For Online Publication

Appendix A: Census Linkage

The detailed linkage procedure is as follows. This description is based heavily on the one provided by Collins and Zimran (2019).

1. We extracted males with non-empty first and last names from the full count 1850 and 1900 censuses and removed punctuation.
2. We divided the listed first name into a given name and middle initial, when one was present.
3. We replaced standard first name abbreviations (e.g., "Wm" was replaced with "William").
4. We removed any remaining spaces removed from the names.
5. After steps 1-4, we linked the 1850 dataset to itself according to the following criteria. We then did the same for the 1900 dataset.
    a. The birthplace (country or US state) matches exactly.[49]
    b. The absolute difference in birth years is less than or equal to 4.
    c. The first three characters of last name soundex match, and either of the following two conditions are true:
        i. The last name soundexes are identical and the SAS spelling distance (using the SAS function SPEDIS) is less than or equal to 20.[50]
        ii. The last name soundexes are non-identical, and the SAS spelling distance is less than or equal to 17.
    d. First letter of first name matches, and spelling distance between first names is less than or equal to 20.
6. We removed from the sample any individual who had a candidate match in step 5 that was someone other than himself.
7. The remaining men from 1850 and 1900 and all those from 1880 and 1930 were cleaned according to steps 1, 2, and 4 above (no standardization of name abbreviations was made).
8. We linked males from 1850 to 1880 and from 1900 to 1930 according to the same criteria listed in step 5, as well as the following additional criterion: where both records report a middle initial, the middle initials must match for a match to be made.
9. We dropped any case in which more than one 1880 individual matched to an 1850 individual or vice versa, and similarly for 1900 and 1930.

[49] For UK-born men (i.e., men born in England, Scotland, or Wales) in 1900-30, we require uniqueness within all UK-born men. In step 8, however, we require a match on the specific birthplace. This distinction is not made in 1850-80 because the data report only the UK as the country of birth.

[50] The SAS spelling distance is not a symmetric measure. Whenever we use spelling distance, we make a match when $\min\{\text{spedis}_{a,b}, \text{spedis}_{b,a}\} \leq c$, where c is the linkage cutoff.

Table A.1: Linkage rates by birthplace, 1850-1880

Birthplace	(1) Start	(2) Searched	(3) Linked
Ireland	303,507	80,457	9,815
		(0.265)	(0.122)
			[0.032]
UK	115,147	49,052	10,200
		(0.426)	(0.208)
			[0.089]
Germany	177,189	105,711	13,300
		(0.597)	(0.126)
			[0.075]
Norway	3,737	2,578	257
		(0.690)	(0.100)
			[0.069]
France	13,217	11,318	1,214
		(0.856)	(0.107)
			[0.092]
Netherlands	2,882	2,604	241
		(0.904)	(0.093)
			[0.084]
Switzerland	3,779	3,384	419
		(0.895)	(0.124)
			[0.111]

Notes: Numbers in parentheses indicate the fraction of the column that was advanced from the previous step. Numbers in square brackets indicate match rates relative to the complete sample of column (1). Sample limited to non-southern white men aged 18-40 in 1850.

Table A.2: Linkage rates by birthplace, 1900-1930, base year 1900

Birthplace	(1) Start	(2) Searched	(3) Linked
Norway	96,376	44,606	8,826
		(0.463)	(0.198)
			[0.092]
Sweden	186,042	47,594	8,992
		(0.256)	(0.189)
			[0.048]
United Kingdom	265,229	110,358	28,963
		(0.416)	(0.262)
			[0.109]
Ireland	294,051	63,913	10,830
		(0.217)	(0.169)
			[0.037]
France	19,774	17,759	2,599
		(0.898)	(0.146)
			[0.131]
Netherlands	23,157	19,436	4,535
		(0.839)	(0.233)
			[0.196]
Switzerland	28,962	22,560	4,954
		(0.779)	(0.220)
			[0.171]
Italy	186,546	144,480	14,236
		(0.775)	(0.099)
			[0.076]
Austria	110,233	89,470	6,141
		(0.812)	(0.069)
			[0.056]
Germany	536,944	257,337	50,086
		(0.479)	(0.195)
			[0.093]
Poland	141,175	114,140	10,388
		(0.809)	(0.091)
			[0.074]
Russia	135,481	85,780	11,015
		(0.633)	(0.128)
			[0.081]

Notes: Numbers in parentheses indicate the fraction of the column that was advanced from the previous step. Numbers in square brackets indicate match rates relative to the base sample in column (1), which is from 1900. Sample limited to non-southern white men aged 18-40 in 1900.

Table A.3: Linkage rates by birthplace, 1900-1930, base year 1930

Birthplace	(1) Start	(2) Linked
Norway	76,827	8,798
		(0.115)
Sweden	141,860	8,933
		(0.063)
United Kingdom	192,377	28,733
		(0.149)
Ireland	157,338	10,785
		(0.069)
France	20,614	2,614
		(0.127)
Netherlands	22,103	4,515
		(0.204)
Switzerland	24,858	4,993
		(0.201)
Italy	152,955	14,416
		(0.094)
Austria	46,676	6,132
		(0.131)
Germany	378,230	50,082
		(0.132)
Poland	109,212	10,381
		(0.095)
Russia	105,062	11,143
		(0.106)

Notes: Numbers in parentheses indicate link rates relative to column (1), which is the base sample from 1930. Sample limited to non-southern white men aged 44-74 in 1930, excluding unlinked immigrants arriving after 1900. Links to men not aged 18-40 in 1900 are not counted as links.

Appendix B: Robustness Checks (For Online Publication)

Results excluding natives with immigrant fathers

Table B.1: Dissimilarity indices between natives and immigrants

	(1) 1850	(2) 1880	(3) 1900	(4) 1930
Dissimilarity	0.3178	0.2164	0.1713	0.1321
	(0.0038)	(0.0039)	(0.0033)	(0.0029)
Observations	227,358	227,358	477,665	477,665

Notes: Dissimilarity indices between natives' and immigrants' occupational distributions in each year, controlling for a quartic in age as described in equation (2). Robust delta method standard errors in parentheses. Observations weighted to correct for selection into linkage. Sample limited to individuals with occupations in both years.

Table B.2: Immigrant-native differences

	1850–1880			1900–1930		
	(1)	(2)	(3)	(4)	(5)	(6)
Variable	1850	1880	Diff.	1900	1930	Diff.
Unskilled	0.238^a	0.128^a	-0.110^a	-0.015^a	0.039^a	0.054^a
	(0.004)	(0.003)	(0.004)	(0.003)	(0.003)	(0.004)
Farmer	-0.282^a	-0.192^a	0.090^a	-0.119^a	-0.088^a	0.031^a
	(0.003)	(0.004)	(0.004)	(0.002)	(0.002)	(0.002)
Craft	0.025^a	0.020^a	-0.006^c	0.067^a	0.036^a	-0.031^a
	(0.003)	(0.003)	(0.003)	(0.002)	(0.002)	(0.003)
Operative	0.054^a	0.069^a	0.015^a	0.105^a	0.058^a	-0.047^a
	(0.003)	(0.002)	(0.003)	(0.003)	(0.002)	(0.003)
White Collar	-0.035^a	-0.024^a	0.011^a	-0.037^a	-0.044^a	-0.007^b
	(0.005)	(0.005)	(0.003)	(0.003)	(0.002)	(0.003)
Average Occ. Rank	-0.138^a	-0.069^a	0.069^a	-0.004^b	-0.029^a	-0.025^a
	(0.003)	(0.003)	(0.002)	(0.002)	(0.002)	(0.002)
log(Occ. Wealth)	-0.663^a	-0.406^a	0.257^a	-0.130^a	-0.150^a	-0.021^b
	(0.011)	(0.013)	(0.009)	(0.007)	(0.007)	(0.009)
log(PH Occ. Score)	-0.106^a	-0.047^a	0.059^a	0.048^a	-0.010^a	-0.058^a
	(0.004)	(0.002)	(0.004)	(0.003)	(0.002)	(0.003)
Occ. Wealth Rank	-0.184^a	-0.106^a	0.078^a	-0.026^a	-0.042^a	-0.016^a
	(0.003)	(0.003)	(0.002)	(0.002)	(0.002)	(0.002)
PH Score Rank	-0.093^a	-0.032^a	0.060^a	0.018^a	-0.016^a	-0.034^a
	(0.003)	(0.003)	(0.003)	(0.002)	(0.002)	(0.002)
Literacy	-0.044^a			-0.071^a	-0.052^a	0.019^a
	(0.002)			(0.002)	(0.002)	(0.002)
Numeracy	-0.083^a	-0.102^a	-0.019^a	-0.017^a	-0.027^a	-0.009^a
	(0.003)	(0.003)	(0.005)	(0.002)	(0.002)	(0.003)
Speaks English				-0.091^a	-0.016^a	0.075^a
				(0.002)	(0.001)	(0.002)

Significance levels: ^{a} p<0.01, ^{b} p<0.05, ^{c} p<0.1

Notes: Robust standard errors in parentheses. Sample limited to individuals with occupations in both years. All specifications include a quartic in age and are weighted by inverse linkage probability, as described in text. Columns (1), (2), (4), and (5) present estimates of β_t from equation (1) for each year with the listed variable on the left-hand side. Columns (3) and (6) present estimates of $\beta_t - \beta_{t-30}$.

Table B.3: Conditional changes in rank

Variables	(1) 1850–1880	(2) 1900–1930	(3) 1850–1880	(4) 1900–1930	(5) 1850–1880	(6) 1900–1930
Immigrant	0.069[a]	−0.024[a]	−0.039[a]	−0.026[a]	−0.050[a]	0.082[a]
	(0.002)	(0.002)	(0.002)	(0.002)	(0.004)	(0.002)
Initial Avg. Occ. Rank			−0.781[a]	−0.699[a]		
			(0.007)	(0.005)		
Observations	227,180	477,420	227,180	477,420	227,175	471,482
R-squared	0.028	0.101	0.470	0.415	0.074	0.076
Weights					1900	1850

Significance levels: [a] p<0.01, [b] p<0.05, [c] p<0.1
Notes: Dependent variable is change in average occupational rank. Robust standard errors in parentheses. All specifications include a quartic in age and are weighted by inverse linkage probability. Excluded group in all specifications are natives. Weights indicate that the data are reweighted to match the occupational distribution of the year listed in the last row of the table, for immigrants and natives separately. Sample limited to individuals with occupations in both years.

