#### The Great Migration in Black and White: New Evidence on the Selection and Sorting of Southern Migrants

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June 2015

#### ONLINE APPENDIX

#### A1. Robustness Checks on Match Criteria

Results in this paper depend upon the quality of the underlying matched data. To assess the robustness of our results to potentially mismatched individuals, we examined the results' sensitivity to tightening the match criteria. As described above, men in the linked sample are matched on place of birth, year of birth, first and last names. Place of birth is already restricted to exact matches, and year of birth is restricted to falling within a two-year window of the year implied by recorded age in 1910. Mill (2013) shows that within this range, year of birth "errors" are not predictive of match success, and we make no further restrictions based on implied year of birth.<sup>1</sup>

Following Mill (2013) and Feigenbaum (2015), we calculated the Jaro-Winkler string distances for first and last names in our sample as recorded in 1910 and for the proposed matches in 1930.<sup>2</sup> Jaro-Winkler string distances are explained in detail in Winkler (1990).<sup>3</sup> We then restricted the sample those with distances of 0 (or, exact matches) for last names and 0.3 for first names.<sup>4</sup> The restricted sample contains 65 percent of the original sample. We then re-estimated results in each of the tables of the main paper using the restricted sample. None of our substantive conclusions were affected, and these results are available upon request.

#### A2. Variable Definitions for Conditional Logit Framework

*Distance:* Distance from each individual to each potential destination state is calculated in miles using the center-of-county latitude and longitude coordinates for the county of origin and the mean latitude and longitude of actual migrants for each potential destination state. All distances are

<sup>&</sup>lt;sup>1</sup> Mill, Roy. 2013. "Inequality and Discrimination in Historical and Modern Labor Markets." Ph.D. dissertation, Stanford University.

<sup>&</sup>lt;sup>2</sup> Feigenbaum, James. 2015. "Automated Census Record Linking." Unpublished working paper, 2015.

<sup>&</sup>lt;sup>3</sup> Winkler, W. E. 1990. "String Comparator Metrics and Enhanced Decision Rules in the Fellegi-Sunter Model of Record Linkage". In *Proceedings of the Survey Research Methods Section, American Statistical Association*.

<sup>&</sup>lt;sup>4</sup> Mill (2013) shows that the ratio of correct to incorrect matches, given a particular string distance, is greater than 1 for only exact last name matches but is greater than 1 for all distance values up to 0.3 for first names. See the likelihood ratios calculated in Column 6 of Table 4.4.

expressed in miles using STATA's "vincenty" function, whose documentation assures users that the distance is calculated to an "insane precision."

Of course, geographic distance and passenger transport distance or costs may differ, but to our knowledge there are no comprehensive measures of place-to-place passenger travel routes or costs for this period. To evaluate the empirical importance of this concern, we took two alternative measures for comparison. First, we used Google Maps to calculate the contemporary travel distance between one county in each state of the South and the largest city in each state. In that sample, the correlation between place-to-place travel distance and geographic distance is, on average (across states of origin), 0.997. Obviously, migrants in the 1910s and 1920s could not travel on the modern interstate system, but the U.S. transportation network was already dense by 1910 (Atack 2013), and maps suggest that modern highways tend to parallel historical railways (which, after all, connected the same places and encountered the same geography).<sup>5</sup> Second, we calculated the correlation between geographic distance and an independent measure of transport costs for freight in 1890. We are indebted to Richard Hornbeck for sharing county-to-county transport cost estimates from his work with Dave Donaldson (Donaldson and Hornbeck 2015).<sup>6</sup> The place-to-place correlation for a similar sample (as described above) is 0.952. Given such high correlations, we conclude that geographic distance is an adequate proxy for our purposes, though we also acknowledge that new GIS databases and computational methods could lead to a better understanding of the economic history of passenger travel.

#### Bartik Measure of Labor Demand: The variable is calculated as:

$$B_j = \sum_{l=1}^L e_{jl} * g_l$$

here  $e_{jl}$  is employment in state j in sector l and  $g_l$  is the growth of employment in sector l nationwide. Employment shares are calculated in 1910 and growth rates over 1910-1930. Sectors denoted by *l* include agriculture, forestry/fishing, mining, manufacturing, transportation/communications, trade, government/public service, professional services, domestic/personal service, and clerical.

<sup>&</sup>lt;sup>5</sup> Atack, Jeremy. 2013. "On the Use of Geographic Information Systems in Economic History: The American Transportation Revolution Revisited." *Journal of Economic History* 73, 2: 313-38.

<sup>&</sup>lt;sup>6</sup> Donaldson, Dave and Richard Hornbeck. 2015. "Railroads and American Economic Growth: A 'Market Access' Approach." Unpublished working paper.

*Average Income*: To measure average income for workers in each potential destination state in 1910, we first average the Mitchener and McLean (1999) productivity levels per worker from 1900 and 1920 for each state.<sup>7</sup> Then, we use the 1940 microdata (Ruggles et al. 2010) to calculate ratios of black (or white) wages to all wages in each state.<sup>8</sup> We use the ratios to scale the Mitchener and McLean-based productivity measure up or down for blacks and whites separately. For race-state pairs with small counts in the 1940 IPUMS, we use an adjustment factor based on region. Effectively, then, each state has a race-specific expected income level.

*Migrant Stock (state-to-state, race-specific)*: The pre-Great-Migration migrant stock in state j for an individual originating in state i is simply the number of individuals in state j who report i as their state of birth as a percentage of all individuals in the 1910 IPUMS sample who report state i as their state of birth.

Other variables in the conditional logit model are straightforward and described in the main text and the notes to Table 4.

#### A3. Additional Figures and Tables

Tables A1A (for white men) and A1B (for black men) report tabulations of state-to-state migration flows for the linked sample. The state-to-state cells add up to 100 percent in each table. In both tables, we highlight the 10 largest state-to-state entries and also the five largest destination and origin state probabilities.

Figure A1 illustrates the 1910 to 1930 change in longitude and latitude for black and white southerners in the linked dataset. Non-migrants are located at coordinates (0,0). The strong tendency of black migrants to follow the north-south axis is in contrast to the more diffuse pattern for whites, many of whom moved westward. Summary statistics for latitude and longitude changes are discussed in Table 3 of the main text, including measures that control for place of origin.

Figure A2 shows that destination choices for black and white inter-state migrants were quite different. We study these differences in the main text (see Figure 2 in the main text for maps). Here,

<sup>&</sup>lt;sup>7</sup> Mitchener, Kris James and Ian W. McLean. 1999. "U.S. Regional Growth and Convergence, 1880-1980." *Journal of Economic History* 59, 4: 1016-42.

<sup>&</sup>lt;sup>8</sup> Ruggles, Steven, J. Trent Alexander, Katie Genadek, Ronald Goeken, Matthew B. Schroeder, and Matthew Sobek. 2010. *Integrated Public Use Microdata Series: Version 5.0* [Machine-readable database]. Minneapolis: University of Minnesota.

we simply note that the favored locations for black migration (Pennsylvania, New York, Ohio, and Illinois) often differed from the same for white migrants (Texas, Ohio, Oklahoma, and California).

