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August 2009

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Discussion Paper No. 4349
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ABSTRACT

Does Racism Affect a Migrant's Choice of Destination?*

I explicitly introduce racial conflict and cultural attitudes on racial diversity as determinants of destination choice to test their continued relevance to African Americans. I construct several measures of racial intolerance towards African Americans using hate crime activity and the feelings of white Americans about race extracted from a national social attitudes survey. Recognizing that African American migration may actually spawn hate crimes against them, I use a control function method with assaults on white police officers and hate crimes against Jews as instruments to correct for potential endogeneity. The results show that the probability of African American migrants choosing a city is significantly reduced by per capita hate crimes against them, the level of race-based crimes against them, by racially intolerant attitudes held by whites, and by poor evolution in whites' feelings about racial diversity – all regardless of the region in which a city is located. Also striking is the previously undocumented divide among African Americans with respect to region, after controlling for racial intolerance. Those starting in the North exhibit an extreme distaste for the South at the margin, which contrasts sharply to the extreme taste for the South displayed by African Americans originating in the South.

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I. Introduction

The early 1970's saw the first reversal of the South consistently losing African Americans on net since the Civil War. By the latest available data, most Southern states no longer show net losses of African Americans. What are the implications of this reversal in population shifts? Previous research shows significant decline in racial wage discrimination in the South over the past 40 years. As African Americans move South to take advantage of this progress, this will likely have consequences for racial wage equality in all regions. Furthermore, African American migrants to the South differ substantially from those already established there. The tide of southern-born African Americans who migrated North before the 1970's were typically less educated and less fortunate than those already in the North. The exact opposite is true for the modern-day migration pattern. Today, African American migrants to the South are *much* more educated and have higher incomes than those already in the South. In addition, political consequences arise. Voting patterns and participation may differ systematically between these groups owing to educational background and previous residency in different regions. In fact, although a minority of African Americans claims a Republican Party affiliation, the probability of such affiliation was higher for African Americans living in the South before 1995.

In addition to the numerous implications of this recent development in the migration pattern, another point arises: given the long history of African American departure from the South and that racial intolerance against African Americans remains higher in the South, why are African Americans migrants outside the South today much more likely to relocate to the South than any other race group? Can it be that African American migrants are still deterred by racism?

To answer this question, I make several key contributions to the economic literature on general migration and on African American migration. First, I introduce racial tension as a determinant of destination choice in an individual utility maximization framework, using Census micro data (IPUMS) and the Current Population Survey (CPS). Though

most studies on African American migration mention racial tension in the South, none have explicitly incorporated it into a model of destination selection.

Second, I construct several measures of racial intolerance towards African Americans using hate crime activity and the responses of white Americans to questions on race from a national social attitudes survey. Though Tolnay and Beck (1992) find a positive correlation between lynching and the net out-migration rate of African Americans in Southern counties; this falls short of my contributions in two ways. The primary shortcoming is that they cannot show hate crimes increased net out-migration to the North or any other area with fewer hate crimes—without micro data one could just as easily argue these Southern residents moved to neighboring counties in the South and/or counties with equal hate crime activity. The other shortcoming is the analysis of aggregate flows rather than the individual location decision, which also stems from the lack of micro data.

Third, while virtually all studies of African American domestic migration examine regional movement from the South to North and focus on historical time periods, I document African American migration in the late 1990s at the regional, state, and metro area levels and include over 125 metro areas in the destination choice set.

The most commonly cited determinants of the post-Civil War African American migration from the South are the "pull" of economic opportunities elsewhere and, despite rigorous treatment, the "push" of racial discrimination in the South. In this light, it is then informative that Heckman (1990) argues that the favorable conditions in the 1970-1980 Southern labor market were key to even the national economic progress of African Americans. Vigdor (2006) provides regional documentation of Northern-born African Americans migrating to the South, and he illustrates that the racial earnings gap in the South had converged to that in the North by the end of the 1990s. Perhaps more importantly, he shows that the narrowing of the racial wage gap was more rapid within the South than outside the South in the 1990s. This turn of events suggests that the economic "pull" factor is still relevant in the location decision, but whether African Americans are

still "put off" by racism is less evident. Specifically, how does racial intolerance against African Americans affect their probability of choosing a destination city?

The results show that African American migrants from the North and South are both significantly deterred by hate crime activity against them and by racially intolerant attitudes towards them held by whites, regardless of the region in which a city is located. In fact, the negative racial attitudes of whites has one of the strongest marginal effects on the probability of choosing a city. Given that African Americans from the South are exposed to stronger feelings of intolerance, it is not immediately intuitive whether they would be less sensitive or more sensitive than their northern counterparts. The results suggest, however, that African Americans starting in the South are *more* sensitive to the lack of progress in racial tolerance. A striking outcome is the divide among African Americans with respect to region after controlling for racial tolerance. Those originating in the North exhibit an extreme *distaste* for the South at the margin, which contrasts sharply with the extreme taste *for* the South displayed by African Americans originating in the South. Previous studies have missed this critical divide. In addition, studies that have attributed discrimination to a negative coefficient on a South indicator, have missed another key point. African Americans outside the South would still prefer a location outside the South *after* controlling for racial intolerance.

IIA. U.S. Geopolitical Background

The United States describes fifty individual states essentially unified by a document commonly referred to as "The Constitution." From many perspectives the fifty states have less in common than they share. Their laws vary as each state has its own constitution in addition to the federal one. For example, the decision to allow the death penalty and how the penalty should be administered is made on the state level. States also vary demographically, politically, linguistically, and economically. The single greatest rift among states—the one which nearly succeeded in dividing the union—was the issue of slavery,

however.

Although slavery was actually legal in all 13 colonies that declared independence to form the United States, its economic importance varied across the early states from the inception (See *Map 1*).¹ The Southern states depended on this enslaved labor quite heavily for large-scale agriculture, while the farming of "cash" crops did not occur in the North, mainly for climatic and geographic reasons. Enslaved labor ranged from exactly 0 to 43 percent of the total population of each of the original states in the first Census of 1790 (See *Chart 1*). Five states had less than 2 percent for this measure, while 5 states had over 25 percent for the same statistic.

Economic and cultural heterogeneity resulted in many of the original states abolishing slavery, while new states were admitted into the Union under "free" or "slave" statuses. By the early 19th century a clear line was drawn. In fact, the line was commonly referred to as the Mason-Dixon Line, and it separated the "free" states in North from the "slave" states in the South. By 1860, there were 33 states in the Union, and 15 of them had legal slavery systems: Delaware, Kentucky, Maryland, Missouri, South Carolina, Mississippi, Florida, Alabama, Georgia, Louisiana, Texas, Virginia, Arkansas, North Carolina, and Tennessee (See *Map 2*). I define these 15 states as the South, unless otherwise noted. All other states are referred to as the North or non-South interchangeably.

Even within the legal context of slavery, the experience within the South varied significantly. On the whole for the region, the probability that an African American in the South was enslaved was essentially 1, yet that probability was surprisingly diverse across Southern states (See *Chart 2*). Furthermore, the relative weight of African Americans also varied from 10 to 60 percent of the total population for states in the Southern region (See *Chart 3* and *Map 3*). Thus, the importance and tolerance of slavery continued to

¹These 13 colonies were Connecticut, Delaware, Georgia, Maryland, Massachusetts, New Hampshire, New Jersey, New York, North Carolina, South Carolina, Pennsylvania, Rhode Island and Virginia. An original draft of the Declaration of Independence penned by Thomas Jefferson included a passage denouncing slavery, which was ultimately removed by the Continental Congress.

be quite divergent both inter- and intra-regionally. One state, Virginia, actually split over the issue of slavery, as did the Union during the Civil War. Eleven states declared separation from the United States by 1861 and all of them were slave states. In sum, African Americans were geographically concentrated in the South to supply the labor for the economic activity localized in that region.

IIB. The Historical African American Migration

Studies on African American migration to the North generally focus on time periods after the Civil War, yet illegal migration of enslaved persons out of the South was a well-established phenomenon prior to the war. This movement was institutionalized through abolitionist networks to the extent that the Fugitive Slave Law of 1850 established penalties for anyone aiding the illegal migration of enslaved persons. This law augmented the already staggering costs of illegal migration, which included death.

Thus, the legal protection of South to North migration via the abolition of slavery reduced the associated costs significantly. The destruction of land and property, disorganization, and the upheaval of social order in the Civil War aftermath, suggest that economic opportunities were more promising in the North in the short term. The "human capital theory" of Sjaastad (1962), which rests on an expected earnings stream differential between origin and destination given the labor markets in each place, would be sufficient to explain northward migration. In addition, the racial resentment, social apartheid, and level of hate crimes that ensued for several decades in the South were arguably a long term "push" effect. Thus, with the end of American slavery, one would expect to have seen significant African American migration from the South to the North over time, a magnification of a trend that had already taken hold.

Accordingly, every Census of Population after the Civil War shows African Americans slipping away from the South through 1960. *Map 3* showed the greater importance of African Americans to Southern state populations than Northern ones in 1860, and, on

the whole, the Census of 1860 shows that 95 percent of African Americans in the United States lived in the South. By 1960, this share dropped dramatically to 60 percent while the Southern share of the total national population decreased only modestly (See *Chart 4*).