Results for 20th-century immigrants arriving 1890 or later

Table B.4: Dissimilarity indices between natives and immigrants

	(1)	(2)	(3)	(4)
	1850	1880	1900	1930
Dissimilarity	0.3148	0.2133	0.2046	0.1705
	(0.0037)	(0.0039)	(0.0030)	(0.0037)
Observations	237,203	237,203	606,013	606,013

Notes: Dissimilarity indices between natives' and immigrants' occupational distributions in each year, controlling for a quartic in age as described in equation (2). Robust delta method standard errors in parentheses. Observations weighted to correct for selection into linkage. Sample limited to individuals with occupations in both years.

Table B.5: Immigrant-native differences

	1850–1880			1900–1930		
	(1)	(2)	(3)	(4)	(5)	(6)
Variable	1850	1880	Diff.	1900	1930	Diff.
Unskilled	0.238^a	0.128^a	−0.111^a	0.036^a	0.076^a	0.040^a
	(0.004)	(0.003)	(0.004)	(0.004)	(0.004)	(0.006)
Farmer	−0.278^a	−0.187^a	0.091^a	−0.143^a	−0.118^a	0.025^a
	(0.003)	(0.004)	(0.004)	(0.002)	(0.002)	(0.003)
Craft	0.023^a	0.018^a	−0.006^c	0.047^a	0.025^a	−0.022^a
	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.004)
Operative	0.053^a	0.068^a	0.015^a	0.122^a	0.070^a	−0.052^a
	(0.003)	(0.002)	(0.003)	(0.004)	(0.004)	(0.005)
White Collar	−0.037^a	−0.026^a	0.011^a	−0.062^a	−0.053^a	0.009^a
	(0.005)	(0.005)	(0.003)	(0.003)	(0.003)	(0.003)
Average Occ. Rank	−0.138^a	−0.069^a	0.069^a	−0.039^a	−0.054^a	−0.016^a
	(0.003)	(0.002)	(0.002)	(0.002)	(0.002)	(0.003)
log(Occ. Wealth)	−0.661^a	−0.404^a	0.257^a	−0.261^a	−0.240^a	0.021^b
	(0.010)	(0.013)	(0.009)	(0.007)	(0.009)	(0.010)
log(PH Occ. Score)	−0.107^a	−0.049^a	0.059^a	0.015^a	−0.040^a	−0.055^a
	(0.004)	(0.002)	(0.004)	(0.003)	(0.003)	(0.004)
Occ. Wealth Rank	−0.183^a	−0.105^a	0.078^a	−0.057^a	−0.069^a	−0.011^a
	(0.003)	(0.003)	(0.002)	(0.002)	(0.003)	(0.003)
PH Score Rank	−0.094^a	−0.034^a	0.060^a	−0.020^a	−0.040^a	−0.020^a
	(0.003)	(0.003)	(0.003)	(0.002)	(0.002)	(0.003)
Literacy	−0.044^a			−0.136^a	−0.089^a	0.047^a
	(0.002)			(0.003)	(0.003)	(0.004)
Numeracy	−0.083^a	−0.102^a	−0.019^a	−0.024^a	−0.035^a	−0.011^b
	(0.003)	(0.003)	(0.005)	(0.003)	(0.003)	(0.004)
Speaks English				−0.191^a	−0.028^a	0.162^a
				(0.003)	(0.001)	(0.003)

Significance levels: ^{a} p<0.01, ^{b} p<0.05, ^{c} p<0.1

Notes: Robust standard errors in parentheses. Sample limited to individuals with occupations in both years. All specifications include a quartic in age and are weighted by inverse linkage probability, as described in text. Columns (1), (2), (4), and (5) present estimates of β_t from equation (1) for each year with the listed variable on the left-hand side. Columns (3) and (6) present estimates of $\beta_t - \beta_{t-30}$.

Table B.6: Conditional changes in rank

Variables	(1) 1850–1880	(2) 1900–1930	(3) 1850–1880	(4) 1900–1930	(5) 1850–1880	(6) 1900–1930
Immigrant	0.069[a]	−0.015[a]	−0.040[a]	−0.042[a]	−0.005	0.065[a]
	(0.002)	(0.003)	(0.002)	(0.002)	(0.004)	(0.003)
Initial Avg. Occ. Rank			−0.781[a]	−0.712[a]		
			(0.007)	(0.005)		
Observations	237,016	605,707	237,016	605,707	236,995	599,185
R-squared	0.028	0.101	0.470	0.428	0.059	0.075
Weights					1900	1850

Significance levels: [a] p<0.01, [b] p<0.05, [c] p<0.1

Notes: Dependent variable is change in average occupational rank. Robust standard errors in parentheses. All specifications include a quartic in age and are weighted by inverse linkage probability. Excluded group in all specifications are natives. Weights indicate that the data are reweighted to match the occupational distribution of the year listed in the last row of the table, for immigrants and natives separately. Sample limited to individuals with occupations in both years.

Results excluding men aged 31-40 in the initial year

Table B.7: Dissimilarity indices between natives and immigrants

	(1) 1850	(2) 1880	(3) 1900	(4) 1930
Dissimilarity	0.3204	0.2177	0.1583	0.1375
	(0.0049)	(0.0049)	(0.0035)	(0.0031)
Observations	156,151	156,151	465,080	465,080

Notes: Dissimilarity indices between natives' and immigrants' occupational distributions in each year, controlling for a quartic in age as described in equation (2). Robust delta method standard errors in parentheses. Observations weighted to correct for selection into linkage. Sample limited to individuals with occupations in both years.

Table B.8: Immigrant-native differences

	1850–1880			1900–1930		
	(1)	(2)	(3)	(4)	(5)	(6)
Variable	1850	1880	Diff.	1900	1930	Diff.
Unskilled	0.234^a	0.124^a	−0.110^a	−0.023^a	0.048^a	0.071^a
	(0.004)	(0.004)	(0.005)	(0.004)	(0.003)	(0.005)
Farmer	−0.281^a	−0.190^a	0.091^a	−0.092^a	−0.090^a	0.001
	(0.004)	(0.005)	(0.004)	(0.001)	(0.002)	(0.002)
Craft	0.033^a	0.019^a	−0.014^a	0.054^a	0.029^a	−0.024^a
	(0.004)	(0.003)	(0.004)	(0.002)	(0.003)	(0.003)
Operative	0.053^a	0.075^a	0.021^a	0.104^a	0.060^a	−0.044^a
	(0.004)	(0.003)	(0.004)	(0.003)	(0.003)	(0.004)
White Collar	−0.039^a	−0.027^a	0.012^a	−0.044^a	−0.047^a	−0.003
	(0.007)	(0.007)	(0.003)	(0.002)	(0.003)	(0.003)
Average Occ. Rank	−0.135^a	−0.069^a	0.067^a	−0.000	−0.038^a	−0.038^a
	(0.004)	(0.003)	(0.003)	(0.002)	(0.002)	(0.002)
log(Occ. Wealth)	−0.657^a	−0.407^a	0.250^a	−0.095^a	−0.172^a	−0.076^a
	(0.014)	(0.017)	(0.011)	(0.006)	(0.007)	(0.008)
log(PH Occ. Score)	−0.105^a	−0.047^a	0.058^a	0.054^a	−0.025^a	−0.079^a
	(0.006)	(0.003)	(0.005)	(0.003)	(0.003)	(0.003)
Occ. Wealth Rank	−0.183^a	−0.105^a	0.077^a	−0.014^a	−0.049^a	−0.034^a
	(0.004)	(0.004)	(0.003)	(0.002)	(0.002)	(0.002)
PH Score Rank	−0.088^a	−0.032^a	0.056^a	0.014^a	−0.027^a	−0.042^a
	(0.004)	(0.003)	(0.003)	(0.002)	(0.002)	(0.002)
Literacy	−0.038^a			−0.085^a	−0.059^a	0.027^a
	(0.003)			(0.002)	(0.002)	(0.003)
Numeracy	−0.045^a	−0.108^a	−0.064^a	−0.014^a	−0.024^a	−0.009^a
	(0.004)	(0.004)	(0.006)	(0.002)	(0.003)	(0.004)
Speaks English				−0.112^a	−0.018^a	0.095^a
				(0.002)	(0.001)	(0.003)

Significance levels: ^{a} p<0.01, ^{b} p<0.05, ^{c} p<0.1

Notes: Robust standard errors in parentheses. Sample limited to individuals with occupations in both years. All specifications include a quartic in age and are weighted by inverse linkage probability, as described in text. Columns (1), (2), (4), and (5) present estimates of β_t from equation (1) for each year with the listed variable on the left-hand side. Columns (3) and (6) present estimates of $\beta_t - \beta_{t-30}$.

Table B.9: Conditional changes in rank

Variables	(1) 1850–1880	(2) 1900–1930	(3) 1850–1880	(4) 1900–1930	(5) 1850–1880	(6) 1900–1930
Immigrant	0.065[a]	−0.038[a]	−0.043[a]	−0.038[a]	−0.056[a]	0.075[a]
	(0.003)	(0.002)	(0.002)	(0.002)	(0.005)	(0.003)
Initial Avg. Occ. Rank			−0.803[a]	−0.739[a]		
			(0.010)	(0.005)		
Observations	156,033	464,841	156,033	464,841	156,031	458,094
R-squared	0.018	0.058	0.483	0.428	0.048	0.056
Weights					1900	1850

Significance levels: [a] p<0.01, [b] p<0.05, [c] p<0.1
Notes: Dependent variable is change in average occupational rank. Robust standard errors in parentheses. All specifications include a quartic in age and are weighted by inverse linkage probability. Excluded group in all specifications are natives. Weights indicate that the data are reweighted to match the occupational distribution of the year listed in the last row of the table, for immigrants and natives separately. Sample limited to individuals with occupations in both years.