## A4. Further Discussion of Background Characteristics and Differences in Black-White Migration Patterns

Blacks and whites circa 1910 differed in a number of observable characteristics that may have influenced migration patterns. To fix ideas, if black and white workers with similar characteristics and from similar environments responded in the same way to post-1910 opportunities in other states, then we would be able to explain a large share of the black-white differences in migration patterns with black-white differences in the dataset's detailed background characteristics.<sup>9</sup> As discussed in the main text, we took two approaches to assessing the hypothesis that racial differences in migration patterns were due to racial differences in observable characteristics. Here, we provide a more detailed description of our efforts along these lines.

#### A4.1 Linear Probability

For the first approach, the fully specified models are described in Equation A1:

$$P_{iac} = \tau R_{iac} + \beta X_{iac} + \gamma_a + \theta_c + e_{iac} .$$
 (A1)

 $P_{iac}$  is a migration outcome variable, such as "inter-regional migrant," "miles moved," or "change in latitude."  $R_{iac}$  is the indicator variable for race (1=black).  $\gamma_a$  and  $\theta_c$  are age and county-of-residence (in 1910) fixed effects, and  $e_{iac}$  is the error term.

 $X_{iac}$  is a vector of individual and household characteristics recorded in the 1910 census manuscripts. A different set of  $X_{iac}$  variables is available depending on whether the person has left his parents' home, and so we estimate separate regressions for those under 18 and residing with father and those 18 and over. For the younger men in our sample,  $X_{iac}$  includes indicators for the father's industry, whether the family resides in owner-occupied housing, the individual's literacy status (only available for those aged 10 and older), whether the person is a first-born male, and school attendance in 1910. For the older men in our sample,  $X_{iac}$  includes indicators for one's own industry, owner-occupied housing status, marital status, and literacy status. For both young and old

<sup>&</sup>lt;sup>9</sup> Implicit in this statement is the idea that observationally similar blacks and whites would have had access to the same variety of labor market opportunities at home and in other states, which of course might not be true. This is why our main analysis incorporates more information about potential destinations.

men, we include indicators for residence in small (<25,000 residents) and large cities, as well as age and county-of-origin fixed effects.

When the regression is run without covariates or fixed effects other than race,  $\tau$  simply measures the difference in choice probabilities for blacks relative to whites. We will refer to this as the "unadjusted" racial difference. When run with the full specification,  $\tau$  will measure the "adjusted" difference in choice probabilities, conditional on all the observable characteristics. The hypothesis is that accounting for observable personal characteristics and county-level fixed effects explains black-white differences in migration behavior. If so, then our estimates of  $\tau$  in the fully specified regressions will be near zero.

Table A2 reports the estimates of  $\tau$  for a variety of outcomes. For the full sample (Panel A),  $P_{iac}$  includes the probability of inter-regional migration, probability of migration within the South, distance, and the change in both latitude and longitude. For the sample of inter-regional migrants (Panel B),  $P_{iac}$  includes the distance travelled and the change in latitude and longitude.

Black men who were young in 1910 were substantially more likely to leave the South by 1930 than were white men (by about 8 percentage points).<sup>10</sup> Adjusting for observables in 1910 tends to widen the racial difference for young men to about 12 percentage points, and opens a black-white gap among older men (to about 5 percentage points). These are relatively large racial differences, and it is clear that accounting for background characteristics does not explain them. The propensity for interstate movement within the South, however, is fairly similar for blacks and whites, and controlling for background characteristics fully accounts for that difference among older men. For the most part, background characteristics account for little of the black and white differences in distance travelled and changes in latitude and longitude. There are some exceptions, for instance distance travelled for older men and change in longitude for younger men.

Among inter-regional migrants (Panel B of Table A2), observable characteristics of black and white men fail to explain differences in the distance travelled. Indeed, the estimated impact of race grows substantially after controlling for these characteristics. Finally, although observable characteristics are largely responsible for racial differences in latitude changes, they are less successful at explaining differences in east-west migration patterns observed in the data.

#### A4.2. Multinomial Logit Analysis

<sup>&</sup>lt;sup>10</sup> The sample reported in the unadjusted column 1 of Table A2 contains only those individuals for which all control variables employed in column 2 are available.

We also estimated multinomial logit models that are similar in spirit to the specification described in Equation A1. But instead of binary outcomes (e.g., inter-regional migration) or continuous outcomes (e.g., miles moved), each state is treated as a discrete choice.<sup>11</sup> Again, because variable availability depends on age, we estimate a separate model for 18-and-over and under-18. For consistency with the conditional logit approach, the sample consists of inter-state migrants.

Multinomial logit estimation generates a set of coefficients for each variable for each possible destination choice and, therefore, results are too unwieldy for presentation in a table. Instead, we compare (1) a simple index of dissimilarity for the geographic distributions of black and white inter-state migrants without any control variables and (2) a similar index that is calculated after equalizing the values of all control variables across these groups (as described in the main text). In both cases, the dissimilarity index indicates the percentage of men (black or white) in the linked sample who would have to relocate to equalize the black and white migrant distributions over states. Table A3 reports that in the unadjusted case, 28 percent of black or white migrants would have had to choose another destination to match the distribution of the other group. But conditioning on average starting characteristics does not reduce the dissimilarity all that much. The conditional dissimilarity index falls to 27 percent.

We also present the racial differences, by state, that contribute to the index of dissimilarity. For each state, the "Unconditional" bar in Figure A3 represents the difference in black and white migration probabilities in each state as observed in the raw data. The "Conditional" bar corresponds to the conditional index above and represents the racial difference conditional on observables. For some states, the conditional difference is markedly smaller (e.g., California and Oklahoma), but for other states, observable characteristics amplify racial differences in migration patterns (e.g., Illinois and Missouri) so that the overall index value is relatively unchanged.

<sup>&</sup>lt;sup>11</sup> With a large number of choices and a large number of control variables, computation is cumbersome a separate coefficient is estimated for each variable for each potential destination. Therefore, we consolidate some states that receive few migrants in our dataset and reduce the set of control variables. Control variables include state of origin fixed effects, whether the person lived in owner-occupied housing, whether the person (or their father, if under 18) was literate, industry of employment fixed effects (if 18 and older), whether attending school (if under 18), whether the individual was the oldest in the household (if under 18), and indicators for small (<25,000 residents) and large cities of residence in 1910 (urban residence is the omitted category). Industry of employment is categorized as agriculture, forestry/fishing, mining, construction, manufacturing, transportation, communication/utilities, wholesale/retail trade, FIRE, business/repair services, household service, other personal service, entertainment/recreation, medical and hospital, legal services, education, religious/non-profit, government, and other.