Migration was key to this declining proportion of African Americans in the South. Collins (1997) documents the magnitude of this migration from 1870 through 1950 (see *Chart 5*). The net outflow of African Americans is often greater than that of whites. Furthermore, the net migration loss starts as 2 percent of the South's total African American population in 1870 and rises to 18 percent in 1940 (see *Chart 6*). Indeed, relative wage differences between the North and South have been linked to this migration (Collins 1997).

III. Recent Developments and Migrant Characteristics

The South's net loss of African Americans for a century after the Civil War finally subsided in the early 1970s, and the region has exhibited a net gain in African American population since that time (See *Chart 7*). A contributing factor to the turnaround was the subsiding pattern of Northern selection among educated Southern-born African Americans between 1940 and 1970 shown by Vigdor (2002). Weiss and Williamson (1972) were the first to document any actual movement in the opposite direction (from the North to the South) with micro data, using the 1967 Survey of Economic Opportunity (SEO). Though 3.4 percent of respondents born in the North moved to the South, 26.3 percent of respondents from the South headed North. Accordingly, McHugh (1987) confirms a net outflow from the South approaching 1970. Using Census data, he shows that between 1965 and 1970 the South lost 251,000 on net. The South's modest net gain of 14,000 African Americans during the 1970-75 period, however, was the region's first positive net flow for this group in 100 years—it has continued since. On a more detailed level of geography, by the end of the 1990's most Southern states no longer lost African Americans, and several demonstrated sizeable gains (See *Chart 8A*). In addition to the narrowing of the racial wage gap in the

South, general economic conditions including unemployment, employment growth, and housing prices were more favorable in the South during the late 1990's (See *Chart 8B*).

Furthermore, my tabulations of the 2000 IPUMS show that African Americans in the North *specifically* are more attracted to the South than any other race/ethnic group. Among migrants starting outside the South, 40 percent of African Americans chose a Southern city compared to 24 percent of Whites and Hispanics, and 20 percent of Asian Americans. Thus, this seemingly strong pull to the South is unique among African Americans, and surprising in light of the historical repression and high out-migration from the South documented above. The next subsection describes these Southward migrants.

Using the IPUMS data mentioned above, I estimate that of 2.8 million total migrant households from the South, 0.9 million chose a metro area outside the South between 1995 and 2000. For the same time period, of 5.5 million migrant households in metro areas outside the South, 1.5 million chose a metro area in the South as their destination. A natural first question is how do these migrants differ from those already in the South? *Chart 9A* provides some answers. As would be expected, migrants are typically younger than non-migrants. The differences in educational attainment are also expected but still striking nonetheless. Sixty-seven percent of African American migrants to the South received some type of higher education, compared to 47 percent of African American non-migrants already in the South. Other migrants to the South also had much higher education attainment than other non-migrants in the South. Note the racial gap in homeownership does not narrow when comparing migrants nor does the overall racial income gap in the absence of controls. When considering migrants, it is clear that differences in their personal characteristics cannot explain different reactions to racism because their characteristics are remarkably similar (See *Chart 9B*).

In terms of metro destinations, the results are also quite remarkable. *Chart 8* showed that D.C. lost 35,000 African Americans on net, yet D.C. is the #2 destination for African American migrants to the South. The fact that almost 20 percent of all African American

migrants to the South chose Atlanta is even more striking. Note that the cities with the most African Americans prior to the migration period are not necessarily the cities that attract the most African Americans. In fact, Memphis, New Orleans, and St. Louis do not even make it into the top 11 Southern destinations for African American migrants to the South. That said, Atlanta, DC, Houston, and Dallas are important cities for all groups. Also, note that although the statistics are for those under age 65, popular retirement destinations, Ft. Lauderdale and Orlando, appear among the migrant favorites.

When considering all destination choices of African American migrants in the North certain cities appear to be favorites, namely Atlanta. The location choices for these migrants from 5 major cities in the non-South also revealed some patterns. Those from coastal cities in the North also preferred coastal cities in the South. Similarly, those from interior cities in the North preferred interior cities in the South (See *Chart 10* and *Map 4*).

Previous studies have explained African Americans abandoning the South explicitly by the pull of economic opportunities in the North and implicitly by the push of racial discrimination, race-based violence, and social apartheid in the South. Given the migration reversal, can those same reasons explain migration today?

IV. How does a Migrant Choose a Destination?

From Sjaastad (1962) and Harris and Todaro (1970), the location decision of migrants has been modeled as the outcome of utility maximization. In these early studies, utility was composed of income or expected income. More recently, Borjas (1992) adds a random utility component specific to the individual to model interstate migration. Dahl (2002) expands the utility function to include non-wage determinants of utility, including location amenities, and individual-specific deviations in tastes for these amenities. Drawing on the studies above, I model utility as a function of personal characteristics, location-specific amenities and disamenities, and an individual-specific idiosyncratic term:

$$\mathcal{U} = f(w, \vec{y}, \vec{z}, \varepsilon),$$

where w is wage, \vec{y} is a number of personal characteristics, \vec{z} is composed of attributes specific to a location, and ε is the individual idiosyncrasy.

In this study, the variables of interest are in \vec{z} ; racially motivated crimes and social attitudes about race are disamenities of a location. In addition, \vec{z} contains the relative wage cost of being African American; otherwise stated, the relative rate of disreturn to wages of being African American is included as a location attribute. This is somewhat inspired by Borjas who also incorporates the relative returns to personal characteristics in his location selection model. In the spirit of Roy (1951), he finds that the probability of moving to a state with higher returns to skill (measured by wage dispersion) increases with skill level. Dahl (2002) tests a similar theory. He finds that individuals with more education do migrate to states with higher returns to education. Finally, Vigdor (2006) considers regional racial wage disparities but tries to explain them *by* migration trends, which is the opposite causality. He concludes that the migration pattern reversal poorly explains the observed labor market developments.

Borjas (1992) models the location decision as a comparison between the log of wage in various possible destinations. Thus, he essentially uses an additive log utility form, if we consider wage to be the only component of utility. Dahl also assumes a linear additively separable form for the wage, non-wage, and random components of utility. I, too, adopt an additive form.

Thus, a migrant chooses location j over location k when utility in j is greater than utility in k :

$$\begin{aligned} \mathcal{U}_j &> \mathcal{U}_k \\ \Leftrightarrow f(w_j) + f(\vec{y}) + f(\vec{z}_j) + \varepsilon_j &> f(w_k) + f(\vec{y}) + f(\vec{z}_k) + \varepsilon_k \\ \Leftrightarrow f(w_j) + f(\vec{y}) + f(\vec{z}_j) - f(w_k) - f(\vec{y}) - f(\vec{z}_k) &> \varepsilon_k - \varepsilon_j \end{aligned}$$

$$\Leftrightarrow f(w_j) + f(\vec{z}_j) - f(w_k) - f(\vec{z}_k) > \varepsilon_k - \varepsilon_j,$$

where f is a linear function.

V. Hate Crime Endogeneity & Quantifying Intolerance

I obtain data on racial attitudes from the General Social Survey (GSS) for the years 1973 to 1993. I calculate a *racial intolerance index* (RiTI) for each metro area based on the answers of white respondents to questions about race after a costly decoding and matching procedure (See Data Appendix for procedure). I grouped these responses into two time periods, 1973-1982 and 1983-1993, to calculate a level of racial intolerance in each time period and also the growth in racial intolerance from the first period to the next. The RiTI level is a composite of the percentage of white respondents who answered intolerantly to the following questions; intolerant answers are in italics:

- Would you yourself have any objection to sending your children to a school where half of the children are Negroes/Blacks/African-Americans? *yes*
- If your party nominated a Negro/Black/African-American for President, would you vote for him if he were qualified for the job? *no*
- Do you agree, disagree, or have no opinion on the following statement: White people have a right to keep Negroes/Blacks/African-Americans out of their neighborhoods if they want to, and Negroes/Blacks/African-Americans should respect that right. *agree*
- Do you think there should be laws against marriages between Negroes/Blacks/African-Americans and whites? *yes*
- Do you agree, disagree, or have no opinion on the following statement: Negroes/Blacks/African-Americans shouldn't push themselves where they're not wanted. *agree*

I provide tabulations of responses for representative areas in *Chart 11*. Though some of these questions appeal to outright bigotry and others to what some would call statistical discrimination, one should avoid "rationalizing" the root or existence of either type of prejudice in this setting. Of sole importance here is whether *migrants* are averse to the

presence of such attitudes and what they believe the consequences of such attitudes may be—as Verdier and Zenou (2004) show, the presence of whites’ negative racial beliefs can be detrimental to African Americans. Furthermore, I do not attempt to explain the change in attitudes documented in *Chart 11*, but rather the migration choices that may depend on the past trajectory of racial tolerance.