Results with age cell-based occupational wealth scores

Table B.10: Dissimilarity indices between natives and immigrants

	(1)	(2)	(3)	(4)
	1850	1880	1900	1930
Dissimilarity	0.3153	0.2133	0.1500	0.1315
	(0.0039)	(0.0039)	(0.0027)	(0.0027)
Observations	237,203	237,203	668,061	668,061

Notes: Dissimilarity indices between natives' and immigrants' occupational distributions in each year, controlling for a quartic in age as described in equation (2). Robust delta method standard errors in parentheses. Observations weighted to correct for selection into linkage. Sample limited to individuals with occupations in both years.

Table B.11: Immigrant-native differences

	1850–1880			1900–1930		
	(1)	(2)	(3)	(4)	(5)	(6)
Variable	1850	1880	Diff.	1900	1930	Diff.
Unskilled	0.239^a	0.128^a	-0.111^a	0.005	0.046^a	0.041^a
	(0.004)	(0.003)	(0.004)	(0.003)	(0.003)	(0.004)
Farmer	-0.278^a	-0.187^a	0.091^a	-0.107^a	-0.084^a	0.024^a
	(0.003)	(0.004)	(0.004)	(0.002)	(0.002)	(0.002)
Craft	0.024^a	0.018^a	-0.006^c	0.053^a	0.031^a	-0.022^a
	(0.003)	(0.003)	(0.003)	(0.002)	(0.002)	(0.003)
Operative	0.053^a	0.068^a	0.015^a	0.092^a	0.054^a	-0.038^a
	(0.003)	(0.002)	(0.003)	(0.002)	(0.002)	(0.003)
White Collar	-0.038^a	-0.026^a	0.011^a	-0.043^a	-0.048^a	-0.005^c
	(0.006)	(0.005)	(0.003)	(0.002)	(0.002)	(0.003)
Average Occ. Rank	-0.126^a	-0.058^a	0.068^a	-0.013^a	-0.029^a	-0.016^a
	(0.003)	(0.002)	(0.002)	(0.001)	(0.001)	(0.002)
log(Occ. Wealth)	-0.759^a	-0.371^a	0.389^a	-0.143^a	-0.157^a	-0.014
	(0.012)	(0.013)	(0.009)	(0.007)	(0.006)	(0.009)
log(PH Occ. Score)	-0.108^a	-0.049^a	0.059^a	0.027^a	-0.021^a	-0.048^a
	(0.004)	(0.002)	(0.004)	(0.002)	(0.002)	(0.003)
Occ. Wealth Rank	-0.157^a	-0.081^a	0.075^a	-0.028^a	-0.034^a	-0.006^a
	(0.003)	(0.002)	(0.002)	(0.001)	(0.001)	(0.002)
PH Score Rank	-0.095^a	-0.034^a	0.060^a	0.002	-0.024^a	-0.025^a
	(0.003)	(0.003)	(0.003)	(0.002)	(0.002)	(0.002)
Literacy	-0.044^a			-0.072^a	-0.052^a	0.020^a
	(0.002)			(0.002)	(0.002)	(0.002)
Numeracy	-0.083^a	-0.102^a	-0.019^a	-0.017^a	-0.025^a	-0.008^a
	(0.003)	(0.003)	(0.005)	(0.002)	(0.002)	(0.003)
Speaks English				-0.091^a	-0.016^a	0.075^a
				(0.002)	(0.001)	(0.002)

Significance levels: ^{a} p<0.01, ^{b} p<0.05, ^{c} p<0.1

Notes: Robust standard errors in parentheses. Sample limited to individuals with occupations in both years. All specifications include a quartic in age and are weighted by inverse linkage probability, as described in text. Columns (1), (2), (4), and (5) present estimates of β_t from equation (1) for each year with the listed variable on the left-hand side. Columns (3) and (6) present estimates of $\beta_t - \beta_{t-30}$.

Table B.12: Conditional changes in rank

Variables	(1) 1850–1880	(2) 1900–1930	(3) 1850–1880	(4) 1900–1930	(5) 1850–1880	(6) 1900–1930
Immigrant	0.067[a]	−0.015[a]	−0.032[a]	−0.024[a]	−0.041[a]	0.082[a]
	(0.002)	(0.002)	(0.002)	(0.001)	(0.003)	(0.002)
Initial Avg. Occ. Rank			−0.792[a]	−0.713[a]		
			(0.006)	(0.004)		
Observations	237,015	667,717	237,015	667,717	237,010	659,693
R-squared	0.033	0.123	0.504	0.458	0.074	0.102
Weights					1900	1850

Significance levels: [a] p<0.01, [b] p<0.05, [c] p<0.1
Notes: Dependent variable is change in average occupational rank. Robust standard errors in parentheses. All specifications include a quartic in age and are weighted by inverse linkage probability. Excluded group in all specifications are natives. Weights indicate that the data are reweighted to match the occupational distribution of the year listed in the last row of the table, for immigrants and natives separately. Sample limited to individuals with occupations in both years.

Appendix C: Additional Results (For Online Publication)

Figure C.1: Change in occupational rank by initial occupation and ethnicity

Figure C.1(a): 1850-1880

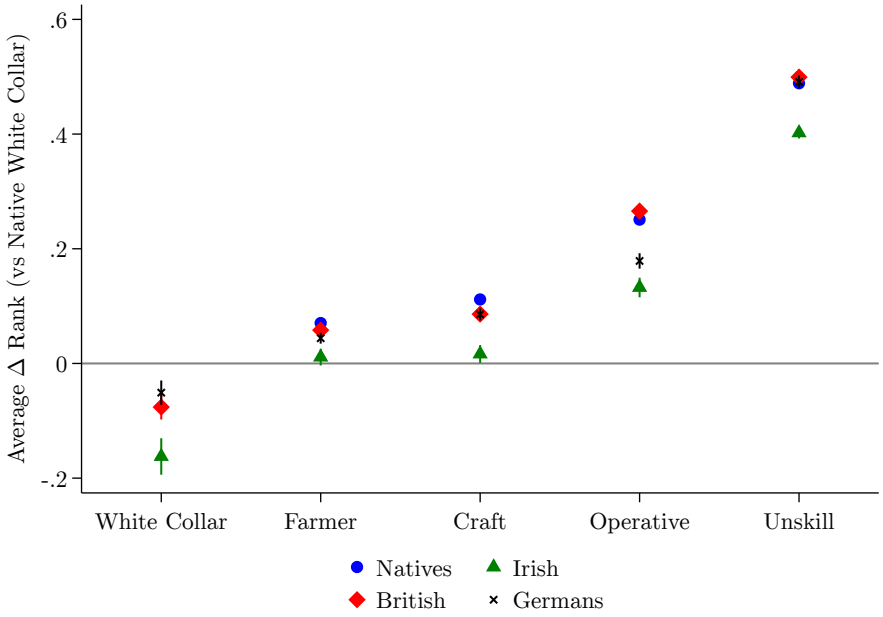
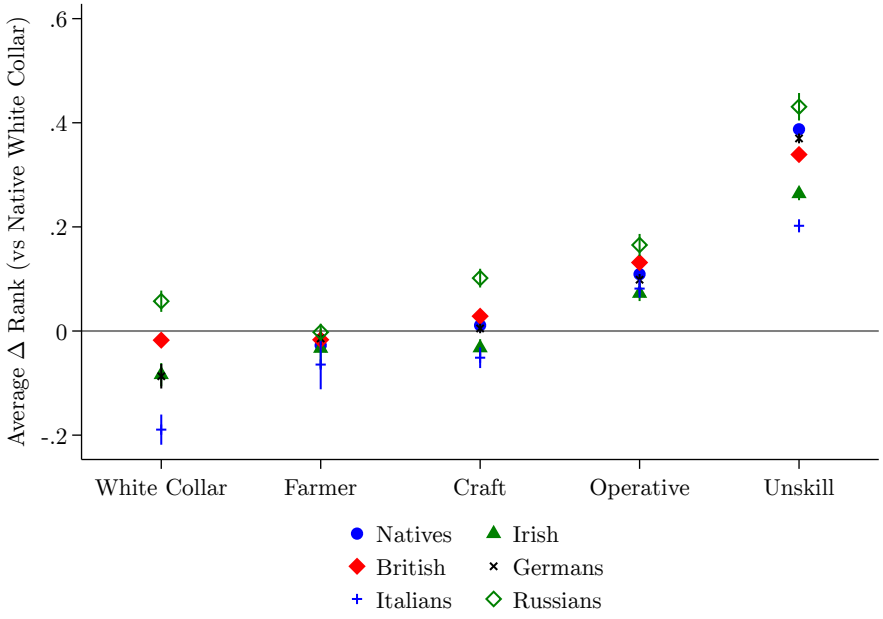


Figure C.1(b): 1900-1930



Notes: Each figure presents coefficients from regressing the change in the average occupational rank on ethnicity-initial occupational category indicators, with native-white collar as the excluded group and controlling for a quartic in age. Robust 95 percent confidence intervals reported. Observations weighted to correct for selection into linkage. Sample limited to individuals with occupations in both years.

Table C.1: Conditional changes in rank, by ethnicity

Variables	(1) Irish	(2) Italians	(3) Irish	(4) Italians	(5) Irish	(6) Italians
Immigrant	-0.022^a	-0.055^a	-0.061^a	-0.092^a	0.056^a	0.022^a
	(0.004)	(0.005)	(0.004)	(0.004)	(0.006)	(0.008)
Initial Avg. Occ. Rank			-0.713^a	-0.715^a		
			(0.005)	(0.005)		
Observations	572,134	574,443	572,134	574,443	566,053	568,475
R-squared	0.110	0.108	0.437	0.436	0.074	0.073
Weights					1900	1850

Significance levels: [a] p<0.01, [b] p<0.05, [c] p<0.1
Notes: Dependent variable is change in average occupational rank. Robust standard errors in parentheses. All specifications use data from the 1900-30 cohort, include a quartic in age, and are weighted by inverse linkage probability. Excluded group in all specifications are natives. Weights indicate that the data are reweighted to match the occupational distribution of the year listed in the last row of the table, for immigrants and natives separately. Sample limited to individuals with occupations in both years.