#### A5. Alternative Specifications

To evaluate the sensitivity of our basic conditional logit results in Table 4, we repeat the analysis using the levels of control variables rather than logs, where appropriate, in Table A4. The scale of coefficients changes, but they remain directionally consistent with those in the baseline. In terms of statistical significance, average income stipulated in levels rather than logs becomes a less significant driver of migration choice for blacks relative to whites in Columns 7 and 8. In addition, the pull of the North for blacks appears to be stronger than for whites under the levels specification (though still not a positive coefficient in columns 4 or 5). Overall, however, results are largely consistent with the baseline interpretations.

To evaluate the importance of the boll weevil infestation on migration choices, we defined three categories of southern states: 1) cotton-intensive states that were affected by the boll weevil prior to 1910; 2) cotton intensive states first affected between 1910 and 1930; and 3) states where cotton agriculture was less than 20 percent of total crop value in 1910 (Haines 2010). See additional discussion and rationale in the main text. We find a negative association of both indicators of boll weevil infestation on migration probabilities, but little evidence of racial differences in the deterrent effect of this agriculture productivity shock. Results are reported in Table A5.

#### A6. Additional Results

In Tables A6 and A7, we report the marginal effects of the variables listed in Table 4, separately for each state and race, per standard deviation increase in the variable of interest. For example, a one standard deviation increase in the distance to Alabama would reduce the migration rate of white men to Alabama from states other than Alabama by 1.69 percentage points. Distance, network, wage, North, and urban population coefficients are from specification A coefficients.

In Table A8, we split the black sample by recorded literacy status in 1910 (which is only available for those age 10 and older). We then estimate the baseline conditional logit regression on these groups separately and in an interacted specification where each regressor is interacted with a literacy indicator (1=literate). Unfortunately, a fully interacted version of Specification C does not converge in estimation, likely because each state fixed effect must be estimated with and without a literacy interaction, indicating a large number of coefficients to be estimated with a relatively small underlying sample. Because the coefficients from this specification presented in Columns 3 and 6 are quantitatively similar to those in Columns 1-2 and 4-5, respectively, we are comfortable projecting no significance in the differences by literacy status in all three specifications. The results indicate no major differences in the behavior of black migrants conditional on literacy status.

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Table A1A	State-to-State	Migration in	n Linked	Sample	White Men
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	AL	AR	FL	GA	KY	LA	MS	NC	OK	SC	TN	TX	VA	WV	Sum
ΔΙ	0.000	0 173	0 293	1.014	0.093	0.120	0 373	0.040	0.093	0.067	0.680	0 533	0.027	0.013	3 52
AZ	0.000	0.173	0.013	0.067	0.093	0.120	0.027	0.040	0.073	0.007	0.000	0.333	0.027	0.013	1.00
AR	0.027	0.000	0.013	0.007	0.000	0.200	0.320	0.040	1.027	0.013	0.320	0.427	0.013	0.040	3.07
CA	0.160	0.867	0.027	0.253	0.667	0.320	0.080	0.267	1 440	0.067	0.493	1 814	0.187	0.293	6.94
CO	0.013	0.007	0.000	0.027	0.133	0.027	0.013	0.013	0.507	0.000	0.040	0.173	0.013	0.067	1 21
CT	0.013	0.027	0.000	0.027	0.013	0.013	0.000	0.000	0.000	0.000	0.040	0.000	0.013	0.007	0.19
DE	0.000	0.000	0.000	0.013	0.000	0.000	0.000	0.013	0.000	0.013	0.013	0.000	0.027	0.000	0.08
DC	0.027	0.027	0.040	0.093	0.067	0.027	0.000	0.040	0.013	0.013	0.013	0.013	0.440	0.093	0.91
FL.	0.587	0.013	0.000	1.680	0.253	0.093	0.173	0.227	0.107	0.173	0.227	0.160	0.093	0.053	3.84
GA	1.094	0.053	0.427	0.000	0.107	0.053	0.133	0.320	0.027	0.560	0.373	0.320	0.093	0.027	3.59
ID	0.000	0.093	0.000	0.013	0.027	0.013	0.000	0.027	0.120	0.000	0.067	0.093	0.013	0.027	0.49
П.	0.187	0.387	0.080	0.093	1.320	0.147	0.107	0.133	0.507	0.027	0.373	0.507	0.120	0.173	4.16
IN	0.107	0.160	0.013	0.067	1.600	0.027	0.053	0.053	0.133	0.000	0.240	0.120	0.147	0.107	2.83
IA	0.013	0.067	0.000	0.000	0.067	0.027	0.027	0.013	0.160	0.013	0.053	0.053	0.053	0.000	0.55
KS	0.013	0.240	0.013	0.053	0.107	0.040	0.040	0.027	1.134	0.000	0.120	0.280	0.093	0.093	2.25
KY	0.080	0.107	0.040	0.053	0.000	0.013	0.027	0.067	0.200	0.013	0.814	0.187	0.187	0.240	2.03
LA	0.160	0.293	0.040	0.107	0.027	0.000	0.627	0.013	0.107	0.027	0.053	0.573	0.013	0.000	2.04
ME	0.000	0.013	0.013	0.000	0.013	0.000	0.000	0.013	0.013	0.000	0.000	0.000	0.013	0.027	0.11
MD	0.040	0.027	0.027	0.027	0.053	0.000	0.013	0.120	0.040	0.013	0.013	0.107	0.627	0.453	1.56
MA	0.027	0.013	0.013	0.053	0.027	0.027	0.000	0.040	0.000	0.040	0.000	0.053	0.053	0.013	0.36
MI	0.067	0.307	0.093	0.120	0.840	0.027	0.067	0.067	0.147	0.040	0.507	0.160	0.133	0.227	2.80
MN	0.000	0.013	0.000	0.027	0.027	0.027	0.013	0.000	0.107	0.000	0.000	0.053	0.013	0.027	0.31
MS	0.533	0.147	0.000	0.080	0.080	0.200	0.000	0.027	0.187	0.000	0.400	0.253	0.013	0.013	1.93
MO	0.067	0.854	0.013	0.080	0.560	0.080	0.080	0.027	0.947	0.013	0.413	0.440	0.080	0.080	3.73
MT	0.000	0.040	0.000	0.000	0.067	0.000	0.013	0.040	0.067	0.000	0.013	0.040	0.013	0.013	0.31
NE	0.013	0.093	0.000	0.013	0.000	0.013	0.013	0.053	0.147	0.000	0.053	0.067	0.040	0.053	0.56
NV	0.000	0.013	0.000	0.000	0.000	0.000	0.000	0.013	0.067	0.000	0.013	0.040	0.000	0.000	0.15
NJ	0.053	0.013	0.040	0.067	0.013	0.027	0.013	0.147	0.013	0.027	0.053	0.093	0.160	0.147	0.87
NM	0.027	0.080	0.013	0.027	0.053	0.040	0.013	0.000	0.267	0.000	0.040	0.667	0.013	0.000	1.24
NY	0.187	0.040	0.120	0.200	0.120	0.293	0.040	0.213	0.187	0.107	0.120	0.253	0.320	0.227	2.43
NC	0.120	0.080	0.147	0.360	0.080	0.027	0.013	0.000	0.027	1.014	0.387	0.053	0.747	0.120	3.17
ND	0.027	0.013	0.000	0.000	0.013	0.000	0.000	0.000	0.000	0.000	0.000	0.027	0.013	0.000	0.09
OH	0.413	0.147	0.093	0.227	2.587	0.040	0.147	0.147	0.200	0.067	0.720	0.267	0.814	2.281	8.15
OK	0.427	2.174	0.013	0.173	0.213	0.147	0.14/	0.013	0.000	0.040	0.373	3.027	0.027	0.14/	6.92
OR	0.013	0.040	0.040	0.000	0.067	0.013	0.013	0.027	0.267	0.000	0.080	0.107	0.040	0.027	0.73
PA	0.100	0.055	0.027	0.055	0.147	0.093	0.040	0.175	0.080	0.027	0.100	0.160	0.575	0.974	2.72
KI SC	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.015	0.000	0.013	0.013	0.04
SC	0.000	0.013	0.040	0.000	0.013	0.013	0.027	0.047	0.000	0.000	0.080	0.033	0.040	0.000	0.12
TN	0.000	0.000	0.000	0.000	0.640	0.013	0.000	0.000	0.027	0.000	0.013	0.040	0.013	0.000	3.07
TY	0.387	1 1 20	0.080	0.320	0.040	1 307	0.495	0.293	2.947	0.133	0.000	0.000	0.100	0.055	8.97
	0.013	0.013	0.120	0.013	0.013	0.000	0.007	0.107	0.013	0.155	0.040	0.000	0.120	0.120	0.07
VT	0.013	0.013	0.000	0.013	0.013	0.000	0.000	0.000	0.013	0.000	0.000	0.000	0.000	0.000	0.07
VA	0.013	0.000	0.000	0.027	0.000	0.013	0.000	1 240	0.000	0.000	0.000	0.000	0.000	0.013	2.84
WA	0.033	0.055	0.015	0.013	0.080	0.000	0.027	0.093	0.213	0.027	0.133	0.007	0.000	0.455	1.05
WV	0.053	0.013	0.027	0.093	0.493	0.000	0.000	0.133	0.067	0.040	0.147	0.040	2 841	0.000	3 95
wi	0.000	0.013	0.027	0.013	0.120	0.000	0.000	0.067	0.067	0.000	0.067	0.013	0.013	0.027	0.43
WY	0.000	0.027	0.000	0.000	0.013	0.000	0.027	0.040	0.053	0.000	0.000	0.040	0.013	0.027	0.43
Sum	6.34	8.72	2.00	6.90	11.71	3.64	3.92	4.95	12.11	2.76	8.88	12.72	8.52	6.83	100.0
Sum	0.54	L	2.00	0.70	11./1	5.04	5.72			2.70	L	12.72	0.52	0.05	100.0