The Uniform Crime Reporting Program (UCRP) provided FBI data on hate crimes. The first measure of race-based violence against African Americans is the number of hate crimes committed against African Americans per African American resident, or the rate of hate crimes against African Americans (Afr. Am.). The total number of hate crimes against African Americans serves as the second measure. The rate of hate crimes is expected to capture a migrant’s response to the real potential of being the victim of a hate crime. The level of hate crimes appeals to a more emotional, albeit no less valid reaction to the sheer scandal of such crimes. I may, however, face an endogeneity problem using hate crimes against African Americans during the migration period as a determinant of their migration, because the arrival of African Americans may increase racial tension and spawn hate crimes against them. The consequence would be an upward bias in the estimated effect of anti-African American hate crimes. This motivates the need to instrument hate crimes against African Americans (as a determinant of their migration).

I instrument the rate of hate crimes against African Americans with the number of assaults on white police officers per Afr. Am. resident. I use total hate crimes against Jews as the instrument for total hate crimes against African Americans. Assaults on white police officers cause the degradation of race relations in a number of ways. White police officers become more likely to racially profile and/or retaliate against African Americans. Both these actions send two signals to other members of the white community and other groups: (1) that it is more acceptable to mistreat African Americans because upholders of the law do it and (2) that offenders are less likely to face criminal punishment because law enforcement agents are also intolerant. These factors encourage hate crimes against

African Americans. In addition, hate crimes against Jews and African Americans are typically perpetrated by the same groups. The two instruments are strong predictors of the respective endogeneous variables (See *Chart 12*).

I now address the validity of the instruments.

Provided assaults on white police officers and hate crimes against Jews are not caused by African American migration, these are valid instruments. Both these offenses have a criminality component, but may also be racially motivated. To check the validity, I will show that African American migrants are neither more likely to commit a crime, nor more likely to be racially intolerant than Afr. Am. non-migrants.

The most commonly cited socioeconomic determinants of criminal behavior are unemployment, education level (because it affects expected lifetime earnings in the legal sector), and income inequality. *Chart 13A* shows that African American migrants are less likely to commit crimes than Afr. Am. non-migrants in all these respects. They have lower unemployment rates, higher educational attainment, and are better off in the income distribution.

Furthermore, African American migrants are less racially intolerant (See *Chart 13B*). They have less mistrust of white people, are more welcoming of white people, and have less separatist views than African American non-migrants. African American migrants also have warmer feelings towards Jews than African American non-migrants. Thus, African American migration to an area should not cause either instrument.²

Chart 14 contains summary statistics for the city characteristics.

²One might entertain that Afr. Am. migration adversely affects native groups and these groups may react violently against any group including white police officers and Jews. Another hypothetical situation is one in which white police officers and Jews provoke assaults because of their feelings about Afr. Am. migration. Both these scenarios would mean, however, that African American migration were positively correlated with the instruments, which implies an upward bias in the coefficient. Thus, if this endogeneity truly existed the negative coefficient I obtain for hate crimes is more positive than the true coefficient. Otherwise stated, correcting the endogeneity would only result in a more negative coefficient and improve the results.

VI. Econometric Framework of Location Decision

As discussed above, migrants in one city in the U.S. select another city by maximizing their utility. Utility in a city is a function of an individual's personal characteristics and an individual's tastes for certain amenities and disamenities that cities offer. The vector of m personal characteristics is \vec{y} , of which wage is a component. For later use, let's define $\tilde{y} = \{\text{experience, gender, marital status, education, experience squared, race}\}$. The vector of h city specific amenities and disamenities is \vec{z} , of which hate crime activity, level of racial intolerance (RiTI), and progress in racial tolerance (RiTIgrowth) are components. Several other area characteristics were collected including unemployment rate, home price index, general crimes (exclusive of hate crimes), weather, population, location in the South, reported level of happiness, distance from the city of origin, employment growth, and population growth. Sources and methods are in the Data Appendix. Recall that all components of \vec{z} , save hate crimes, are measured before the migration period.

Thus an individual i 's utility in a given city c is

$$U_{ic} = \vec{\alpha} \vec{y}_i + \vec{\beta} \vec{z}_c + \varepsilon_{ic} \quad (1)$$

Now, I'll slightly expand the expression in (1):

$$U_{ic} = \alpha_1 \text{wage}_{ic} + \sum_{m=2}^M (\alpha_m y_{im}) + \beta_1 \text{hate_crime}_c + \beta_2 \text{RiTI}_c + \beta_3 \text{RiTIgrowth}_c + \sum_{h=4}^H (\beta_h z_{ch}) + \varepsilon_{ic} \quad (2)$$

I assume an individual's wage is composed of a "base" wage (ω) invariant to location, a location-specific part (ζ), and a bundle of unobservable qualities (ν). Using the previous assumptions, the following expresses an individual i 's wage in a city c :

$$\text{wage}_{ic} = \omega_i + \zeta_{ic} + \nu_i \quad (3)$$

I assume a structural form for the determination of wages in each city, which is a function of \tilde{y} defined above:

$$\ln \text{wage}_c = \gamma_{1c} \text{exp} + \gamma_{2c} \text{sex} + \gamma_{3c} \text{educ} + \gamma_{4c} \text{exp}^2 + \gamma_{5c} \text{race} + \gamma_{6c} \text{married} + \mu \quad (4)$$

Next, I argue that $\{\gamma_{1c}, \gamma_{2c}, \gamma_{3c}, \gamma_{4c}, \gamma_{5c}, \gamma_{6c}\}$ are all actually composed of a location invariant part (γ_p) and a location specific part (η_{pc}), so that for an individual in a given city:

$$\begin{aligned} \ln wage_{ic} = & (\gamma_1 + \eta_{1c})exp_i + (\gamma_2 + \eta_{2c})sex_i + (\gamma_3 + \eta_{3c})educ_i + \\ & (\gamma_4 + \eta_{4c})exp_i^2 + (\gamma_5 + \eta_{5c})race_i + (\gamma_6 + \eta_{6c})married_i + \mu_i \quad (6) \end{aligned}$$

Otherwise stated, $\{\eta_{1c}, \eta_{2c}, \eta_{3c}, \eta_{4c}, \eta_{5c}, \eta_{6c}\} (= \vec{\eta}_c)$ are the relative prices for these personal characteristics in city c . Distributing in (6) gives:

$$\ln wage_{ic} = \vec{\gamma}\tilde{y}_i + \vec{\eta}_c\tilde{y}_i + \mu_i, \quad (7)$$

when defining $\vec{\gamma} = \{\gamma_1, \gamma_2, \gamma_3, \gamma_4, \gamma_5, \gamma_6\}$ and recalling the definition of \tilde{y} .

Clearly, $\vec{\gamma}\tilde{y}_i$ is a part of the wage that does not vary with location and $\vec{\eta}_c\tilde{y}_i$ are the location specific returns. Thus, the former is simply ω_i and the latter is ζ_{ic} from (3). I calculate $\vec{\eta}_c$ —the relative rates of (dis)return to wages of race, gender, education, marriage, experience, and experience squared—with wage equations that include metro area indicators and metro area indicators interacted with the relevant wage determinant.

Thus, I can rewrite (2) as:

$$\begin{aligned} \mathcal{U}_{ic} = & \alpha_1[\omega_i + \vec{\eta}_c\tilde{y}_i + \nu_i] + \sum_{m=2}^M(\alpha_m y_{im}) + \beta_1 hate_crimes_c + \\ & \beta_2 RiTI_c + \beta_3 RiTIgrowth_c + \sum_{h=4}^H(\beta_h z_{ch}) + \varepsilon_{ic}, \quad (9) \end{aligned}$$

Migrants compare utility in all possible destinations, and choose the city k that offers them the greatest utility. Thus, migration to city k rather than to city j is observed when $\mathcal{U}_{ik} > \mathcal{U}_{ij}$ or, equivalently, when $\mathcal{U}_{ik} - \mathcal{U}_{ij} > 0, \forall j$:

$$\begin{aligned} & \alpha_1\vec{\eta}_k\tilde{y}_i - \alpha_1\vec{\eta}_j\tilde{y}_i + \beta_1 hate_crimes_k - \beta_1 hate_crimes_j + \beta_2 RiTI_k - \beta_2 RiTI_j + \\ & \beta_3 RiTIgrowth_k - \beta_3 RiTIgrowth_j + \sum_{h=4}^H(\beta_h z_{kh}) - \sum_{h=4}^H(\beta_h z_{jh}) + \varepsilon_{ik} - \varepsilon_{ij} > 0. \quad (10) \end{aligned}$$

Thus, after eliminating ν_i with a fixed-effects specification, a given individual's destination choice is reached by considering utility returns to city-specific characteristics (\vec{z}_c), the utility from city-specific wage returns to individual characteristics ($\vec{\eta}_c \tilde{y}_i$), and utility returns from an unobservable (ε_{ic}). Because $\vec{\eta}_c \tilde{y}_i$ depends only on c for a given individual i , I represent it as a location characteristic from the point-of-view of the individual and α_1 is consequently an element of $\vec{\beta}$.