Table C.2: Immigrant-native differences

Variable	(1) 1900	(2) 1930	(3) Diff.
Unskilled	0.064^a	0.063^a	-0.001
	(0.002)	(0.002)	(0.002)
Farmer	-0.108^a	-0.088^a	0.019^a
	(0.001)	(0.001)	(0.001)
Craft	0.034^a	0.036^a	0.002
	(0.001)	(0.002)	(0.002)
Operative	0.081^a	0.052^a	-0.029^a
	(0.002)	(0.001)	(0.002)
White Collar	-0.071^a	-0.063^a	0.009^a
	(0.001)	(0.002)	(0.002)
Average Occ. Rank	-0.052^a	-0.046^a	0.007^a
	(0.001)	(0.001)	(0.001)
log(Occ. Wealth)	-0.270^a	-0.212^a	0.058^a
	(0.004)	(0.004)	(0.005)
log(PH Occ. Score)	-0.027^a	-0.035^a	-0.008^a
	(0.001)	(0.001)	(0.002)
Occ. Wealth Rank	-0.065^a	-0.059^a	0.005^a
	(0.001)	(0.001)	(0.001)
PH Score Rank	-0.041^a	-0.031^a	0.009^a
	(0.001)	(0.001)	(0.001)
Literacy	-0.094^a	-0.053^a	0.041^a
	(0.001)	(0.001)	(0.001)
Numeracy	-0.025^a	-0.021^a	0.004^b
	(0.001)	(0.001)	(0.002)
Speaks English	-0.109^a	-0.024^a	0.085^a
	(0.001)	(0.001)	(0.001)

Significance levels: [a] p<0.01, [b] p<0.05, [c] p<0.1
Notes: Robust standard errors in parentheses. Sample limited to individuals with occupations in both years. All specifications include a quartic in age and are weighted by inverse linkage probability, as described in text. Columns (1), (2), (4), and (5) present estimates of β_t from equation (1) for each year with the listed variable on the left-hand side. Columns (3) and (6) present estimates of $\beta_t - \beta_{t-30}$.

Appendix D: Results Incorporating "Not Yet Classified" Occupations (For Online Publication)

The 1900 and 1930 complete-count datasets provided by Ruggles et al. (2019) are preliminary. The main complication that this induces for our analysis is that 10.87 percent of the 1900 sample and 16.47 percent of the 1930 sample have occupations categorized as "Not Yet Classified." To ensure that the exclusion of a sizable number of observations from our analysis as a result of this missing code is not responsible for our findings, this Appendix repeats our main results with imputed occupational codes for these unclassified individuals. Specifically, we assign these uncategorized individuals the modal occupational code assigned to all occupational strings with a matching NYSIIS code of the listed occupational string, in a manner similar to Collins and Wanamaker (2020). We continue to use the listed occupational code for cases that were assigned a code by Ruggles et al. (2019). Tables D.1-D.3 show that our main results are qualitatively unaffected by including these individuals, implying that excluding these unclassified individuals does not drive our results.

Table D.1: Dissimilarity indices between natives and immigrants

	(1)	(2)	(3)	(4)
	1850	1880	1900	1930
Dissimilarity	0.3148	0.2133	0.1494	0.1264
	(0.0037)	(0.0039)	(0.0023)	(0.0024)
Observations	237,203	237,203	860,247	860,247

Notes: Dissimilarity indices between natives' and immigrants' occupational distributions in each year, controlling for a quartic in age as described in equation (2). Robust delta method standard errors in parentheses. Observations weighted to correct for selection into linkage. Sample limited to individuals with occupations in both years.

Table D.2: Immigrant-native differences

	1850–1880			1900–1930		
	(1)	(2)	(3)	(4)	(5)	(6)
Variable	1850	1880	Diff.	1900	1930	Diff.
Unskilled	0.238^a	0.128^a	−0.111^a	0.012^a	0.045^a	0.033^a
	(0.004)	(0.003)	(0.004)	(0.003)	(0.003)	(0.004)
Farmer	−0.278^a	−0.187^a	0.091^a	−0.093^a	−0.068^a	0.025^a
	(0.003)	(0.004)	(0.004)	(0.002)	(0.002)	(0.002)
Craft	0.023^a	0.018^a	−0.006^c	0.049^a	0.029^a	−0.020^a
	(0.003)	(0.003)	(0.003)	(0.002)	(0.002)	(0.003)
Operative	0.053^a	0.068^a	0.015^a	0.089^a	0.053^a	−0.036^a
	(0.003)	(0.002)	(0.003)	(0.002)	(0.002)	(0.003)
White Collar	−0.037^a	−0.026^a	0.011^a	−0.057^a	−0.058^a	−0.002
	(0.005)	(0.005)	(0.003)	(0.002)	(0.002)	(0.003)
Average Occ. Rank	−0.138^a	−0.069^a	0.069^a	−0.021^a	−0.037^a	−0.017^a
	(0.003)	(0.002)	(0.002)	(0.001)	(0.001)	(0.002)
log(Occ. Wealth)	−0.661^a	−0.404^a	0.257^a	−0.153^a	−0.160^a	−0.007
	(0.010)	(0.013)	(0.009)	(0.005)	(0.005)	(0.007)
log(PH Occ. Score)	−0.107^a	−0.049^a	0.059^a	0.014^a	−0.027^a	−0.042^a
	(0.004)	(0.002)	(0.004)	(0.002)	(0.002)	(0.002)
Occ. Wealth Rank	−0.183^a	−0.105^a	0.078^a	−0.034^a	−0.045^a	−0.012^a
	(0.003)	(0.003)	(0.002)	(0.001)	(0.002)	(0.002)
PH Score Rank	−0.094^a	−0.034^a	0.060^a	−0.008^a	−0.029^a	−0.022^a
	(0.003)	(0.003)	(0.003)	(0.002)	(0.002)	(0.002)
Literacy	−0.044^a			−0.071^a	−0.050^a	0.021^a
	(0.002)			(0.002)	(0.002)	(0.002)
Numeracy	−0.083^a	−0.102^a	−0.019^a	−0.016^a	−0.027^a	−0.011^a
	(0.003)	(0.003)	(0.005)	(0.002)	(0.002)	(0.003)
Speaks English				−0.089^a	−0.016^a	0.073^a
				(0.002)	(0.001)	(0.002)

Significance levels: ^{a} p<0.01, ^{b} p<0.05, ^{c} p<0.1

Notes: Robust standard errors in parentheses. Sample limited to individuals with occupations in both years. All specifications include a quartic in age and are weighted by inverse linkage probability, as described in text. Columns (1), (2), (4), and (5) present estimates of β_t from equation (1) for each year with the listed variable on the left-hand side. Columns (3) and (6) present estimates of $\beta_t - \beta_{t-30}$.

Table D.3: Conditional changes in rank

Variables	(1) 1850–1880	(2) 1900–1930	(3) 1850–1880	(4) 1900–1930	(5) 1850–1880	(6) 1900–1930
Immigrant	0.069^a	−0.015^a	−0.040^a	−0.030^a	−0.027^a	0.068^a
	(0.002)	(0.002)	(0.002)	(0.001)	(0.009)	(0.003)
Initial Avg. Occ. Rank			−0.781^a	−0.723^a		
			(0.007)	(0.004)		
Observations	237,016	859,366	237,016	859,366	236,645	766,287
R-squared	0.028	0.082	0.470	0.420	0.020	0.152
Weights					1900	1850

Significance levels: [a] p<0.01, [b] p<0.05, [c] p<0.1

Notes: Dependent variable is change in average occupational rank. Robust standard errors in parentheses. All specifications include a quartic in age and are weighted by inverse linkage probability. Excluded group in all specifications are natives. Weights indicate that the data are reweighted to match the occupational distribution of the year listed in the last row of the table, for immigrants and natives separately. Sample limited to individuals with occupations in both years.

Appendix E: Results with Exact Matches Only (For Online Publication)

Abramitzky et al. (2019a) and Bailey et al. (2019) suggest that results be verified with link criteria of various strictness in order to ensure that false matches are not responsible for any results. To this end, we repeat our main results with what we call "exact" matches, whose quality suggests that they are less likely to be false positives. Specifically, these matches, in addition to meeting the criteria described in Appendix A, must also satisfy the following conditions:

1. The difference in age-implied birth years across the two censuses is not more than one year.
2. The first and last names across the two records are identical, except for the potential removal of double letters or the use of common name abbreviations.

Imposing this restriction and requiring that an individual have an occupation in both observed years and enough information with which to compute linkage weights (as in the main text) limits the sample to 107,704 natives linked from 1850-80, 7,644 immigrants linked from 1850-80, 323,182 natives linked from 1900-30, and 36,838 immigrants linked from 1900-30. These samples are considerably smaller than the main samples, and so some caution must be taken in interpreting the results. Nonetheless, this exercise provides an important check of our results.

We replicate the main results in Tables E.1-E.3. Naturally, eliminating a large fraction of the sample has an impact on the quantitative results. But the findings of unconditional assimilation in the nineteenth century and not in the twentieth, and the result that the difference is due to different initial occupation distributions are not qualitatively affected. We therefore conclude that false matches are unlikely to have qualitatively impacted our results.

Table E.1: Dissimilarity indices between natives and immigrants

	(1)	(2)	(3)	(4)
	1850	1880	1900	1930
Dissimilarity	0.2942	0.1920	0.1596	0.1078
	(0.0055)	(0.0068)	(0.0031)	(0.0031)
Observations	115,348	115,348	360,020	360,020

Notes: Dissimilarity indices between natives' and immigrants' occupational distributions in each year, controlling for a quartic in age as described in equation (2). Robust delta method standard errors in parentheses. Observations weighted to correct for selection into linkage. Sample limited to individuals with occupations in both years.