<u>Notes and sources</u>: State of origin is across columns. State of destination is down rows. Each cell reports the share of all inter-state migrants who made a given state-to-state transition. By construction, all home-home pairs (e.g., Alabama to Alabama) are zero, as these men are not counted as migrants. The ten most common transitions are in boxes outlined with a solid line. The five most common destinations (summed over origins) and the five most common origins (summed over destinations) are outlined with dashed lines. Data are from the sample of linked census records, described in the main text.

Table A1B: State-to-State Migration in Linked Sample, Black Men

	AL	AR	FL	GA	KY	LA	MS	NC	OK	SC	TN	TX	VA	WV	Sum
AL	0.000	0.000	0.473	0.851	0.189	0.047	0.615	0.000	0.047	0.095	0.047	0.189	0.000	0.000	2.554
AZ	0.000	0.000	0.000	0.047	0.000	0.000	0.047	0.047	0.047	0.000	0.000	0.095	0.000	0.000	0.284
AR	0.284	0.000	0.095	0.237	0.047	1.041	1.514	0.047	0.237	0.047	0.378	0.284	0.000	0.047	4.257
CA	0.142	0.000	0.047	0.189	0.000	0.237	0.095	0.000	0.189	0.095	0.047	0.710	0.000	0.000	1.750
CO	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
DE	0.047	0.000	0.047	0.095	0.000	0.000	0.000	0.095	0.000	0.047	0.000	0.000	0.047	0.000	0.378
DC	0.000	0.000	0.000	0.000	0.000	0.047	0.000	0.047	0.000	0.000	0.000	0.000	0.000	0.000	1 703
FI	0.000	0.000	0.095	3 264	0.000	0.000	0.047	0.237	0.000	1 230	0.000	0.000	0.304	0.047	5.013
GA	0.308	0.000	0.000	0.000	0.000	0.095	0.095	0.237	0.000	1.230	0.047	0.093	0.237	0.047	3 074
ID UA	0.940	0.000	0.000	0.000	0.000	0.000	0.284	0.189	0.000	0.000	0.000	0.047	0.095	0.000	0.047
П	0.757	0.600	0.000	0.000	0.615	0.615	2 129	0.000	0.000	0.000	0.851	0.000	0.189	0.000	7 379
IN	0.142	0.013	0.000	0.142	1 041	0.015	0.142	0.000	0.000	0.142	0.331	0.095	0.000	0.000	2 271
IA	0.000	0.095	0.000	0.000	0.000	0.000	0.142	0.000	0.000	0.000	0.047	0.000	0.000	0.000	0.284
KS	0.142	0.095	0.047	0.047	0.095	0.000	0.000	0.000	0.142	0.047	0.095	0.095	0.000	0.000	0.804
KY	0.284	0.047	0.000	0.047	0.000	0.000	0.047	0.000	0.000	0.000	0.473	0.000	0.095	0.000	0.993
LA	0.237	0.237	0.000	0.047	0.000	0.000	1.466	0.000	0.095	0.000	0.000	0.568	0.000	0.000	2.649
ME	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
MD	0.000	0.000	0.000	0.047	0.000	0.000	0.000	0.662	0.000	0.284	0.000	0.000	1.088	0.095	2.176
MA	0.000	0.000	0.047	0.095	0.000	0.000	0.000	0.189	0.000	0.095	0.000	0.000	0.095	0.000	0.520
MI	0.804	0.284	0.426	1.041	0.284	0.142	0.426	0.189	0.047	0.568	0.568	0.142	0.095	0.000	5.014
MN	0.000	0.000	0.000	0.000	0.047	0.000	0.000	0.000	0.000	0.000	0.000	0.047	0.000	0.000	0.095
MS	0.804	0.757	0.047	0.095	0.047	0.710	0.000	0.142	0.189	0.047	0.615	0.047	0.000	0.000	3.500
MO	0.095	0.615	0.047	0.237	0.000	0.284	1.183	0.047	0.284	0.047	0.710	0.615	0.000	0.000	4.163
MT	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NE	0.000	0.047	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.142	0.000	0.000	0.189
NV	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NJ NM	0.142	0.000	0.237	0.851	0.000	0.047	0.047	0.426	0.000	0.662	0.047	0.000	0.757	0.000	3.217
INIVI NIV	0.047	0.000	0.000	0.000	0.000	0.047	0.000	0.000	0.000	0.000	0.000	0.047	1 1 25	0.000	6 102
N I NC	0.551	0.142	0.002	0.308	0.000	0.093	0.095	0.940	0.000	2 217	0.142	0.095	0.472	0.047	5 208
ND	0.095	0.189	0.237	0.757	0.000	0.000	0.142	0.000	0.000	0.000	0.000	0.047	0.473	0.142	0.000
	1 277	0.000	0.000	2.081	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	7 100
OK	1.277	0.331	0.237	2.081	0.000	0.047	0.004	0.264	0.047	0.308	0.475	1.514	0.331	0.095	2 460
OR	0.047	0.237	0.000	0.047	0.000	0.237	0.169	0.000	0.000	0.000	0.169	0.000	0.000	0.000	0.000
PΔ	0.000	0.000	0.000	1 703	0.000	0.000	0.000	0.000	0.000	1.608	0.000	0.000	1.892	0.000	7 805
RI	0.000	0.000	0.109	0.000	0.109	0.000	0.142	0.040	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SC	0.000	0.000	0.662	0.568	0.000	0.000	0.000	0.520	0.000	0.000	0.000	0.000	0.000	0.000	2 129
SD	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
TN	0.378	0.710	0.000	0.899	0.189	0.189	1.845	0.047	0.095	0.095	0.000	0.047	0.000	0.047	4.541
TX	0.189	0.237	0.000	0.142	0.000	2.081	0.237	0.095	0.473	0.047	0.047	0.000	0.000	0.000	3.548
UT	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.047	0.000	0.000	0.047
VT	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
VA	0.095	0.047	0.095	0.189	0.047	0.000	0.000	1.892	0.000	0.378	0.142	0.000	0.000	0.568	3.453
WA	0.000	0.047	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.047	0.047	0.000	0.000	0.000	0.142
WV	0.520	0.000	0.000	0.189	0.095	0.000	0.047	0.331	0.047	0.142	0.095	0.000	1.088	0.000	2.554
WI	0.000	0.095	0.000	0.095	0.047	0.000	0.047	0.000	0.000	0.000	0.000	0.095	0.000	0.000	0.378
WY	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Sum	9.22	5.30	4.64	15.61	3.50	6.10	11.87	7.81	1.94	12.91	5.91	5.39	8.47	1.32	100.0