To estimate $\vec{\beta}$, I can find the probability that the observed chosen location \mathcal{L} is city c using the fixed-effects conditional logit specification and assuming the ε_{ic} are i.i.d. \sim Weibull. Formally,

$$Prob(\mathcal{L} = c) = \frac{e^{\vec{\beta} \vec{z}_c}}{\sum_c e^{\vec{\beta} \vec{z}_c}} \quad (11)$$

Given the nonlinear model, I choose a control function approach to deal with the hate crime endogeneity. In standard notation,

$$y = \beta x + \varepsilon, \mathbb{E}(x\varepsilon) \neq 0, \quad (12)$$

where y is migration and x is hate crimes against African Americans. I assume that the above proposed instruments, z , satisfy $\mathbb{E}(z\varepsilon) = 0$.

I can then represent hate crimes as

$$x = \gamma z + v, \quad (13)$$

where v is the part of x that may be caused by y . I then control for the endogeneity in (11) by introducing \tilde{v} predicted from v .

Equation (11) is estimated separately for white and African American migrants, each by region of origination (South and North).³

³For the purpose of symmetry the identical specification is used for both whites and African Americans. This causes an endogeneity problem in the estimations for whites because the instrument for total black hate crimes is total hate crimes against Jews. White migration includes Jews and may increase hate

VII. Racial Intolerance is a Significant Deterrent

A conservative interpretation of the results would end by determining whether city characteristics are significantly associated or significantly disassociated with the cities that migrants chose. If the outcome is consistent with basic intuition, however, one may reason that migrants *were* actually informed and intentionally sought (or avoided) places with particular characteristics.

The first set of results (*IV1*) relies on per capita hate crimes against African Americans as the relevant representation of hate crime activity (See *Table 1* in this section). The instrument is attacks on white police officers per African American resident. The effect of per capita hate crimes is quite large and significant for African Americans originating in the North, and has a smaller and slightly less significant impact on those from the South. Given that African Americans in the South are exposed to stronger feelings of intolerance, it is not immediately intuitive whether they would be less sensitive or more sensitive. The level of racial intolerance has a statistically significant larger impact on African Americans originating in the South than on their Northern counterparts. That said, the level of racial intolerance significantly reduces the probability that a given individual chose a city for both race groups and both regions of origin. Recall that a negative growth rate of intolerant answers reflects progress; we observe that a lack of progress in the racial attitudes of whites reduces the probability of choosing a city for both groups of African Americans. From this specification, it is clear that relatively low racial tolerance reduces a city's attractiveness for African American migrants.

Now I consider the robustness of the representation of hate crimes in the estimation above. In place of per capita hate crimes, I use the *level* of hate crimes against African

crimes against these members of the white community. Thus, the results for whites should be interpreted cautiously. In addition, the IPUMS estimations for white migrants use a random sample of the total number of white migrants because of computing constraints. Finally, the results are generated assuming Independence of Irrelevant Alternatives.

Americans. As mentioned earlier, this representation appeals more to the effect that outrage from hate crimes may have on the destination choice. The potential endogeneity is still a factor, and I use the level of hate crimes against Jews as an instrument (*IV2*) (see *Table 2*). African Americans from the North continue to show a significant distaste for cities with higher levels of hate crimes. African Americans from the South also show a negative reaction to the level of hate crimes, but a much stronger one. Though whites from the North exhibited a small negative response to per capita hate crimes, the coefficient is now positive though very small. With respect to the impact of racial attitudes, using total hate crimes against African Americans does not change the outcome for any group qualitatively. Both groups of African Americans remain significantly deterred by the level of racial intolerance. African Americans starting in the North and in the South also remain averse to the lack of progress in racial attitudes.

I perform an additional robustness check for the results in *IV1* by changing the migration data source to the 2000 CPS (*IV3*).⁴ The results support the findings in *IV1*, yet the small sample sizes prevent many significant outcomes (See *Table 3* in Appendix). That said, the level of racial tolerance remains a significant deterrent to African Americans starting in the South. Though the same coefficient is also negative for African Americans originating in the South, it is not significant. The hate crime rate a deterrent large in magnitude for African Americans starting in the North, but it is not significant. It is positive for African Americans from the South but with an extremely small and insignificant effect in comparison. The impact of the progress in racial attitudes was less important than the level of racial tolerance in *IV1* and now fails to achieve significance for either group.

In sum, one can conclude that, at the margin, African Americans are significantly

⁴The migration period in the CPS data is shorter at 1 year, but does overlap with that used in *IV1*. The CPS does not provide metro area of origin and so migrants are identified as those who made interstate moves. In some cases an interstate move does not imply changing metro areas. An additional consequence is that the distance variable cannot be calculated.

deterred by high levels of racially intolerant attitudes, lack of progress in racial tolerance, the probability of being a hate crime victim, and by the total level of hate crimes against their group. Furthermore, it appears that no group likes racial intolerance, but that African Americans are particularly sensitive to hate crimes.

Furthermore, the level of racial intolerance (RiTI) has a relatively large marginal effect on the probability that an African American migrant chooses a city (See *Table 4* in Appendix). One more percentage point of city residents answering intolerantly to questions on race reduces by .01 the probability that an African American starting in the South will choose that city. The same effect is about half as large for African Americans from the North. That said, the impact of hate crimes against African Americans is largest for African Americans in *North* and almost as large as the impact of the African American Population share. For a one percentage point increase in the rate of hate crimes per 10,000 African Americans, the probability of an African American from the North choosing a city drops by .01. Though significant, the impact for African Americans from the South is about 10 times smaller. In fact, the Whites from the North appear more sensitive to hate crimes than African Americans from the South. This could highlight different regional perceptions and acceptance of racial intolerance. In addition, conditional on starting in the North, African Americans appear more concerned with the racially intolerant *actions* and whites with racially intolerant *attitudes*. This is somewhat intuitive because hate crimes against African Americans threaten African Americans directly. That said, one percentage point less of progress in racial tolerance reduces the probability that any African American will choose a city by about .003, yet whites are not deterred by the lack of progress. In addition, the impact of African American population share on the probability is significantly greater for African Americans. Finally the largest marginal impacts regardless of race and regional origin are from the region the city is in. These marginal effects are huge, but most pronounced for African Americans from the South. A city being in the South rather than in the North increased the probability of being chosen

by .20 for this group.

In fact, the impact of RiTI is slightly larger than the impact of distance when choosing a city. Hate crimes against African Americans have the next largest marginal impact on the probability of African Americans in the North choosing a city. This marginal effect is larger than that of population, the share of people that are African American, and general crimes. In contrast, the marginal effect of hate crimes does not achieve significance for African Americans from the *South*, but the evolution of racial intolerance does. Among all city characteristics, the South indicator has the largest marginal effect for African Americans in the North and the 2nd largest effect for African Americans in the South. These impressive effects are of opposite sign for each group, however.

Recall some of the descriptive statistics mentioned earlier and consider their irony in the context of these results. The fact that over 1 million African Americans (20%) left the south in the 1940s clearly indicates a distaste for the region at that time. Yet, just 2-3 generations later, that African Americans from the South show a strikingly strong taste for cities in the South is remarkable. Furthermore, they show a greater attachment to the region than whites. Controlling for racial climate strongly suggests that for the century after the Civil War, African Americans in the South were truly fleeing racial intolerance and not the South per se, a distinction other studies have failed to make. Also surprising is the distaste for the South on the part of African Americans from the North, *after* controlling for racial intolerance and distance. First, from the raw tabulations above they do not appear significantly unlikely to move South (40%) in general, and as I mentioned they were more likely than any other race group to do so. Second, recall that 6-7 generations ago, virtually *all* African Americans lived in the South!

The two groups are now sharply divided in their affection for the region. Thus, previous studies that have grouped African Americans from both regions have missed this critical divide. In addition, studies that have attributed discrimination to a negative coefficient on a South indicator have missed another key point. African Americans from the North

would still prefer a location outside the South *after* controlling for racial intolerance.

The results do show, however, that the aversion of African Americans from the North is lower than the aversion of whites from the North, which is consistent with the tabulations presented earlier.

Table 1: Conditional Logit Fixed-Effects Model of Destination Choice: IV1

Dependent Variable: Indicator that Migrant i Chose City c								
	African Americans				Whites			
	Migrants of Northern Origin		Migrants of Southern Origin		Migrants of Northern Origin		Migrants of Southern Origin	
	Coeff.	S.E.	Coeff.	S.E.	Coeff.	S.E.	Coeff.	S.E.
Hate Crimes ^a	***-0.0502	0.0058	** -0.0055	0.0024	***-0.0127	0.0022	0.0003	0.0017
RiTI ^b	***-0.0292	0.0027	***-0.0606	0.0028	***-0.0603	0.0028	***-0.0540	0.0025
Δ RiTI	***-0.0134	0.0009	***-0.0150	0.0011	***0.0024	0.0007	***-0.0023	0.0008
South Dummy	***-0.1661	0.0362	***1.4735	0.0493	***-0.5749	0.0372	***0.5780	0.0390
Afr-Am Pop%	***0.0623	0.0015	***0.0489	0.0013	***0.0075	0.0017	-0.0011	0.0016
Control Fct. ^c	***0.0481	0.0066	0.0021	0.0026	***0.0134	0.0025	0.0007	0.0018
Unique Obs.	10070		9760		8275		8231	
Pseudo R ²	.18		.29		.15		.15	

Control Variables: Per Capita Non-hate Crimes, Unemp. Rate, Employment and Pop. Growth, House Price Index, Population, Distance from Origin City, Rate of Disreturn to Wages of Being Afr. American, City Relative Wage Returns to Characteristics, Average Range of Temperatures, Average Temperature

^a Anti-Afr. Am. hate crimes per Afr. Am. with assaults on white police officers as instrument.