Table E.2: Immigrant-native differences

	1850–1880			1900–1930		
	(1)	(2)	(3)	(4)	(5)	(6)
Variable	1850	1880	Diff.	1900	1930	Diff.
Unskilled	0.196^a	0.093^a	−0.102^a	−0.012^a	0.016^a	0.027^a
	(0.007)	(0.006)	(0.008)	(0.003)	(0.003)	(0.004)
Farmer	−0.271^a	−0.192^a	0.080^a	−0.109^a	−0.071^a	0.039^a
	(0.005)	(0.006)	(0.006)	(0.002)	(0.002)	(0.002)
Craft	0.037^a	0.031^a	−0.007	0.075^a	0.049^a	−0.026^a
	(0.005)	(0.005)	(0.006)	(0.002)	(0.003)	(0.003)
Operative	0.061^a	0.068^a	0.007	0.085^a	0.043^a	−0.042^a
	(0.005)	(0.005)	(0.007)	(0.002)	(0.002)	(0.003)
White Collar	−0.023^a	−0.000	0.023^a	−0.039^a	−0.037^a	0.002
	(0.004)	(0.005)	(0.005)	(0.002)	(0.002)	(0.003)
Average Occ. Rank	−0.116^a	−0.047^a	0.069^a	−0.007^a	−0.016^a	−0.009^a
	(0.004)	(0.003)	(0.004)	(0.002)	(0.002)	(0.002)
log(Occ. Wealth)	−0.585^a	−0.318^a	0.267^a	−0.129^a	−0.102^a	0.027^a
	(0.013)	(0.014)	(0.017)	(0.006)	(0.007)	(0.007)
log(PH Occ. Score)	−0.083^a	−0.022^a	0.061^a	0.030^a	−0.002	−0.032^a
	(0.004)	(0.004)	(0.005)	(0.002)	(0.002)	(0.002)
Occ. Wealth Rank	−0.164^a	−0.087^a	0.077^a	−0.029^a	−0.028^a	0.001
	(0.004)	(0.004)	(0.004)	(0.002)	(0.002)	(0.002)
PH Score Rank	−0.068^a	−0.007^c	0.062^a	0.016^a	−0.004^b	−0.020^a
	(0.005)	(0.004)	(0.005)	(0.002)	(0.002)	(0.002)
Literacy	−0.039^a			−0.027^a	−0.015^a	0.011^a
	(0.004)			(0.002)	(0.001)	(0.002)
Numeracy	−0.094^a	−0.114^a	−0.020^a	−0.015^a	−0.010^a	0.004
	(0.006)	(0.006)	(0.007)	(0.002)	(0.002)	(0.003)
Speaks English				−0.039^a	−0.004^a	0.034^a
				(0.001)	(0.000)	(0.001)

Significance levels: ^{a} p<0.01, ^{b} p<0.05, ^{c} p<0.1

Notes: Robust standard errors in parentheses. Sample limited to individuals with occupations in both years. All specifications include a quartic in age and are weighted by inverse linkage probability, as described in text. Columns (1), (2), (4), and (5) present estimates of β_t from equation (1) for each year with the listed variable on the left-hand side. Columns (3) and (6) present estimates of $\beta_t - \beta_{t-30}$.

Table E.3: Conditional changes in rank, exact matches only

Variables	(1) 1850–1880	(2) 1900–1930	(3) 1850–1880	(4) 1900–1930	(5) 1850–1880	(6) 1900–1930
Immigrant	0.069^a	-0.010^a	-0.020^a	-0.014^a	-0.019^a	0.066^a
	(0.004)	(0.002)	(0.003)	(0.002)	(0.006)	(0.002)
Initial Avg. Occ. Rank			-0.765^a	-0.682^a		
			(0.004)	(0.002)		
Observations	115,258	359,826	115,258	359,826	115,255	353,045
R-squared	0.032	0.116	0.471	0.436	0.088	0.063
Weights					1900	1850

Significance levels: [a] p<0.01, [b] p<0.05, [c] p<0.1
Notes: Dependent variable is change in average occupational rank. Robust standard errors in parentheses. All specifications include a quartic in age and are weighted by inverse linkage probability. Excluded group in all specifications are natives. Weights indicate that the data are reweighted to match the occupational distribution of the year listed in the last row of the table, for immigrants and natives separately. Sample limited to individuals with occupations in both years.

Appendix F: Results with Alternative Record Linkage Methods (For Online Publication)

We use two methods described and analyzed by Abramitzky et al. (2019a) to construct alternative linked samples with which to verify the robustness of our results.[51] The first is the ABE linkage method based on NYSIIS standardization of names, and requiring uniqueness within a five-year band. The second is the ABE linkage method requiring exact matches by name, and requiring uniqueness within a five-year band. We do not use middle names in either of these matches. We refer to these two methods as "ABE-NYSIIS, 5-Year Band" and "ABE-Exact, 5 Year Band," respectively, in the following discussion.

Table F.1 shows the match rates for natives and immigrants in a manner analogous to Table 1.[52] Though there are differences between the match rates of Table 1 and those of Table F.1, the differences are not sizable. Table F.2 compares the matches made by the various linkage methods. In Table F.2(a), we show that in the vast majority of cases in which our method and either of the ABE methods makes a match, the matches agree with one another. However, Table F.2(a) also shows that there was a large number of observations for which our method made a link and the ABE method did not or vice versa. These large non-overlapping sections of the linkage sets are to be expected given the differences in the link criteria used by each method—for instance, our method allows matches for individuals up to 4 years apart in age, whereas the ABE methods allow a match for a maximum difference of two years. We are reassured, however, by the fact that Table F.2(b) also shows that there are large non-overlapping sections between the two ABE linkage methods.

Tables F.3-F.7 and Figure F.1 repeat the main results of the paper with the two alternative linked samples.[53] Given the strong similarity of results reached regardless of the linkage method, we conclude that our results are not spurious products of peculiarities of our linkage method.

[51] We executed these linkages using Stata code provided by Abramitzky et al. (2019a).
[52] The number in column (4) for the base-1930 data is different from Table 1 because individuals are included either if they are involved in a successful link or if their stated year of arrival is 1900 or earlier.
[53] Two individuals with extremely high real property values in 1850 ($300,000 or greater) were excluded from the analysis because their outlying wealth values resulted in inverse linkage probabilities that would cause these individuals to completely dominate any regression in which they were included.

Table F.1: Rates of successful linkage

	Natives			Immigrants		
	(1)	(2)	(3)	(4)	(5)	(6)
Link	Start	NYSIIS	Exact	Start	NYSIIS	Exact
1850–1880	2,064,491	279,383	261,038	626,320	35,936	32,457
		(0.135)	(0.126)		(0.057)	(0.052)
1900–1930 (Base 1900)	7,447,320	1,051,037	1,125,598	2,235,798	174,921	159,073
		(0.141)	(0.151)		(0.078)	(0.071)
1900–1930 (Base 1930)	7,105,156	1,071,513	1,145,601	1,650,691	174,872	158,949
		(0.151)	(0.161)		(0.106)	(0.096)

Notes: Numbers in parentheses indicate match rates relative to the full sample in columns (1) and (4). For 1850-1880, numbers are relative to the base year 1850. For 1900-1930, numbers are relative to the indicated base year. For 1850-1880 and 1900-1930 (Base 1900), the sample is limited to non-southern white men aged 18-40 in the base year. For 1900-1930 (Base 1930), the sample is limited to non-southern white men aged 44-74 in the base year excluding unlinked (by either method) immigrants arriving after 1900; in this case links to men not aged 18-40 in 1900 are not counted as links.

Table F.2: Comparison of matches made by the various linkage methods

Table F.2(a): Comparing our matching method to ABE

	ABE-NYSIIS, 5 yr Band			ABE-Exact, 5 yr Band		
	Matched		Unmatched	Matched		Unmatched
Our Linkage	Agree (1)	Disagree (2)	(3)	Agree (4)	Disagree (5)	(6)
Panel A: Natives 1850–1880						
Matched	162,225	1,060	74,984	144,181	604	93,484
Unmatched	116,098		1,710,124	116,253		1,709,969
Panel B: Immigrants 1850–1880						
Matched	14,127	735	20,957	11,622	196	24,001
Unmatched	21,074		569,427	20,639		569,862
Panel C: Natives 1900–1930 (Base 1900)						
Matched	650,778	4,095	332,746	631,515	2,154	353,950
Unmatched	396,164		6,063,537	491,929		5,967,772
Panel D: Immigrants 1900–1930 (Base 1900)						
Matched	88,251	2,139	87,813	75,153	633	102,417
Unmatched	84,531		1,973,064	83,287		1,974,308
Panel E: Natives 1900–1930 (Base 1930)						
Matched	661,415	6,259	337,377	641,322	4,239	359,490
Unmatched	403,839		5,696,266	500,040		5,600,065
Panel F: Immigrants 1900–1930 (Base 1930)						
Matched	88,172	2,048	87,946	75,038	905	102,223
Unmatched	84,652		1,409,814	83,006		1,411,460

Notes: This table compares the matches created by our matching method to those created by the two ABE methods, neither using middle names. Samples constrained as in Table F.1.

Table F.2(b): Comparing the two ABE methods

	ABE-NYSIIS, 5 yr Band		
	Matched		Unmatched
ABE-Exact, 5 yr Band	Agree (1)	Disagree (2)	(3)
Panel A: Natives 1850–1880			
Matched	199,656	0	79,727
Unmatched	61,382		1,723,726
Panel B: Immigrants 1850–1880			
Matched	15,925	0	20,011
Unmatched	16,532		573,852
Panel C: Natives 1900–1930 (Base 1900)			
Matched	788,345	0	262,692
Unmatched	337,253		6,059,030
Panel D: Immigrants 1900–1930 (Base 1900)			
Matched	94,804	0	80,117
Unmatched	64,269		1,996,608
Panel E: Natives 1900–1930 (Base 1930)			
Matched	802,691	0	268,822
Unmatched	342,910		5,690,733
Panel F: Immigrants 1900–1930 (Base 1930)			
Matched	94,754	0	80,118
Unmatched	64,195		1,433,565

Notes: This table compares the matches created by the two ABE methods, neither using middle names. Samples constrained as in Table F.1.

