the probability of getting a job if white Europeans were preferred by employers to blacks
- When the flow of immigrants declines, the levels of black migration rise

Why Was Black Migration Delayed?



Why Was Black Migration Delayed?

W. COLE, No. 8 Ann-st.

GROCERY CART AND HARNESS FOR SALE—In good order, and one chestnut horse, 8 years old, excellent saddle horse; can be ridden by a lady. Also, young man wanted, from 16 to 18 years of age, able to work. No Irish need apply. **CLUFF & TUNIS**, No. 270 West 4th-st., corner of Myrtle-av., Brooklyn.

BILLIARD TABLE FOR SALE—Of Leona manufacture; been used about nine months. Also, furniture of a Bar-room. Inquire on the premises. No.

Classified ad in The New York Times, March 25, 1854

Why Was Black Migration Delayed?



Why Was Black Migration Delayed?

may be located not less than eight (8) feet from any such side lot line. For the purposes of such measurements as are contained in this paragraph (c), State Highway No. 31, leading from Williamsburg to Jamestown, shall be considered as a side lot line.

(d) No noxious or offensive trade or activity shall be carried on upon any lot, nor shall anything be done thereon which may be or become an annoyance or nuisance to the neighborhood.

(e) No persons of any race other than the white or Caucasian race, shall use or occupy any building or any lot, except that this covenant shall not prevent occupancy by domestic servants of a different race domiciled with an owner or tenant.

(f) No trailer, basement, tent, shack, garage, barn, or other out-building erected in the tract shall at any time be used as a residence, temporarily or permanently, nor shall any structure of a temporary character be used as a residence, except that a servants' room and bath is permitted over detached garages.

(g) No dwelling costing less than \$6,000 shall be permitted on any lot having a frontage on Lake Powell, and no dwelling costing less than \$5,000 shall be permitted on any other lot shown on said plat plan above mentioned. The ground floor area of the main structure, exclusive of one-story open porches and garages, shall be no less than 900 square feet in the case of a one-story structure, nor less than 600 square feet in the case of a one and one-half, two, or two and one-half - story structure.

Outcomes During the Great Migration

- How did the Great Migration impact black outcomes?
- We've got a similar problem to the Age of Mass Migration
- A cross-section will give us biased results due to selection into migration
- We can take the same approach to this problem as Abramitzky, Bouston and Eriksson – linking across censuses
- Let's take a look at Collins and Wanamaker (2014)

Outcomes During the Great Migration

TABLE 3—1910 CHARACTERISTICS OF MALES IN LINKED DATASET, BY SUBSEQUENT INTERREGIONAL MIGRATION STATUS

	Nonmigrants (total $N = 4,361$)	Migrants (total $N = 1,104$)	p -value of difference
<i>Personal characteristics</i>			
Attending school (age 5–20)	47.6	51.2	0.11
Literate (age 10–40)	65.1	68.4	0.08
Owner-occupied housing	21.7	25.1	0.01
Mean age in 1910	17.3	15.7	0.01
1910 city population			
Not in city	75.8	69.4	0.01
City population $\leq 25,000$	15.4	19.8	0.01
City population $> 25,000$	8.9	10.8	0.05
Latitude (county)	33.4	34.1	0.01
Longitude (county)	86.6	84.9	0.01
Distance to Chicago or Philadelphia (min.)	578.2	510.3	0.01
<i>Job characteristics (ages 21–40)</i>			
Farmer	38.9	26.3	0.01
Farm laborer	18.2	16.7	0.52
Operative	7.0	9.0	0.20
Nonagricultural laborer	27.5	37.0	0.01
Employed	93.5	93.5	0.98
Class of worker, wage or salary employee	58.9	72.8	0.01

Outcomes During the Great Migration

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

Outcomes During the Great Migration

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

Outcomes During the Great Migration

- Collins and Wanamaker find big returns to migration for black men during the Great Migration
- These returns remain large even after controlling for positive selection into migration
- This helped partially close black-white gaps but large gaps remained: the black-white earnings score ratio increased from 0.44 in 1910 to 0.47 in 1930
- Even after moving north, black workers faced discrimination in housing markets, labor markets, schools, and a range of other dimensions