^b Level of Racial Intolerance

^c Predicted residuals from first stage regression of endogenous variable on instrument.

Robust standard errors. *** denotes significance at the 1% level, ** 5% level.

Table 2: Conditional Logit Fixed-Effects Model of Destination Choice: IV2

Dependent Variable: Indicator that Migrant i Chose City c								
	African Americans				Whites			
	Migrants of Northern Origin		Migrants of Southern Origin		Migrants of Northern Origin		Migrants of Southern Origin	
	Coeff.	S.E.	Coeff.	S.E.	Coeff.	S.E.	Coeff.	S.E.
Hate Crimes ^a	***-0.0113	0.0007	***-0.0361	0.0011	***0.0065	0.0006	***-0.0087	0.0011
RiTI ^b	***-0.0325	0.0026	***-0.0411	0.0025	***-0.0627	0.0030	***-0.0446	0.0027
Δ RiTI	***-0.0121	0.0009	***-0.0105	0.0009	***0.0049	0.0008	***-0.0048	0.0008
South Dummy	***-0.1881	0.0375	***1.4580	0.0606	***-0.4979	0.039	***0.5177	0.0413
Afr-Am Pop%	***0.0679	0.0016	***0.0588	0.0013	***0.0079	0.0018	0.0024	0.0018
Control Fct. ^c	***0.0135	0.0008	***0.0427	0.0012	-0.0005	0.0007	***0.0128	0.0011
Unique Obs.	10070		9760		8275		8231	
Pseudo R ²	.17		.32		.15		.14	

Control Variables: Per Capita Non-hate Crimes, Unemp. Rate, Employment and Pop. Growth, House Price Index, Population, Distance from Origin City, Rate of Disreturn to Wages of Being Afr. American, City Relative Wage Returns to Characteristics, Average Range of Temperatures, Average Temperature

^a Total Anti-Afr. Am. hate crimes with total Anti-Jew hate crimes as instrument.

^b Level of Racial Intolerance

^c Predicted residuals from first stage regression of endogenous variable on instrument.

Robust standard errors. *** denotes significance at the 1% level, ** 5% level.

Table 3: Conditional Logit Fixed-Effects Model of Destination Choice: IV3 CPS

Dependent Variable: Indicator that Migrant i Chose City c								
	African Americans				Whites			
	Migrants of Northern Origin		Migrants of Southern Origin		Migrants of Northern Origin		Migrants of Southern Origin	
	Coeff.	S.E.	Coeff.	S.E.	Coeff.	S.E.	Coeff.	S.E.
Hate Crimes ^a	-0.1621	0.1350	0.0225	0.1451	-0.0771	0.0604	** -0.1696	0.074
RiTI ^b	-0.0386	0.0351	** -0.0521	0.0248	*** -0.0465	0.0134	*** -0.0408	0.0146
Δ RiTI	-0.0052	0.0083	-0.0029	0.0096	0.0038	0.003	*** -0.0148	0.0045
South Dummy	*** -1.5386	0.5727	*** 2.903	0.6809	*** -1.158	0.2396	*** 2.1546	0.2763
Afr-Am Pop%	*** 0.0857	0.021	*** 0.0557	0.0179	*** 0.025	0.0088	-0.001	0.0093
Control Fct. ^c	.0064	.0081	0.0029	0.014	0.0000	0.0026	-0.0026	0.0051
Pseudo R ²	.18		.29		.15		.22	
Unique Obs.	76		61		486		280	

Control Variables: Per Capita Non-hate Crimes, Unemp. Rate, Employment and Pop. Growth, House Price Index, Population, Distance from Origin City, Rate of Disreturn to Wages of Being Afr. American, City Relative Wage Returns to Characteristics, Average Range of Temperatures, Average Temperature

^a Anti-Afr. Am. hate crimes per Afr. Am. with assaults on white police officers as instrument.

^b Level of Racial Intolerance

^c Predicted residuals from first stage regression of endogenous variable on instrument.

Robust standard errors. *** denotes significance at the 1% level, ** 5% level.

Table 4: Marginal Effects of Covariates in IV1 on $Prob(\mathcal{L} = c)$

Dependent Variable: Indicator that Migrant i Chose City c								
	African Americans				Whites			
	Migrants of Northern Origin		Migrants of Southern Origin		Migrants of Northern Origin		Migrants of Southern Origin	
	$\partial y/\partial x$	S.E.	$\partial y/\partial x$	S.E.	$\partial y/\partial x$	S.E.	$\partial y/\partial x$	S.E.
Hate Crimes ^a	***-0.0112	0.0015	***-0.0009	0.0004	***-0.0031	0.0006	0.0000	0.0002
RiTI ^b	***-0.0065	0.0008	***-0.0100	0.0014	***-0.0150	0.0007	***-0.0067	0.0010
Δ RiTI	***-0.0030	0.0003	** -0.0025	0.0003	***0.0006	0.0002	***-0.0003	0.0001
South Dummy	***-0.0373	0.0076	***0.207	0.0282	***-0.1407	0.0102	***0.0669	0.0102
Afr-Am Pop%	***0.0139	0.0009	***0.0081	0.0010	***0.0019	0.0004	-0.0001	0.0002
Control Fct. ^c	***0.0107	0.0170	0.0003	0.0004	***0.0033	0.0006	0.0001	0.0002

Control Variables: Per Capita Non-hate Crimes, Unemp. Rate, Employment and Pop. Growth, House Price Index, Population, Distance from Origin City, Rate of Disreturn to Wages of Being Afr. American, City Relative Wage Returns to Characteristics, Average Range of Temperatures, Average Temperature

^a Anti-Afr. Am. hate crimes per Afr. Am. with assaults on white police officers as instrument.

^b Level of Racial Intolerance

^c Predicted residuals from first stage regression of endogenous variable on instrument.

*** denotes significance at the 1% level, ** 5% level.

VIII. Conclusion

The results show that African Americans in the North and South are significantly put off by per capita hate crime activity, the level of hate crimes, racially intolerant attitudes held by whites, and by the lack of progress in whites' attitudes about race, all regardless of the region in which a city is located. Also striking is the divide among African Americans with respect to region after controlling for racial tolerance and distance. Those starting in the North exhibit an extreme distaste for the South at the margin, which contrasts sharply with the extreme taste for the South displayed by African Americans starting in the South. Before this study, this divide was undocumented.

In addition, I have shown that the net migration of African Americans into the South documented by previous research has increased according to the latest Census data available and that the African American migrants into the South differ substantially from African Americans already there.

The potential implications of these findings are numerous. As mentioned earlier, the fact that African Americans are moving to the South on net where wage equality for them has increased will have consequences for the racial wage gap in the North and the South. If the migration behavior provoked by dispersed returns to race is similar to that provoked by dispersed returns to skill proposed by Borjas (1987, 1992), the racial wage gap in the North could converge past that of the South.

The fact that African Americans in the North are deterred by the level of racially intolerant attitudes could also be dampening the recent net migration of African Americans into the South à la Collins (1997) because cities in the South display higher levels of intolerance.

References

1. Blundell, R. and Powell J. "Endogeneity in Semiparametric Binary Response Models." *The Review of Economic Studies*. 2004. 71:3. 581-613.
2. Blundell, R. and Powell J. "Endogeneity in Nonparametric and Semiparametric Regression Models." *Advances in Economics and Econometrics*. eds. Dewatripont, M., Hansen, L., and Turnovsky, S.J. Cambridge University Press. 2003. 312-357.
3. Borjas, George J. "Ethnicity, Neighborhoods, and Human-Capital Externalities." *The American Economic Review*. 1995. 85:3. 365-390.
4. Borjas, George J. "Self-Selection and the Earnings of Immigrants." *The American Economic Review*. 1987. 77:4. 531-553.
5. Borjas, George J., Bronars, Stephen G., and Trejo, Stephen J. "Self-Selection and Internal Migration in the United States." *Journal of Urban Economics*. 1992. 32. 159-185.
6. Bowles, Samuel. "Migration as Investment: Empirical Tests of the Human Investment Approach to Geographical Mobility." *The Review of Economics and Statistics*. 1970. 52:4. 356-362.
7. Collins, William J. "When the Tide Turned: Immigration and the Delay of the Great Black Migration." *The Journal of Economic History*. 1997. 57:3.607-632.
8. Dahl, Gordon B. "Mobility and the Return to Education: Testing a Roy Model with Multiple Markets." *Econometrica*. 2002. 70:6. 2367-2420.
9. Greenwood, Michael J. "Research on Internal Migration in the United States: A Survey." *The Journal of Economic Literature*. 1975. 397-433.
10. Harris, J.R. and Todaro, M.P. "Migration, Unemployment, and Development: A Two-Sector Analysis." *American Economic Review*. 1970. 60. 126-42.
11. Heckman, James J. "Sample Selection Bias as a Specification Error." *Econometrica*. 47. 153-161.
12. Heckman, James J. "The Central Role of the South in Accounting for the Economic Progress of Black Americans." *The American Economic Review*. 1990. 80:2. 242-246.
13. Kau, James B. and Sirmins, C.F. "New, Repeat, and Return Migration: A Study of Migrant Types." *Southern Economic Journal*. 1976. 43:2. 1144-1148.
14. Lee, SeongWoo and Roseman, Curtis C. "Migration Determinants and Employment Consequences of White and Black Families, 1985-1990." *Economic Geography*. 1999. 75:2. 109-133.
15. McHugh, Kevin E. "Black Migration Reversal in the United States." *Geographical Review*. 1987. 77:2. 171-182.