Table F.3: Summary Statistics

Table F.3(a): ABE-NYSIIS 5 Year Band

	1850		1880		1900		1930	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Variable	Native	Immigrant	Native	Immigrant	Native	Immigrant	Native	Immigrant
Age	27.401	28.390	57.307	58.341	26.471	28.058	56.290	57.917
	(6.461)	(6.155)	(6.570)	(6.280)	(6.608)	(6.579)	(6.855)	(6.832)
log(Occ. Wealth)	7.856	7.233	8.141	7.750	7.378	7.293	7.817	7.652
	(0.917)	(0.960)	(0.850)	(1.019)	(1.049)	(0.954)	(1.020)	(1.031)
log(PH Occ Score)	6.354	6.260	6.422	6.374	6.231	6.287	6.424	6.400
	(0.288)	(0.313)	(0.281)	(0.307)	(0.432)	(0.353)	(0.354)	(0.342)
Unskilled	0.152	0.379	0.103	0.231	0.363	0.337	0.222	0.272
	(0.359)	(0.485)	(0.304)	(0.422)	(0.481)	(0.473)	(0.415)	(0.445)
Farmer	0.419	0.141	0.514	0.324	0.209	0.121	0.258	0.178
	(0.493)	(0.348)	(0.500)	(0.468)	(0.406)	(0.326)	(0.438)	(0.382)
Craft	0.191	0.217	0.140	0.155	0.135	0.201	0.186	0.214
	(0.393)	(0.412)	(0.347)	(0.362)	(0.342)	(0.401)	(0.389)	(0.410)
Operative	0.129	0.182	0.078	0.147	0.113	0.205	0.083	0.134
	(0.335)	(0.386)	(0.268)	(0.354)	(0.317)	(0.404)	(0.277)	(0.341)
White Collar	0.109	0.081	0.166	0.144	0.180	0.136	0.251	0.202
	(0.312)	(0.272)	(0.372)	(0.351)	(0.384)	(0.342)	(0.434)	(0.402)
Average Occ Rank	0.512	0.384	0.596	0.529	0.448	0.451	0.535	0.499
	(0.232)	(0.267)	(0.198)	(0.239)	(0.280)	(0.251)	(0.251)	(0.256)
Occ. Wealth Rank	0.507	0.336	0.645	0.543	0.448	0.435	0.564	0.518
	(0.274)	(0.261)	(0.240)	(0.273)	(0.302)	(0.263)	(0.293)	(0.291)
PH Score Rank	0.516	0.431	0.547	0.515	0.448	0.467	0.507	0.480
	(0.276)	(0.326)	(0.237)	(0.268)	(0.304)	(0.281)	(0.282)	(0.281)
Literacy	0.963	0.917			0.980	0.905	0.986	0.933
	(0.189)	(0.276)			(0.141)	(0.293)	(0.116)	(0.249)
Speaks English					0.989	0.894	0.997	0.979
					(0.106)	(0.308)	(0.053)	(0.143)
Urban	0.199	0.494	0.196	0.456	0.336	0.614	0.495	0.676
	(0.400)	(0.500)	(0.397)	(0.498)	(0.472)	(0.487)	(0.500)	(0.468)
Midwest	0.381	0.318	0.431	0.424	0.586	0.455	0.530	0.419
	(0.486)	(0.466)	(0.495)	(0.494)	(0.492)	(0.498)	(0.499)	(0.493)
Northeast	0.582	0.661	0.496	0.478	0.329	0.460	0.325	0.448
	(0.493)	(0.473)	(0.500)	(0.500)	(0.470)	(0.498)	(0.468)	(0.497)
South			0.035	0.054				
			(0.185)	(0.226)				
West	0.038	0.021	0.038	0.044	0.084	0.085	0.144	0.133
	(0.191)	(0.144)	(0.191)	(0.205)	(0.278)	(0.279)	(0.352)	(0.340)
Old Source						0.426		
						(0.494)		
Years in US						13.195		
						(8.631)		
Observations	242,477	30,651	242,522	30,651	589,254	97,672	605,128	100,182

Notes: For 1850 and 1880, the table includes white males linked from 1850 to 1880 who were ages 18-40 in 1850, who had an occupation in both years, and who did not live in the South in 1850. For 1900 and 1930, the table includes white males linked from 1900 to 1930 who were ages 18-40 in 1900, who had an occupation in both years, and who did not live in the South in either year. Observation numbers are the minimum with data for all variables except literacy, old source, and years in US. Different observation numbers for the same cohort across years are due to occupations that could not be scored. Observations weighted to correct for selection into linkage. Standard deviations in parentheses.

Table F.3(b): ABE-Exact 5 Year Band

	1850		1880		1900		1930	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Variable	Native	Immigrant	Native	Immigrant	Native	Immigrant	Native	Immigrant
Age	27.395	28.396	57.300	58.342	26.460	28.028	56.277	57.882
	(6.460)	(6.170)	(6.568)	(6.290)	(6.606)	(6.567)	(6.853)	(6.817)
log(Occ. Wealth)	7.857	7.234	8.147	7.744	7.384	7.320	7.817	7.643
	(0.917)	(0.961)	(0.847)	(1.019)	(1.046)	(0.955)	(1.020)	(1.029)
log(PH Occ Score)	6.354	6.261	6.424	6.373	6.234	6.295	6.424	6.396
	(0.288)	(0.312)	(0.280)	(0.306)	(0.431)	(0.354)	(0.354)	(0.341)
Unskilled	0.152	0.380	0.101	0.231	0.359	0.326	0.221	0.276
	(0.359)	(0.485)	(0.301)	(0.422)	(0.480)	(0.469)	(0.415)	(0.447)
Farmer	0.419	0.142	0.515	0.326	0.209	0.123	0.258	0.178
	(0.493)	(0.349)	(0.500)	(0.469)	(0.406)	(0.328)	(0.438)	(0.383)
Craft	0.192	0.217	0.140	0.156	0.137	0.203	0.186	0.212
	(0.394)	(0.412)	(0.347)	(0.363)	(0.344)	(0.402)	(0.389)	(0.409)
Operative	0.129	0.181	0.077	0.146	0.114	0.206	0.084	0.134
	(0.335)	(0.385)	(0.267)	(0.353)	(0.318)	(0.404)	(0.277)	(0.341)
White Collar	0.109	0.081	0.167	0.141	0.181	0.142	0.251	0.199
	(0.311)	(0.272)	(0.373)	(0.348)	(0.385)	(0.349)	(0.434)	(0.399)
Average Occ Rank	0.512	0.384	0.598	0.527	0.450	0.458	0.535	0.496
	(0.232)	(0.267)	(0.198)	(0.239)	(0.279)	(0.251)	(0.251)	(0.256)
Occ. Wealth Rank	0.508	0.336	0.647	0.541	0.449	0.443	0.564	0.516
	(0.274)	(0.261)	(0.239)	(0.273)	(0.302)	(0.263)	(0.293)	(0.291)
PH Score Rank	0.516	0.432	0.548	0.513	0.450	0.473	0.507	0.477
	(0.276)	(0.326)	(0.237)	(0.268)	(0.304)	(0.281)	(0.282)	(0.280)
Literacy	0.964	0.915			0.980	0.918	0.986	0.931
	(0.187)	(0.279)			(0.139)	(0.274)	(0.117)	(0.253)
Speaks English					0.989	0.913	0.997	0.978
					(0.103)	(0.282)	(0.053)	(0.148)
Urban	0.199	0.493	0.197	0.452	0.341	0.610	0.495	0.676
	(0.400)	(0.500)	(0.397)	(0.498)	(0.474)	(0.488)	(0.500)	(0.468)
Midwest	0.380	0.316	0.430	0.417	0.587	0.456	0.530	0.416
	(0.486)	(0.465)	(0.495)	(0.493)	(0.492)	(0.498)	(0.499)	(0.493)
Northeast	0.582	0.663	0.498	0.485	0.330	0.458	0.325	0.451
	(0.493)	(0.473)	(0.500)	(0.500)	(0.470)	(0.498)	(0.468)	(0.498)
South			0.034	0.053				
			(0.181)	(0.225)				
West	0.038	0.021	0.038	0.045	0.083	0.086	0.144	0.132
	(0.190)	(0.143)	(0.190)	(0.208)	(0.275)	(0.280)	(0.351)	(0.339)
Old Source						0.425		
						(0.494)		
Years in US						13.566		
						(8.522)		
Observations	226,469	27,801	226,505	27,799	630,914	88,429	647,437	90,515

Notes: For 1850 and 1880, the table includes white males linked from 1850 to 1880 who were ages 18-40 in 1850, who had an occupation in both years, and who did not live in the South in 1850. For 1900 and 1930, the table includes white males linked from 1900 to 1930 who were ages 18-40 in 1900, who had an occupation in both years, and who did not live in the South in either year. Observation numbers are the minimum with data for all variables except literacy, old source, and years in US. Different observation numbers for the same cohort across years are due to occupations that could not be scored. Observations weighted to correct for selection into linkage. Standard deviations in parentheses.

Table F.4: Dissimilarity indices

	(1)	(2)	(3)	(4)
	1850	1880	1900	1930
NYSIIS	0.3108	0.2160	0.1647	0.1343
	(0.0026)	(0.0034)	(0.0018)	(0.0021)
Observations	273,280	273,280	705,310	705,310
Exact	0.3104	0.2187	0.1566	0.1370
	(0.0028)	(0.0035)	(0.0027)	(0.0034)
Observations	254,401	254,401	737,952	737,952

Notes: Dissimilarity indices between natives' and immigrants' occupational distributions in each year, controlling for a quartic in age as described in equation (2). Robust delta method standard errors in parentheses. Observations weighted to correct for selection into linkage. Sample limited to individuals with occupations in both years.