Notes and sources: See Appendix Table A1A.

		Unadjusted Black-White Difference	Adjusted Black-White Difference
		Panel A: Full	Sample
Inter-Regional Migration	Under 18	0.08 (0.02)	0.12 (0.02)
	18 and Over	0.01 (0.01)	0.05 (0.01)
Within-South Migration	Under 18	0.01 (0.01)	-0.02 (0.02)
	18 and Over	0.03 (0.01)	-0.01 (0.01)
Distance	Under 18	26.8 (11.6)	31.8 (17.0)
	18 and Over	-11.5 (7.1)	-6.0 (9.3)
Change in Latitude	Under 18	1.22 (0.13)	0.95 (0.16)
	18 and Over	0.52 (0.07)	0.35 (0.09)
Change in Longitude	Under 18	1.52 (0.18)	1.02 (0.30)
	18 and Over	0.97 (0.12)	0.79 (0.16)
		Panel B: Inter-Regi	onal Migrants
Distance	Under 18	-80.3 (29.8)	-204.7 (102.2)
	18 and Over	-150.8 (24.4)	-261.5 (48.7)
Change in Latitude	Under 18	2.80 (0.25)	0.19 (0.64)
	18 and Over	2.05 (0.20)	0.46 (0.33)
Change in Longitude	Under 18	7.13 (0.73)	3.73 (2.77)
	18 and Over	5.98 (0.61)	5.87

#### Table A2: Black-White Differences in Basic Migration Variables

<u>Notes and sources</u>: For columns 1 and 2, each entry corresponds to the coefficient on tau (coefficient on race where black=1) from a separate OLS regression. In column 1, there are no controls other than race. Column 2 contains controls as specified in the text. Standard errors (in parentheses) are clustered by 1910 household. Sample sizes for under 18/18 and over are 5206/10727. Regional Migrants are 966/1735.

	Racial Dissimilarity
	Index
Unconditional as observed in 1930	0.283
Prediction given equivalent 1910 characteristics	0.266

### Table A3: Conditional and Unconditional Racial Dissimilarity Index in Location Choice for Interstate Migrants

<u>Notes and sources:</u> See text and appendix section A4.2 for discussion of the multinomial logit methodology. Data are from the sample of linked census records, as described in the text and Appendix.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
							Pooled, coefficient	Pooled, coefficient	Pooled, coefficient
	White	White	White	Black	Black	Black	on race interaction	on race interaction	on race interaction
	(A)	(B)	(C)	(A)	(B)	(C)	(A)	(B)	(C)
Cost variables									
Distance (in 1K	-1.72***	-1.72***	-2.55***	-4.06***	-4.07***	-4.88***	-2.34***	-2.35***	-2.33***
miles)	(0.0685)	(0.0680)	(0.0928)	(0.189)	(0.202)	(0.224)	(0.196)	(0.210)	(0.238)
Migrant stock	0.275***	0.278***	0.308***	0.251***	0.242***	0.207***	-0.0247	-0.0361	-0.103***
8	(0.00952)	(0.00990)	(0.0145)	(0.0217)	(0.022)	(0.0276)	(0.0234)	(0.0244)	(0.0306)
Labor market varia	bles	(,	(			(/			(/
Average wage	0.0810***	0.0527***		0.0684***	0.00658		-0.0126	-0.0462*	
6	(0.00685)	(0.00728)		(0.0241)	(0.0266)		(0.0248)	(0.0276)	
	(,	(							
Labor demand	0.0333***			0.0621***			0.0289***		
	(0.00229)			(0.00490)			(0.00529)		
	. , ,			· · · ·					
% Manufacturing		-0.0197***			0.0177***			0.0373***	
U		(0.00227)			(0.00514)			(0.00555)	
		× ,						× ,	
% Agriculture		-0.0239***			-0.0141***			0.00975*	
U		(0.00270)			(0.00514)			(0.00547)	
		· · · ·			× ,			· · · ·	
Region and other co	ntrol variab	les							
Non-South	-0.461***	-0.521***		-0.0972	-0.194*		0.364***	0.327**	
	(0.0524)	(0.0529)		(0.124)	(0.117)		(0.135)	(0.128)	
I Jule ere	0.00102**	0.00007***		0 00742***	0.00296		0.00027***	0.00507*	
Urban	$-0.00183^{**}$	$-0.00882^{****}$		$(0.00/43^{****})$	-0.00280		$0.00927^{****}$	$0.00597^{*}$	
	(0.000801)	(0.00167)		(0.00155)	(0.00311)		(0.00170)	(0.00544)	
Population		0.0123***			0.0210***			0.00867***	
L.		(0.000672)			(0.00142)			(0.00160)	
Decudo $P^2$	0.17	0.17	0.24	0.24	0.25	0.20			
r seudo K-	0.17	0.17	0.24	0.24	0.23	0.29	0.19	0 19	0.25
Ν	7,498	7,498	7,498	2.114	2.114	2.114	9.612	9.612	9.612
				-,	-,	-,			