16. Nakosteen, R.A. and Zimmer, M. "Migration and Income: The Question of Self-Selection." *Southern Economic Journal*. 1980. 46:3. 840-851.
17. Navratil, Frank J. and Doyle, James J. "The Socioeconomic Determinants of Migration and the Level of Aggregation." *Southern Economic Journal*. 1977. 43:4. 1547-1559.
18. Roy, A.D. "Some Thoughts on the Distribution of Earnings." *Oxford Economic Papers*. 1951. 3. 135-146.
19. Ruggles, Steven, Matthew Sobek, Trent Alexander, Catherine A. Fitch, Ronald Goeken, Patricia Kelly Hall, Miriam King, and Chad Ronnander. Integrated Public Use Microdata Series: Version 4.0 [Machine-readable database]. Minneapolis, MN: Minnesota Population Center [producer and distributor], 2008.
20. Tolnay, S.E. and Beck, E.M. "Racial Violence and Black Migration in the American South, 1910 to 1930." *American Sociological Review*. 1992. 57. 103-117.
21. Schlottmann, Alan M. and Herzog, Jr. Henry W. "Employment Status and the Decision to Migrate." *The Review of Economics and Statistics*. 1981. 63:4. 590-598.
22. Sjaastad, L.A. "The Costs and Returns of Human Migration." *Journal of Political Economy*. 1962. 70. 80-93.
23. U.S. Dept. of Justice, Federal Bureau of Investigation. UNIFORM CRIME REPORTING PROGRAM DATA [UNITED STATES]: HATE CRIME DATA, 1996 [Computer file]. Compiled by the U.S. Dept. of Justice, Federal Bureau of Investigation. ICPSR ed. Ann Arbor, MI: Inter-university Consortium for Political and Social Research [producer and distributor], 2000.
24. U.S. Dept. of Justice, Federal Bureau of Investigation. UNIFORM CRIME REPORTING PROGRAM DATA: [UNITED STATES], 1975-1997 [Computer file]. Compiled by the U.S. Dept. of Justice, Federal Bureau of Investigation. ICPSR09028-v5. Ann Arbor, MI: Inter-university Consortium for Political and Social Research [producer and distributor], 2005-09-30.
25. Verdier, Thierry and Zenou, Yves. "Racial Beliefs, Location, and The Causes Of Crime." *International Economic Review*. 2004. 45:3. 731-760.
26. Vigdor, Jacob L. "The New Promised Land: Black-White Convergence in the American South, 1960-2000." NBER Working Paper Series.
27. Vigdor, Jacob L. "The Pursuit of Opportunity: Explaining Selective Black Migration." *Journal of Urban Economics*. 2002. 51. 391-417.
28. Weiss, Leonard and Williamson, Jeffrey G. "Black Education, Earnings, and Interregional Migration: Some New Evidence." *The American Economic Review*. 1972. 372-383.25.

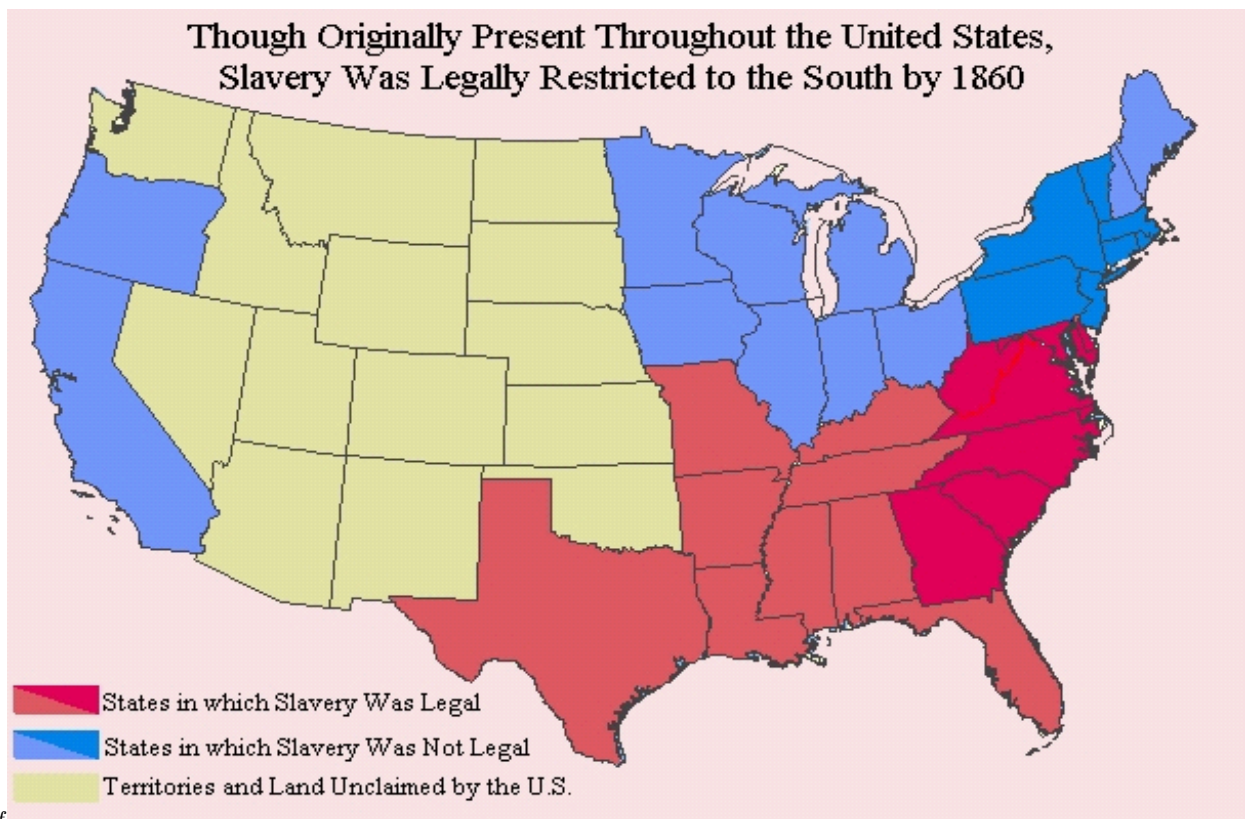
Charts and Maps

The Importance of the Enslaved Population Varied Dramatically			
States in 1790	Total Population	Enslaved Population	% Enslaved
South Carolina	249,073	107,094	43%
Virginia	747,550	292,627	39%
Georgia	82,548	29,264	35%
Maryland	319,728	103,036	32%
North Carolina	395,005	100,783	26%
Delaware	59,096	8,887	15%
New York	340,241	21,193	6%
New Jersey	184,139	11,423	6%
Rhode Island	69,112	958	1.4%
Connecticut	237,655	2,648	1.1%
Pennsylvania	433,611	3,707	0.9%
New Hampshire	141,899	157	0.1%
Massachusetts	378,556	0	0.0%
All States	3,638,213	681,777	19%

Source: U.S. Census of Population, 1790.