Table F.5: Results

Table F.5(a): ABE-NYSIIS 5 Year Band

	1850–1880			1900–1930		
	(1)	(2)	(3)	(4)	(5)	(6)
Variable	1850	1880	Diff.	1900	1930	Diff.
Unskilled	0.236[a]	0.128[a]	−0.108[a]	0.010[a]	0.047[a]	0.036[a]
	(0.003)	(0.003)	(0.004)	(0.002)	(0.002)	(0.003)
Farmer	−0.278[a]	−0.195[a]	0.083[a]	−0.116[a]	−0.089[a]	0.027[a]
	(0.002)	(0.003)	(0.003)	(0.001)	(0.001)	(0.002)
Craft	0.023[a]	0.017[a]	−0.006[c]	0.060[a]	0.032[a]	−0.027[a]
	(0.003)	(0.002)	(0.003)	(0.002)	(0.002)	(0.002)
Operative	0.052[a]	0.071[a]	0.019[a]	0.094[a]	0.055[a]	−0.039[a]
	(0.003)	(0.002)	(0.003)	(0.002)	(0.002)	(0.002)
White Collar	−0.032[a]	−0.021[a]	0.012[a]	−0.048[a]	−0.046[a]	0.003
	(0.002)	(0.002)	(0.003)	(0.001)	(0.002)	(0.002)
Average Occ. Rank	−0.135[a]	−0.067[a]	0.068[a]	−0.020[a]	−0.035[a]	−0.015[a]
	(0.002)	(0.002)	(0.002)	(0.001)	(0.001)	(0.001)
log(Occ. Wealth)	−0.648[a]	−0.394[a]	0.253[a]	−0.180[a]	−0.170[a]	0.010[c]
	(0.007)	(0.007)	(0.009)	(0.004)	(0.005)	(0.005)
log(PH Occ. Score)	−0.105[a]	−0.047[a]	0.058[a]	0.023[a]	−0.022[a]	−0.045[a]
	(0.002)	(0.002)	(0.003)	(0.002)	(0.002)	(0.002)
Occ. Wealth Rank	−0.179[a]	−0.104[a]	0.075[a]	−0.040[a]	−0.048[a]	−0.008[a]
	(0.002)	(0.002)	(0.002)	(0.001)	(0.001)	(0.002)
PH Score Rank	−0.092[a]	−0.031[a]	0.061[a]	−0.001	−0.023[a]	−0.023[a]
	(0.002)	(0.002)	(0.003)	(0.001)	(0.001)	(0.002)
Literacy	−0.048[a]			−0.072[a]	−0.052[a]	0.020[a]
	(0.002)			(0.002)	(0.001)	(0.002)
Numeracy	−0.100[a]	−0.132[a]	−0.032[a]	−0.021[a]	−0.024[a]	−0.003
	(0.003)	(0.003)	(0.004)	(0.002)	(0.002)	(0.002)
Speaks English				−0.094[a]	−0.017[a]	0.077[a]
				(0.002)	(0.001)	(0.002)

Significance levels: [a] p<0.01, [b] p<0.05, [c] p<0.1

Notes: Robust standard errors in parentheses. Sample limited to individuals with occupations in both years. All specifications include a quartic in age and are weighted by inverse linkage probability, as described in text. Columns (1), (2), (4), and (5) present estimates of β_t from equation (1) for each year with the listed variable on the left-hand side. Columns (3) and (6) present estimates of $\beta_t - \beta_{t-30}$.

Table F.5(b): ABE-Exact 5 Year Band

	1850–1880			1900–1930		
	(1)	(2)	(3)	(4)	(5)	(6)
Variable	1850	1880	Diff.	1900	1930	Diff.
Unskilled	0.237^a	0.130^a	−0.107^a	0.003	0.051^a	0.048^a
	(0.003)	(0.003)	(0.004)	(0.004)	(0.004)	(0.004)
Farmer	−0.279^a	−0.194^a	0.085^a	−0.114^a	−0.088^a	0.025^a
	(0.002)	(0.003)	(0.003)	(0.001)	(0.002)	(0.002)
Craft	0.021^a	0.018^a	−0.003	0.060^a	0.030^a	−0.029^a
	(0.003)	(0.002)	(0.003)	(0.002)	(0.002)	(0.002)
Operative	0.052^a	0.071^a	0.019^a	0.094^a	0.056^a	−0.039^a
	(0.003)	(0.002)	(0.003)	(0.004)	(0.005)	(0.004)
White Collar	−0.031^a	−0.025^a	0.007^b	−0.043^a	−0.049^a	−0.006^c
	(0.002)	(0.002)	(0.003)	(0.003)	(0.002)	(0.003)
Average Occ. Rank	−0.136^a	−0.070^a	0.065^a	−0.015^a	−0.038^a	−0.023^a
	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
log(Occ. Wealth)	−0.649^a	−0.407^a	0.243^a	−0.157^a	−0.179^a	−0.022^a
	(0.007)	(0.007)	(0.009)	(0.006)	(0.009)	(0.008)
log(PH Occ. Score)	−0.104^a	−0.050^a	0.054^a	0.028^a	−0.025^a	−0.053^a
	(0.002)	(0.002)	(0.003)	(0.002)	(0.003)	(0.003)
Occ. Wealth Rank	−0.179^a	−0.107^a	0.072^a	−0.034^a	−0.049^a	−0.016^a
	(0.002)	(0.002)	(0.002)	(0.002)	(0.003)	(0.002)
PH Score Rank	−0.092^a	−0.033^a	0.058^a	0.003	−0.027^a	−0.030^a
	(0.002)	(0.002)	(0.003)	(0.002)	(0.002)	(0.002)
Literacy	−0.048^a			−0.061^a	−0.055^a	0.006
	(0.002)			(0.003)	(0.004)	(0.005)
Numeracy	−0.090^a	−0.125^a	−0.035^a	−0.016^a	−0.019^a	−0.003
	(0.003)	(0.003)	(0.004)	(0.003)	(0.003)	(0.004)
Speaks English				−0.075^a	−0.019^a	0.056^a
				(0.003)	(0.002)	(0.004)

Significance levels: ^{a} p<0.01, ^{b} p<0.05, ^{c} p<0.1

Notes: Robust standard errors in parentheses. Sample limited to individuals with occupations in both years. All specifications include a quartic in age and are weighted by inverse linkage probability, as described in text. Columns (1), (2), (4), and (5) present estimates of β_t from equation (1) for each year with the listed variable on the left-hand side. Columns (3) and (6) present estimates of $\beta_t - \beta_{t-30}$.

Table F.6: Conditional changes in rank

Table F.6(a): ABE-NYSIIS 5 Year Band

Variables	(1) 1850–1880	(2) 1900–1930	(3) 1850–1880	(4) 1900–1930	(5) 1850–1880	(6) 1900–1930	(7) 1900–1930	(8) 1900–1930
Immigrant	0.068[a]	−0.015[a]	−0.039[a]	−0.030[a]	−0.028[a]	0.075[a]	−0.011[a]	−0.034[a]
	(0.002)	(0.001)	(0.002)	(0.001)	(0.003)	(0.002)	(0.002)	(0.002)
Initial Avg. Occ. Rank			−0.791[a]	−0.705[a]				−0.705[a]
			(0.003)	(0.002)				(0.002)
Old Source							−0.009[a]	0.010[a]
							(0.002)	(0.002)
Observations	273,025	704,947	273,025	704,947	273,020	696,392	704,947	704,947
R-squared	0.029	0.098	0.478	0.425	0.068	0.069	0.098	0.425
Weights					1900	1850		

Significance levels: [a] p<0.01, [b] p<0.05, [c] p<0.1
Notes: Dependent variable is change in average occupational rank. Robust standard errors in parentheses. All specifications include a quartic in age and are weighted by inverse linkage probability. Excluded group in all specifications are natives. Weights indicate that the data are reweighted to match the occupational distribution of the year listed in the last row of the table, for immigrants and natives separately. Sample limited to individuals with occupations in both years.

Table F.6(b): ABE-Exact 5 Year Band

Variables	(1) 1850–1880	(2) 1900–1930	(3) 1850–1880	(4) 1900–1930	(5) 1850–1880	(6) 1900–1930	(7) 1900–1930	(8) 1900–1930
Immigrant	0.065[a]	−0.023[a]	−0.042[a]	−0.034[a]	−0.036[a]	0.067[a]	−0.023[a]	−0.040[a]
	(0.002)	(0.002)	(0.002)	(0.002)	(0.003)	(0.002)	(0.003)	(0.003)
Initial Avg. Occ. Rank			−0.790[a]	−0.697[a]				−0.697[a]
			(0.003)	(0.002)				(0.002)
Old Source							0.000	0.015[a]
							(0.003)	(0.004)
Observations	254,178	737,584	254,178	737,584	254,173	728,085	737,584	737,584
R-squared	0.028	0.099	0.477	0.422	0.066	0.068	0.099	0.422
Weights					1900	1850		

Significance levels: [a] p<0.01, [b] p<0.05, [c] p<0.1
Notes: Dependent variable is change in average occupational rank. Robust standard errors in parentheses. All specifications include a quartic in age and are weighted by inverse linkage probability. Excluded group in all specifications are natives. Weights indicate that the data are reweighted to match the occupational distribution of the year listed in the last row of the table, for immigrants and natives separately. Sample limited to individuals with occupations in both years.

Table F.7: Correlates of change in rank

Table F.7(a): ABE-NYSIIS 5 Year Band

Variables	(1) 1850–1880	(2) 1900–1930	(3) 1850–1880	(4) 1900–1930	(5) 1850–1880	(6) 1900–1930	(7) 1850–1880	(8) 1900–1930
Immigrant	0.078[a]	0.018[a]	−0.049[a]	−0.038[a]	0.068[a]	0.017[a]	−0.057[a]	−0.039[a]
	(0.002)	(0.001)	(0.002)	(0.001)	(0.002)	(0.001)	(0.002)	(0.001)
Initial Avg. Occ. Rank			−0.792[a]	−0.731[a]			−0.797[a]	−0.736[a]
			(0.003)	(0.002)			(0.003)	(0.002)
Literate in Initial Year	−0.058[a]	−0.016[a]	0.058[a]	0.061[a]	−0.057[a]	−0.017[a]	0.057[a]	0.059[a]
	(0.005)	(0.003)	(0.004)	(0.003)	(0.004)	(0.003)	(0.004)	(0.003)
Urban in Initial Year	−0.015[a]	−0.077[a]	0.026[a]	0.026[a]	−0.012[a]	−0.074[a]	0.031[a]	0.033[a]
	(0.003)	(0.001)	(0.002)	(0.001)	(0.003)	(0.001)	(0.002)	(0.001)
Moved to Urban					0.014[a]	0.011[a]	0.027[a]	0.026[a]
					(0.003)	(0.002)	(0.003)	(0.002)
Moved County					−0.000	−0.014[a]	−0.027[a]	−0.027[a]
					(0.002)	(0.001)	(0.001)	(0.001)
Observations	245,024	704,947	245,024	704,947	244,821	704,941	244,821	704,941
R-squared	0.072	0.129	0.478	0.435	0.098	0.137	0.501	0.445
Initial County FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Final County FE	No	No	No	No	Yes	Yes	Yes	Yes

Significance levels: [a] p<0.01, [b] p<0.05, [c] p<0.1

Notes: Dependent variable is change in average occupational rank. Robust standard errors in parentheses. All specifications include a quartic in age and are weighted by inverse linkage probability. Excluded group in all specifications are natives. Sample limited to individuals with occupations in both years.