Table A4: Migrant Sorting, Conditional Logit Coefficients with Level Specifications

<u>Notes and sources:</u> The sample consists of inter-state migrants. Specifications A and B differ in the inclusion/exclusion of labor demand, log population, % manufacturing and % agriculture variables only. Specification C includes state fixed effects. Columns 1-3 are restricted to white migrants only. Columns 4-6 are restricted to black migrants only. Columns 7-9 report interaction terms from a pooled regression with each regressor interacted with a race dummy (1=black). Standard errors, clustered by county of origin, are in parentheses. Statistical significance is indicated at the 99% (\*\*\*), 95% (\*\*) and 90% (\*) level. Data are from the sample of linked census records, described in the text and Appendix.

	(1)	(2)	(3)	(4)	(5)	(6)
					Pooled,	Pooled,
					coefficient on	coefficient on
					race	race
	White	White	Black	Black	interaction	interaction
	(A)	(B)	(A)	(B)	(A)	(B)
Cost variables						
Log distance	-1.24	-1.22	-1.78	-1.74	-0.536	-0.511
	(0.0286)	(0.0292)	(0.0747)	(0.0746)	(0.0783)	(0.0782)
Migrant stock	0.214	0.207	0.195	0.195	-0.0185	-0.0120
8	(0.00909)	(0.00925)	(0.0260)	(0.0262)	(0.0273)	(0.0278)
I abor markat variable			× ,	× /		× ,
Labor market variables	1 28	1 14	0 301	-0.0284	-0.978	-1 17
Log average meome	(0.0926)	(0.0986)	(0.174)	(0.190)	(0.192)	(0.212)
<b>T</b> 11 1 1	(0.0920)	(0.0700)	(0.174)	(0.170)	(0.172)	(0.212)
Log labor demand	0.447		0.826		0.379	
	(0.0180)		(0.0400)		(0.0443)	
Manufacturing		-0.0242		0.0109		0.0352
		(0.00280)		(0.00501)		(0.00571)
% Agriculture		-0.0218		-0.0266		-0.00476
6		(0.00322)		(0.00666)		(0.00732)
Region and other contr	ol variables					
Cotton State. Early BW	-0.274	-0.133	-0.229	0.0125	0.0452	0.146
	(0.0536)	(0.0633)	(0.107)	(0.120)	(0.116)	(0.134)
Cotton State Late BW	0.282	0.145	0 332	0.156	0.0403	0.0115
Cotton State, Late Dw	-0.282	-0.143	-0.352	-0.130	-0.0493	-0.0113
	(0.0373)	(0.0030)	(0.114)	(0.120)	(0.120)	(0.132)
Non-South	-0.577	-0.455	-0.400	-0.262	0.177	0.193
	(0.0518)	(0.0516)	(0.129)	(0.129)	(0.139)	(0.141)
Urban	-0.00805	-0.0124	0.00568	-0.0106	0.0137	0.00171
	(0.00109)	(0.00205)	(0.00184)	(0.00390)	(0.00217)	(0.00441)
Population		0.496		0.895		0.399
F		(0.0206)		(0.0421)		(0.0476)
Pseudo $R^2$	0.21	0.21	0.26	0.26	0.22	0.22
Ν	7,498	7,498	2,114	2,114	9,612	9,612

Table A5: Migrant Sorting, Conditional Logit Coefficients with Boll Weevil Variables

<u>Notes and sources:</u> The linked data set is described in the text. Based on the map from Hunter and Coad (1923), we coded Texas, Arkansas, Louisiana, and Mississippi as "early boll weevil" states, and we coded Alabama, Georgia, South Carolina, North Carolina, and Oklahoma as "late boll weevil" states. All these states had at least 20 percent of total crop value from cotton production in 1910 (Haines 2010). Tennessee, Kentucky, Virginia, West Virginia, and Florida are coded as southern "little/no-cotton" states (this is the base category). The sample includes interstate migrants only. We do not estimate specifications with destination fixed effects here since the boll weevil variables would drop out. Columns 1-2 include whites; columns 3-4 include blacks; columns 5-6 report interaction terms from a pooled regression where each regressor is interacted with a race dummy (1=black). Standard errors, clustered by county of origin, are in parentheses.