Chart 1

2



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Map 2

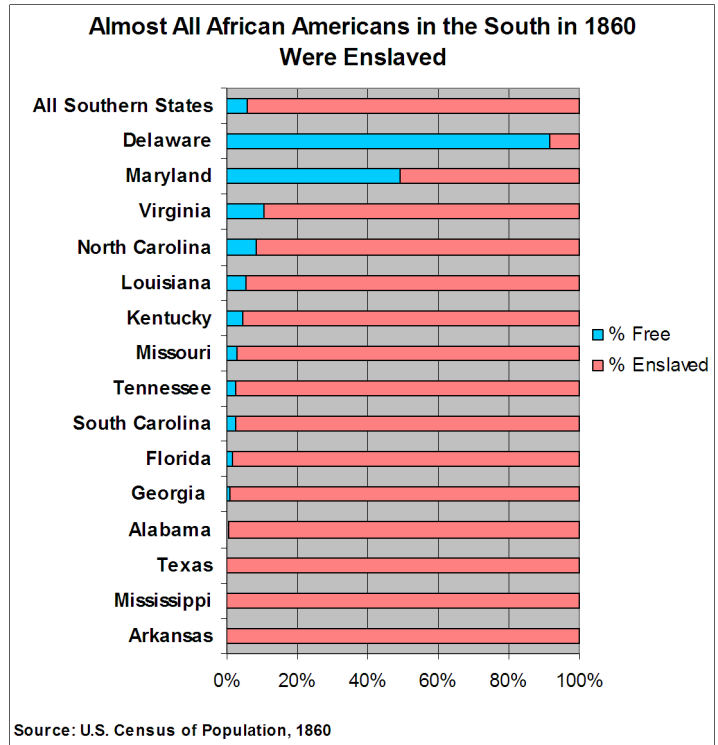
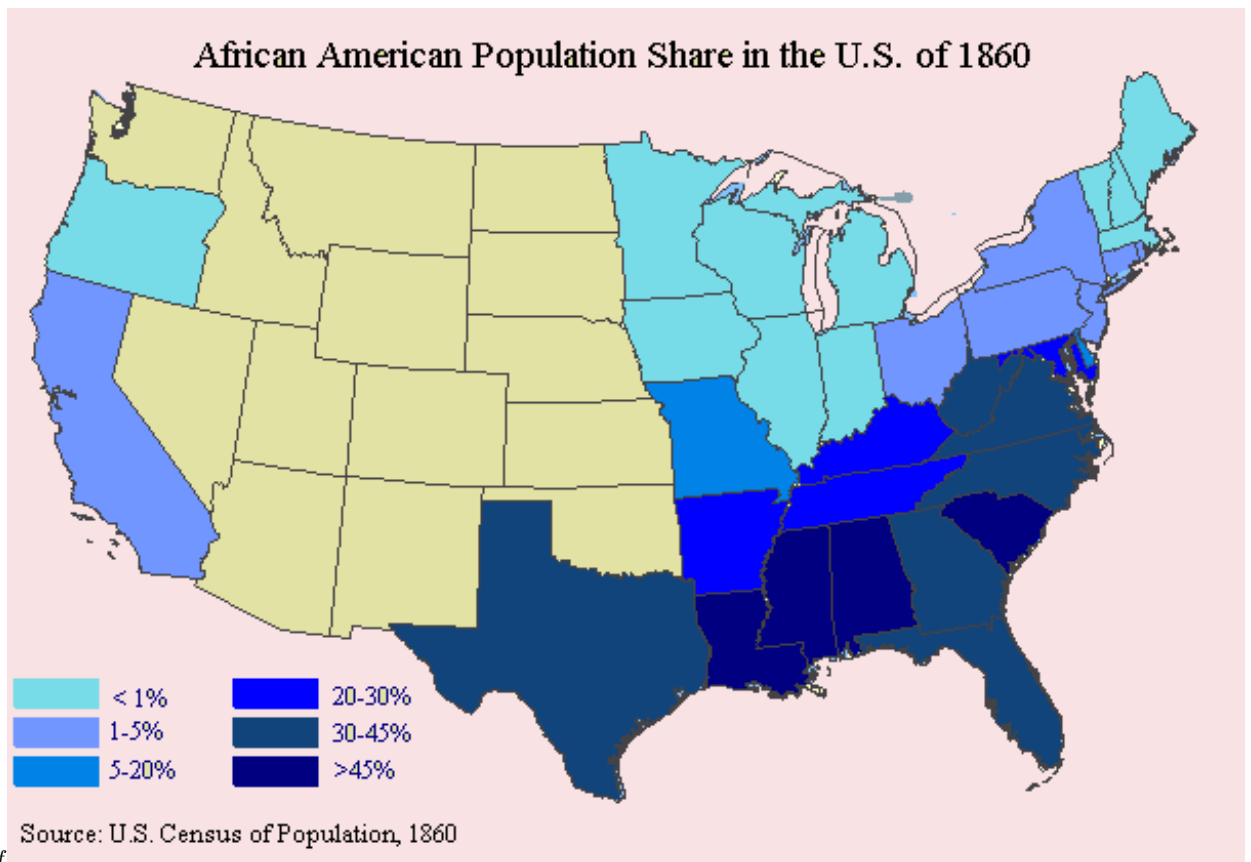


Chart 2

African American Population Share in 1860	
South Carolina	59%
Mississippi	55%
Louisiana	49%
Alabama	45%
Florida	45%
Georgia	44%
North Carolina	36%
Virginia	34%
Texas	30%
Arkansas	26%
Tennessee	26%
Maryland	25%
Kentucky	20%
Delaware	19%
Missouri	10%
All Southern States	34%

Source: U.S. Census of Population, 1860

Chart 3



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Map 3

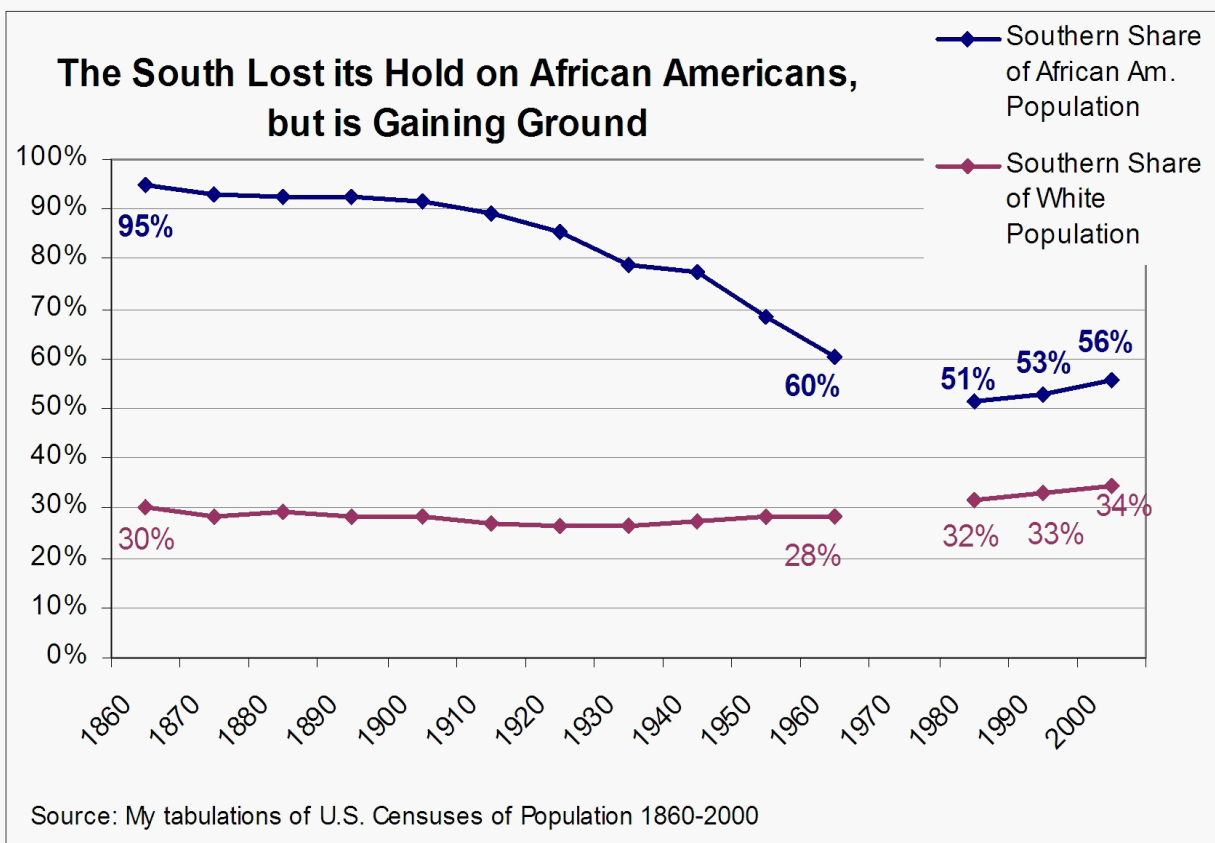


Chart 4

African Americans Consistently Left the South for the North : 1870-1950

Ten Year Period	African American Net Migration				White Net Migration			
	South	Northeast	North Central	West	South	Northeast	North Central	West
1870-1880	-68,000	26,000	42,000	-	91,000	-374,000	26,000	257,000
1880-1890	-88,000	61,000	28,000	-	-271,000	-240,000	-43,000	554,000
1890-1900	-185,000	136,000	49,000	-	-30,000	101,000	-445,000	374,000
1900-1910	-194,000	109,000	63,000	22,000	-69,000	-196,000	-1,100,000	1,375,000
1910-1920	-555,000	242,000	281,000	32,000	-663,000	-74,000	-145,000	880,000
1920-1930	-903,000	435,000	426,000	42,000	-704,000	-177,000	-464,000	1,345,000
1930-1940	-480,000	273,000	152,000	55,000	-558,000	55,000	-747,000	1,250,000
1940-1950	-1,581,000	599,000	626,000	356,000	-866,000	-659,000	-1,296,000	2,822,000

Source: Collins, William J. "When the Tide Turned: Immigration and the Delay of the Great Black Migration." *Journal of Economic History*. 57:3. 1997.

Note: Collins' definition of the South *excludes* Delaware and Maryland and *includes* Oklahoma. Recall that 8% and 51% of African Americans were enslaved in Delaware and Maryland, respectively.