Table F.7(b): ABE-Exact 5 Year Band

Variables	(1) 1850–1880	(2) 1900–1930	(3) 1850–1880	(4) 1900–1930	(5) 1850–1880	(6) 1900–1930	(7) 1850–1880	(8) 1900–1930
Immigrant	0.072[a]	0.011[a]	−0.051[a]	−0.041[a]	0.065[a]	0.011[a]	−0.057[a]	−0.041[a]
	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.001)
Initial Avg. Occ. Rank			−0.791[a]	−0.723[a]			−0.795[a]	−0.729[a]
			(0.003)	(0.002)			(0.003)	(0.002)
Literate in Initial Year	−0.057[a]	−0.005	0.061[a]	0.068[a]	−0.057[a]	−0.007	0.060[a]	0.066[a]
	(0.004)	(0.005)	(0.004)	(0.004)	(0.004)	(0.005)	(0.003)	(0.004)
Urban in Initial Year	−0.015[a]	−0.075[a]	0.025[a]	0.027[a]	−0.011[a]	−0.071[a]	0.031[a]	0.034[a]
	(0.003)	(0.001)	(0.002)	(0.001)	(0.003)	(0.001)	(0.002)	(0.001)
Moved to Urban					0.017[a]	0.012[a]	0.029[a]	0.027[a]
					(0.004)	(0.002)	(0.003)	(0.002)
Moved County					−0.005[a]	−0.016[a]	−0.031[a]	−0.027[a]
					(0.002)	(0.001)	(0.001)	(0.001)
Observations	227,527	737,584	227,527	737,584	227,313	737,580	227,313	737,580
R-squared	0.070	0.131	0.477	0.433	0.099	0.138	0.501	0.443
Initial County FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Final County FE	No	No	No	No	Yes	Yes	Yes	Yes

Significance levels: [a] p<0.01, [b] p<0.05, [c] p<0.1

Notes: Dependent variable is change in average occupational rank. Robust standard errors in parentheses. All specifications include a quartic in age and are weighted by inverse linkage probability. Excluded group in all specifications are natives. Sample limited to individuals with occupations in both years.

Figure F.1: Changes in occupational rank by initial occupation

Figure F.1(a): 1850-1880, ABE-NYSIIS 5 Year Band

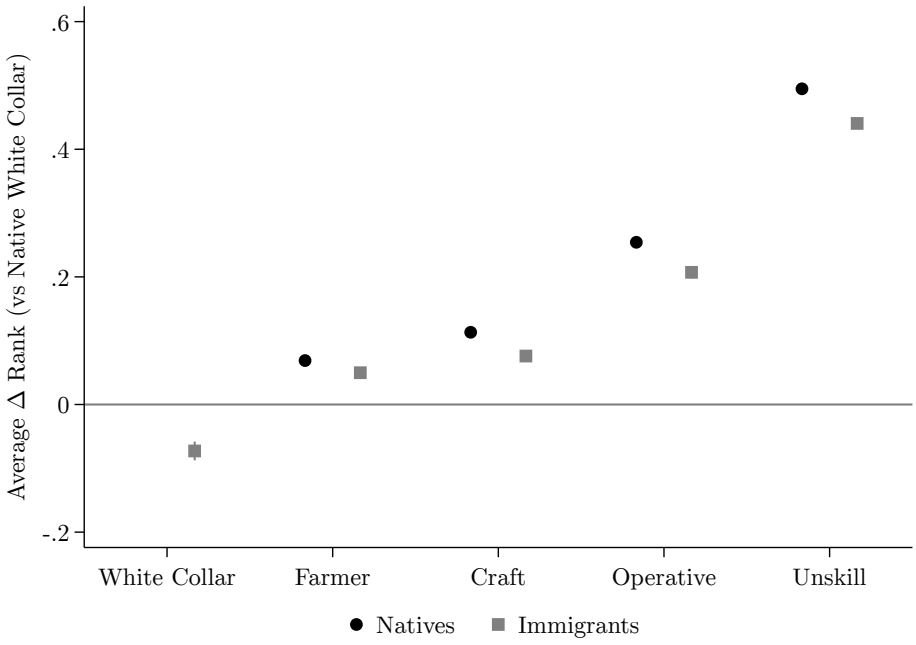


Figure F.1(b): 1900-1930, ABE-NYSIIS 5 Year Band

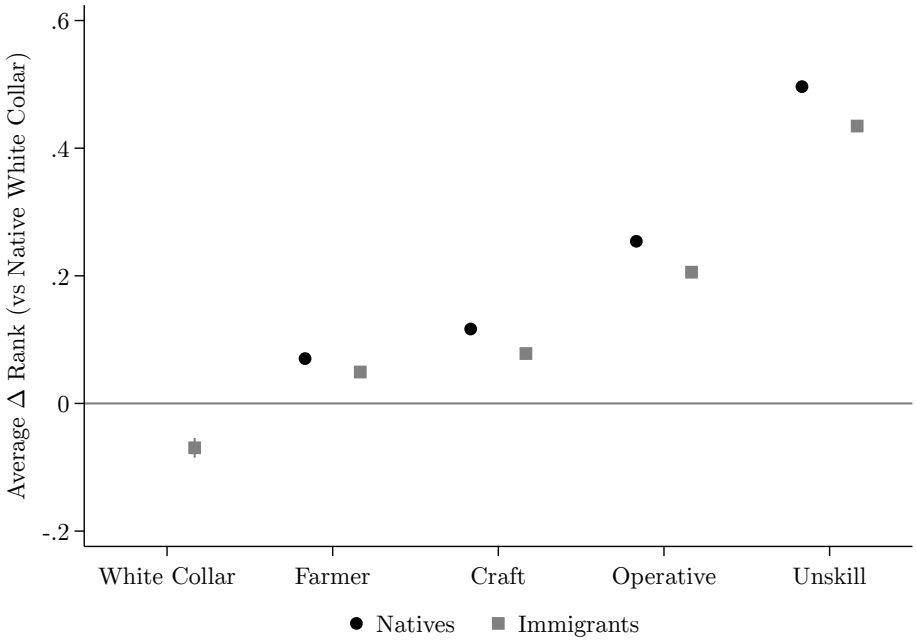


Figure F.1(c): 1850-1880, ABE-Exact 5 Year Band

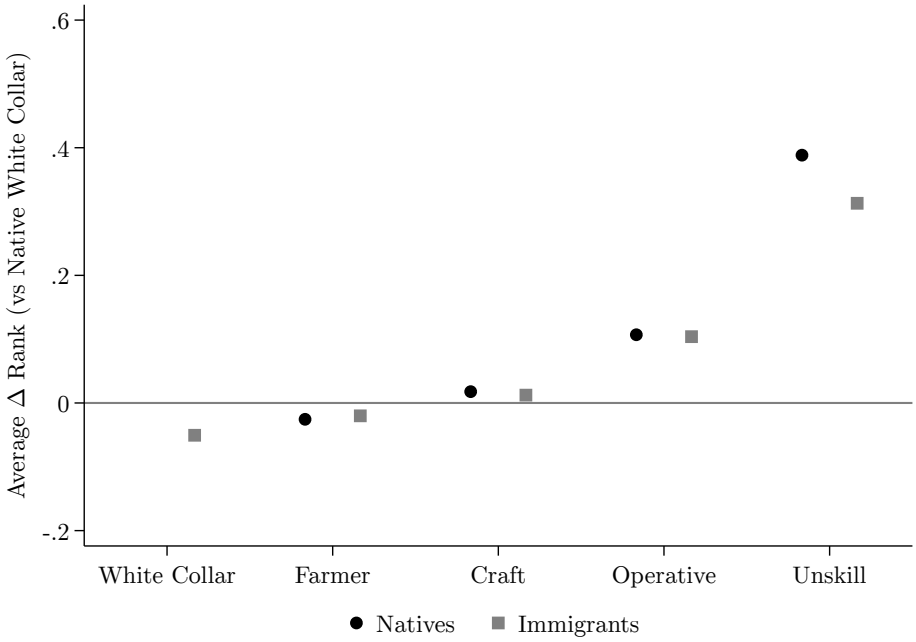
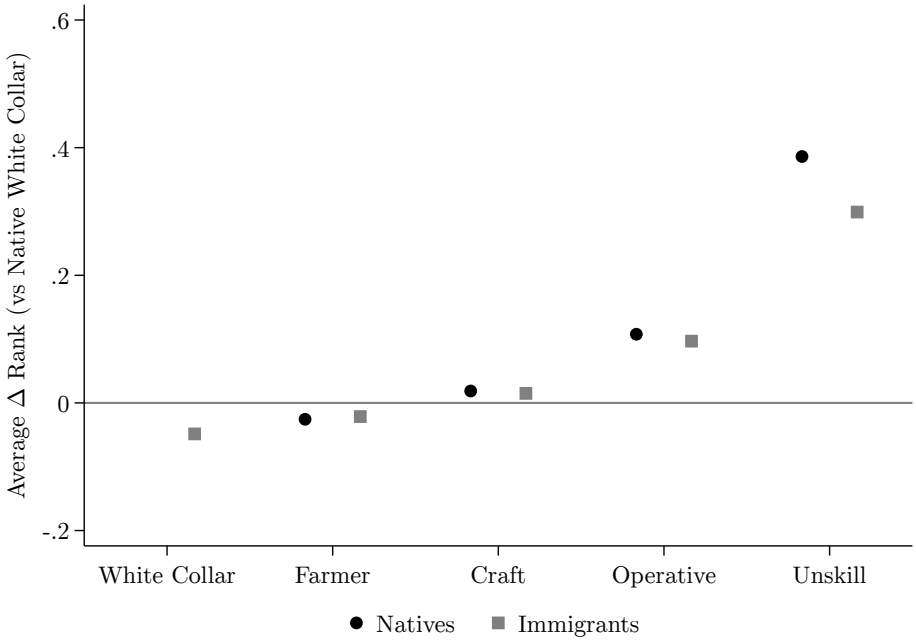


Figure F.1(d): 1900-1930, ABE-Exact 5 Year Band



Notes: Each figure presents coefficients from regressing the change in the average occupational rank on nativity-initial occupational category indicators, with native-white collar as the excluded group and controlling for a quartic in age. Robust 95 percent confidence intervals reported (but are so small that they do not exceed width of the point estimate markers). Observations weighted to correct for selection into linkage. Sample limited to individuals with occupations in both years.