	Log	Migrant	Log	Log				0%	Log
	dist	stock	income	demand	% Δσ	% Mfg	North	Urban	non
Moon	6.60	0.45	7.12	12.5	26 A	24.6	0.72	30.0	14.0
(St Dev.)	(0.64)	(1, 10)	(0.20)	(1.05)	(10.4)	(11.8)	0.72	(22.5)	(1.03)
Alabama	(0.04)	(1.10)	(0.29)	(1.05)	1 21	0.77	1.00	0.51	1.03)
Anabanna	-1.09	0.07	0.10	0.22	-1.21	-0.77	-1.09	-0.51	0.22
Arizonaa	-0.21	0.09	0.19	0.22	-0.19	-0.12	-0.21	-0.00	0.52
Arkansas	-1.52	0.62	1.52	1.52	-1.04	-0.00	-0.99	-0.40	1.04
California	-0.40	0.19	0.41	0.47	-0.54	-0.22	-0.40	-0.14	0.50
Colorado	-0.52	0.22	0.47	0.54	-0.43	-0.27	-0.55	-0.10	0.09
Connecticut	-0.44	0.18	0.39	0.45	-0.22	-0.14	-0.44	-0.13	0.36
Delaware	-0.43	0.18	0.39	0.44	-0.22	-0.14	-0.44	-0.13	0.36
DC	-0.63	0.26	0.55	0.63	-0.94	-0.60	-0.62	-0.19	1.45
Florida	-0.87	0.35	0.75	0.87	-0.60	-0.39	-0.56	-0.26	0.96
Georgia	-1.75	0.70	1.46	1.68	-1.24	-0.79	-1.13	-0.53	1.89
Idaho	-0.12	0.05	0.11	0.13	-0.10	-0.06	-0.13	-0.04	0.16
Illinois	-2.38	0.96	2.04	2.34	-1.71	-1.09	-2.30	-0.72	2.67
Indiana	-1.78	0.72	1.52	1.75	-1.24	-0.79	-1.71	-0.54	1.92
Iowa	-0.77	0.32	0.69	0.79	-0.63	-0.41	-0.78	-0.24	1.03
Kansas	-1.74	0.68	1.42	1.63	-1.32	-0.84	-1.60	-0.52	1.97
Kentucky	-2.03	0.82	1.72	1.98	-1.52	-0.97	-1.31	-0.61	2.34
Louisiana	-1.95	0.78	1.63	1.88	-1.29	-0.82	-1.26	-0.59	1.98
Maine	-0.17	0.07	0.15	0.17	-0.12	-0.07	-0.17	-0.05	0.19
Maryland	-1.38	0.55	1.16	1.33	-0.94	-0.60	-1.31	-0.41	1.46
Massachusetts	-0.59	0.25	0.53	0.61	-0.31	-0.20	-0.60	-0.18	0.51
Michigan	-0.95	0.40	0.85	0.98	-0.64	-0.41	-0.96	-0.29	1.04
Minnesota	-0.40	0.17	0.36	0.41	-0.34	-0.22	-0.41	-0.12	0.55
Mississippi	-1.12	0.46	0.97	1.12	-0.73	-0.47	-0.73	-0.34	1.17
Missouri	-2.15	0.87	1.84	2.12	-1.65	-1.05	-2.08	-0.65	2.56
Montana	-0.14	0.06	0.13	0.15	-0.13	-0.08	-0.14	-0.04	0.21
Nebraska	-0.60	0.25	0.54	0.62	-0.47	-0.30	-0.61	-0.18	0.76
Nevada	-0.16	0.07	0.14	0.16	-0.16	-0.11	-0.16	-0.05	0.27
New Jersev	-0.98	0.41	0.86	1.00	-0.56	-0.36	-0.98	-0.30	0.91
New Mexico	-0.32	0.13	0.29	0.33	-0.25	-0.16	-0.32	-0.10	0.40
New York	-1.94	0.79	1.68	1 94	-1.26	-0.80	-1.90	-0.59	1 99
North Carolina	-1.42	0.57	1.21	1.39	-0.92	-0.59	-0.92	-0.43	1.44
North Dakota	-0.36	0.15	0.32	0.37	-0.25	-0.16	-0.37	-0.11	0.41
Ohio	-2.92	1 13	2 34	2 69	-1.95	-1.23	-2 64	-0.86	2.88
Oklahoma	-4 74	1.15	3 11	3 53	-3 33	-2.03	-2.88	-1.28	2.00 4.04
Oregon	-0.14	0.06	0.12	0.14	-0.10	-0.06	-0.14	-0.04	0.16
Pennsylvania	-2.18	0.00	1.83	2 10	-1 70	-1.08	-2.06	-0.65	2.60
Rhode Island	-0.23	0.07	0.21	0.24	_0.09	-0.06	_0.23	-0.07	0.15
South Carolina	-1.16	0.10	1.00	1 15	-0.71	-0.45	-0.75	-0.35	1 12
South Dakota	-1.10	0.47	0.15	0.17	-0.71	-0.45	-0.75	-0.55	0.24
Toppossoo	-0.17	0.07	1.03	0.17	-0.14	-0.09	-0.17	-0.05	0.24
Tennes	-2.31	1.92	1.75	2.22	-1.62	-1.13	-1.49	-0.09	2.70
Itab	-3.12	1.05	5.70 0.12	4.51	-5.59	-2.24	-5.21	-1.40	4.07
Utall	-0.13	0.00	0.15	0.10	-0.12	-0.08	-0.13	-0.03	0.20
Vincinia	-0.10	0.04	0.09	0.10	-0.08	-0.03	-0.10	-0.05	0.15
v irginia Washin star	-1.59	0.64	1.54	1.55	-1.27	-0.81	-1.02	-0.48	1.95
w asnington	-0.24	0.10	0.21	0.25	-0.1/	-0.11	-0.24	-0.07	0.27
west virginia	-1.00	0.66	1.40	1.01	-1.59	-1.01	-1.07	-0.50	2.40
w isconsin	-0.52	0.22	0.4/	0.54	-0.37	-0.24	-0.55	-0.16	0.60
w yoming	-0.15	0.06	0.13	0.15	-0.12	-0.08	-0.15	-0.05	0.21
AVEKAGE	-1.15	0.45	0.95	1.10	-0.84	-0.53	-0.92	-0.34	1.26

Table A6: Conditional Logit Marginal Effects (per Standard Deviation), by State, White Migrants

<u>Notes and sources</u>: The table reports marginal effects for variables in Table 4, per standard deviation increase. See text for additional details. Data are from the sample of linked census records.

	Log	Migrant	Log	Log				%	Log
	dist.	stock	income	demand	% Ag	% Mfg	North	Urban	pop
Mean	6.62	0.33	6.57	12.5	36.4	24.6	0.72	39.0	14.0
(St. Dev.)	(0.65)	(0.84)	(0.42)	(1.05)	(19.4)	(11.8)		(22.5)	(1.03)
Alabama	-3.23	0.75	1.12	5.03	-1.80	0.52	-1.54	0.61	5.38
Arizona	-0.04	0.01	0.02	0.07	-0.03	0.01	-0.03	0.01	0.10
Arkansas	-2.37	0.55	0.83	3.71	-1.30	0.37	-1.13	0.45	3.87
California	-0.30	0.08	0.11	0.56	-0.13	0.04	-0.22	0.06	0.45
Colorado	-0.26	0.07	0.10	0.48	-0.12	0.04	-0.19	0.05	0.43
Connecticut	-0.50	0.13	0.19	0.93	-0.36	0.11	-0.37	0.10	1.23
Delaware	-0.16	0.04	0.06	0.30	-0.09	0.03	-0.12	0.03	0.30
DC	-0.99	0.24	0.36	1.70	-0.84	0.24	-0.70	0.19	2.66
Florida	-2.05	0.46	0.69	3.06	-1.29	0.36	-0.96	0.37	3.67
Georgia	-4.02	0.90	1.33	5.79	-2.36	0.66	-1.88	0.73	6.51
Idaho	-0.03	0.01	0.01	0.06	-0.02	0.01	-0.02	0.01	0.06
Illinois	-4.00	0.95	1.42	6.49	-2.17	0.63	-2.73	0.77	6.68
Indiana	-2.08	0.49	0.73	3.37	-1.29	0.37	-1.41	0.40	3.96
Iowa	-0.74	0.19	0.28	1.37	-0.40	0.12	-0.55	0.15	1.37
Kansas	-0.96	0.23	0.34	1.57	-0.55	0.16	-0.65	0.18	1.68
Kentucky	-2.14	0.52	0.78	3.65	-1.27	0.37	-1.04	0.42	4.07
Louisiana	-2.92	0.64	0.95	4.17	-1.58	0.44	-1.35	0.52	4.42
Maine	-0.14	0.04	0.05	0.26	-0.11	0.03	-0.10	0.03	0.39
Marvland	-1.38	0.34	0.50	2.36	-0.80	0.23	-0.97	0.27	2.59
Massachusetts	-1.31	0.33	0.49	2.36	-0.68	0.20	-0.96	0.26	2.30
Michigan	-1.07	0.27	0.40	1.96	-0.68	0.20	-0.79	0.22	2.30
Minnesota	-0.49	0.13	0.19	0.91	-0.25	0.07	-0.37	0.10	0.86
Mississippi	-2.62	0.61	0.90	4.01	-1.44	0.41	-1.24	0.49	4.22
Missouri	-2.51	0.60	0.90	4.16	-1.48	0.43	-1.74	0.49	4.61
Montana	-0.06	0.01	0.02	0.11	-0.03	0.01	-0.04	0.01	0.10
Nebraska	-0.36	0.09	0.14	0.67	-0.18	0.06	-0.27	0.07	0.10
Nevada	-0.02	0.00	0.01	0.03	-0.01	0.00	-0.01	0.00	0.04
New Jersey	-1.59	0.39	0.59	2.82	-0.95	0.28	-1.15	0.32	3.15
New Mexico	-0.06	0.02	0.02	0.12	-0.04	0.01	-0.05	0.01	0.13
New York	-4.87	1.15	1.71	7.70	-2.34	0.68	-3.27	0.92	7.23
North Carolina	-2.73	0.61	0.91	4.03	-1.61	0.45	-1.28	0.50	4.57
North Dakota	-0.06	0.02	0.02	0.12	-0.03	0.01	-0.05	0.01	0.11
Ohio	-3.63	0.85	1.26	5.74	-2.26	0.64	-2.42	0.68	6.77
Oklahoma	-1.50	0.34	0.51	2.26	-0.87	0.24	-0.71	0.28	2.50
Oregon	-0.07	0.02	0.03	0.12	-0.03	0.01	-0.05	0.01	0.11
Pennsylvania	-5.45	1 19	1 77	7.63	-3.82	1.04	-3 33	0.96	10.06
Rhode Island	-0.31	0.08	0.12	0.58	-0.15	0.04	-0.23	0.06	0.51
South Carolina	-1.68	0.00	0.60	2.76	-0.96	0.28	-0.81	0.32	3.00
South Dakota	-0.09	0.02	0.04	0.18	-0.05	0.01	-0.07	0.02	0.17
Tennessee	-3.11	0.02	1 10	5.02	-2.00	0.57	-1 49	0.59	6.03
Texas	-2.01	0.47	0.70	3.18	-1.06	0.30	-0.96	0.38	3 20
Utah	-0.06	0.01	0.02	0.11	-0.03	0.01	-0.04	0.01	0.12
Vermont	-0.08	0.01	0.02	0.11	-0.05	0.01	-0.04	0.01	0.12
Virginia	-0.00	0.02	0.05	3.18	-0.00	0.02	-0.00	0.02	4 30
Washington	_0.11	0.47	0.70	0.20	-0.05	0.72	-0.08	0.50	0.18
West Virginia	-0.11	0.05	0.04	2 53	-0.05	0.02	-0.70	0.02	3 20
Wisconsin	-0 <i>77</i>	0.30	0.33	1 42	_0.45	0.30	-0.57	0.29	1.53
Wyoming	-0.77	0.20	0.29	0.00	-0.43	0.15	-0.07	0.10	0.06
AVERAGE	-1.43	0.33	0.02	2.27	-0.84	0.24	-0.83	0.27	2.54

Table A7: Conditional Logit Marginal Effects (per Standard Deviation), by State, Black Migrants

Notes and sources: See "notes and sources" for Table A6.

	1 4010 110. 1	ingrant Dorting	, conditional	i Logit Coeffie	ionto ioi Diuch	inigrants, by	Diteracy Diata	,
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Literate	Literate	Literate	Illiterate	Illiterate	Illiterate	Pooled,	Pooled,
	Blacks	Blacks	Blacks	Blacks	Blacks	Blacks	Interacted	Interacted
	(A)	(B)	(C)	(A)	(B)	(C)	(A)	(B)
Cost variables								
Log distance	-1.69***	-1.63***	-1.80***	-1.77***	-1.72***	-1.63***	0.0770	0.0872
0	(0.0936)	(0.0950)	(0.115)	(0.125)	(0.128)	(0.142)	(0.151)	(0.167)
Migrant stock	0.175***	0.180***	0.138***	0.188***	0.197***	0.207***	-0.0125	-0.0172
C	(0.0307)	(0.0308)	(0.0361)	(0.0451)	(0.0451)	(0.0565)	(0.0508)	(0.0508)
Labor market variables	· · · ·		× ,	× ,	× ,		× /	
Log average wage	0.399**	-0.204		0.312	-0.098		0.0869	-0.105
	(0.188)	(0.240)		(0.256)	(0.330)		(0.303)	(0.395)
Log labor demand	0 783***			0 892***			-0 109	
Log habor demand	(0.0560)			(0.0797)			(0.0976)	
% Manufacturing		-1.48x10 <sup>-5</sup>			0.0149			-0.0149
,		$(7.55 \times 10^{-3})$			(0.0103)			(0.0128)
% Agriculture		-0.0352***			-0.0225*			-0.0128
0		(0.00885)			(0.0115)			(0.0145)
Region and other contr	ol variables							
Non-South	-0.327*	-0.140		-0.504***	-0.504**		0.177	0.273
	(0.167)	(0.164)		(0.252)	(0.252)		(0.297)	(0.302)
Urban	0.00184	-0.0171***		0.00745*	-0.0660		-0.00561	-0.0105
	(0.00271)	(0.00510)		(0.00397)	(0.00697)		(0.00476)	(0.00853)
Log population		0.893***			0.984***			-0.0907
		(0.0549)			(0.0833)			(0.0999)
Pseudo $R^2$	0.24	0.24	0.28	0.26	0.26	0.30	0.25	0.25
Ν	1,000	1,000	1,000	496	496	496	1,496	1,496

Table A8: Migrant Sorting, Conditional Logit Coefficients for Black Migrants, by Literacy Status

Notes and sources: See notes to Table 4. The sample consists of black inter-state migrants from the sample of linked census records. Columns 7-8 report interaction terms from a pooled regression with each regressor interacted with a literacy dummy (1=literate). An interacted version of specification C did not converge in maximum likelihood estimation. Standard errors are in parentheses. Standard errors, clustered by county of origin, are in parentheses. Statistical significance is indicated at the 99% (\*\*\*), 95% (\*\*) and 90% (\*) level.



<u>Notes and sources</u>: Changes are defined as the difference in latitude or longitude between an individual's 1930 and 1910 county of residence in the linked dataset described in text. Those who do not move are plotted at coordinates (0,0).

Figure A1: Change in Latitude and Longitude, 1910 to 1930



Figure A2: Distribution of Inter-State Migrants, by Race and State of Destination, 1910-30

■ Black migrants □ White migrants

<u>Notes and sources</u>: Data are from the linked dataset described in detail in the main text and appendix. Some states with small black populations are grouped to save space for exposition. Totals sum to 1.0 for each race category.



# Figure A3: Conditional and Unconditional Racial Differences in Migration Probabilities, by Destination State

<u>Notes and sources</u>: Data are for inter-state migrants from the linked dataset of census records, which is described in detail in the main text and Appendix. See the text for a description of the multinomial logit model. Some states with small black populations are grouped to save space for exposition and facilitate estimation. Black bars reflect the unconditional black-white difference in migration probability. White bars reflect conditional differences.