Chart 5

Almost 20% of the South's African Americans Left Between 1940-50, but Less Than 5% of the South's Whites Left In Any 10-Year Period

Census Year	Population		10-Year Migration Period	% of Population Lost	
	White	Afr. Am.		White	Afr. Am
1870	8,109,309	4,043,818	1870-1880	1%	-2%
1880	10,424,423	5,409,601	1880-1890	-3%	-2%
1890	12,689,999	6,081,366	1890-1900	0%	-3%
1900	15,084,260	7,055,334	1900-1910	0%	-3%
1910	19,098,433	7,858,953	1910-1920	-3%	-7%
1920	21,792,397	7,963,998	1920-1930	-3%	-11%
1930	25,016,106	8,289,404	1930-1940	-2%	-6%
1940	27,557,118	8,694,260	1940-1950	-3%	-18%

Source: Chart 5, U.S. Censuses of Population 1870-1940.

Note: The definition of the South is consistent with Chart 5; it excludes Delaware and Maryland and includes Oklahoma.

Chart 6

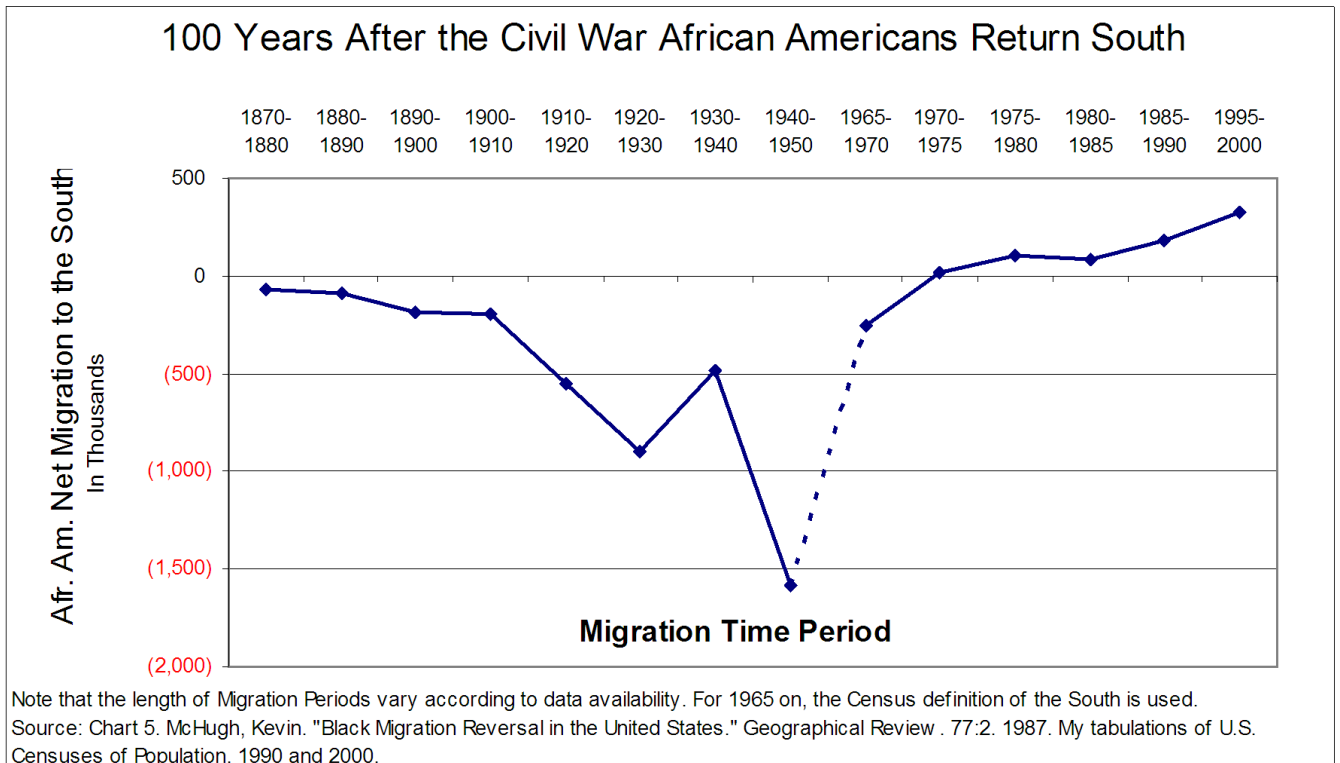


Chart 7

Most Southern States No Longer Lose African Americans

Region	State	Migration Time Period			
		1965-1970	1975-1980	1985-1990	1995-2000
Northeast	New York	7,053	-128,143	-141,372	-160,008
	New Jersey	24,936	-6,462	-12,628	-36,767
	Pennsylvania	2,182	-25,849	-11,753	-15,465
	Massachusetts	7,701	-5,766	3,123	-4,991
	Connecticut	8,356	-3,012	-995	-5,089
Midwest	Illinois	12,670	-37,220	-61,289	-52,011
	Michigan	56,729	3,592	-19,301	-13,922
	Kansas	1,248	4,215	3,099	-7,756
	Ohio	17,857	-16,503	-1,357	-3,711
	Missouri	253	-10,428	-4,704	2,619
	Wisconsin	7,910	6,964	6,786	885
	Indiana	9,177	-2,040	-1,357	7,059
South	Georgia	-19,643	29,616	83,666	127,906
	Texas	5,009	47,685	7,651	45,026
	Florida	-5,466	15,900	53,855	45,303
	North Carolina	-25,887	14,456	36,005	52,108
	Maryland	40,750	54,793	60,365	43,516
	Tennessee	-15,577	4,436	11,992	22,270
	Virginia	-8,448	22,295	55,143	19,205
	South Carolina	-23,462	9,238	3,210	16,207
	Alabama	-53,854	-7,843	-9,828	4,366
	Oklahoma	-946	7,192	-1,239	-301
	Kentucky	-5,255	5,500	-2,933	-479
	Arkansas	-23,465	-9,236	-7,436	-2,612
	Mississippi	-56,367	-20,106	-17,356	-5,354
	Louisiana	-34,346	-5,315	-49,910	-19,649
DC	-18,876	-58,454	-42,928	-35,131	
West	California	83,318	75,746	20,665	-52,300
	Colorado	4,764	8,861	1,911	-478
	Washington	3,550	10,681	7,036	4,464

Source: McHugh, Kevin. "Black Migration Reversal in the United States." *Geographical Review*. 77:2. 1987.; My tabulations of U.S. Censuses of Population 1990, 2000.

Note: States with an African American population of at least 100,000 in 1980.

Chart 8A

Metro Areas in the South Offered Better Economic Prospects		
	Metro Areas in the South	Metro Areas in the North
N	88	134
Employment Growth ('92-'94)	9.73%	6.22%
Unemployment Rate (1994)	5.63%	6.19%
Housing Price Index (1994)	118.34	136.24
Source: Author's tabulations of CPS, BLS, CMHPI data.		

Chart 8B

Characteristics of Residents of the South in 2000				
	African American Migrants	African American Non-Migrants	All Other Migrants	All Other Non-Migrants
Median Age	35	42	36	44
Distribution of Education Attainment				
No High School Degree	11%	22%	9%	14%
High School Degree	22%	31%	16%	25%
Some College/Associate Degree	40%	32%	29%	30%
College Degree	17%	11%	28%	19%
Graduate/Professional Degree	10%	5%	18%	11%
Mean Household Income	45,644	42,720	66,648	67,522
Homeownership Rate	28%	47%	50%	75%
Top Southern Metro Areas (% of Group There)	Atlanta (17%)	DC (9.4%)	DC (8.5%)	DC (6%)
	DC (9%)	Atlanta (8%)	Atlanta (6%)	Houston (6%)
	Norfolk (5%)	Houston (5.4%)	Tampa (5%)	Dallas (5%)
	Baltimore (4%)	Baltimore (5%)	Dallas (5%)	Atlanta (5%)
	Charlotte (3%)	Dallas (4%)	Orlando (4%)	St. Louis (4%)
	Houston (3%)	New Orleans (4%)	Houston (4%)	Tampa (3.5%)
	Dallas (3%)	St. Louis (3.5%)	Ft. Laud. (3%)	Baltimore (3%)
	Ft. Laud. (3%)	Memphis (3%)	W.Palm Bch (3%)	Kansas City (3%)
	Orlando (3%)	Norfolk (3%)	Raleigh (3%)	Fort Worth (2.5%)
	Raleigh (3%)	Richmond (2%)	Baltimore (3%)	San Antonio (2%)
	Richmond (2.5%)	Charlotte (2%)	Charlotte (3%)	Orlando (2%)
Note: Residents Under Age 65. "All Other" is whites, Hispanics, Asian Americans. Facts are as of 2000 i.e. post-migration.				
Source: My tabulations of 5% 2000 PUMS				

Chart 9A

Personal Characteristics Do Not Explain Different Reactions to Racism				
	African Americans		Whites	
	Migrants of Northern Origin	Migrants of Southern Origin	Migrants of Northern Origin	Migrants of Southern Origin
Mean Age	36.0	34.5	36.4	37.2
% in Female	50%	48%	34%	31%
% Married	31%	33%	47%	50%
% in Blue Collar Professions	37%	35%	27%	26%
Mean Education Attainment	11.5	11.7	12.4	12.4
% Stayed in Region of Origin	59%	79%	77%	71%

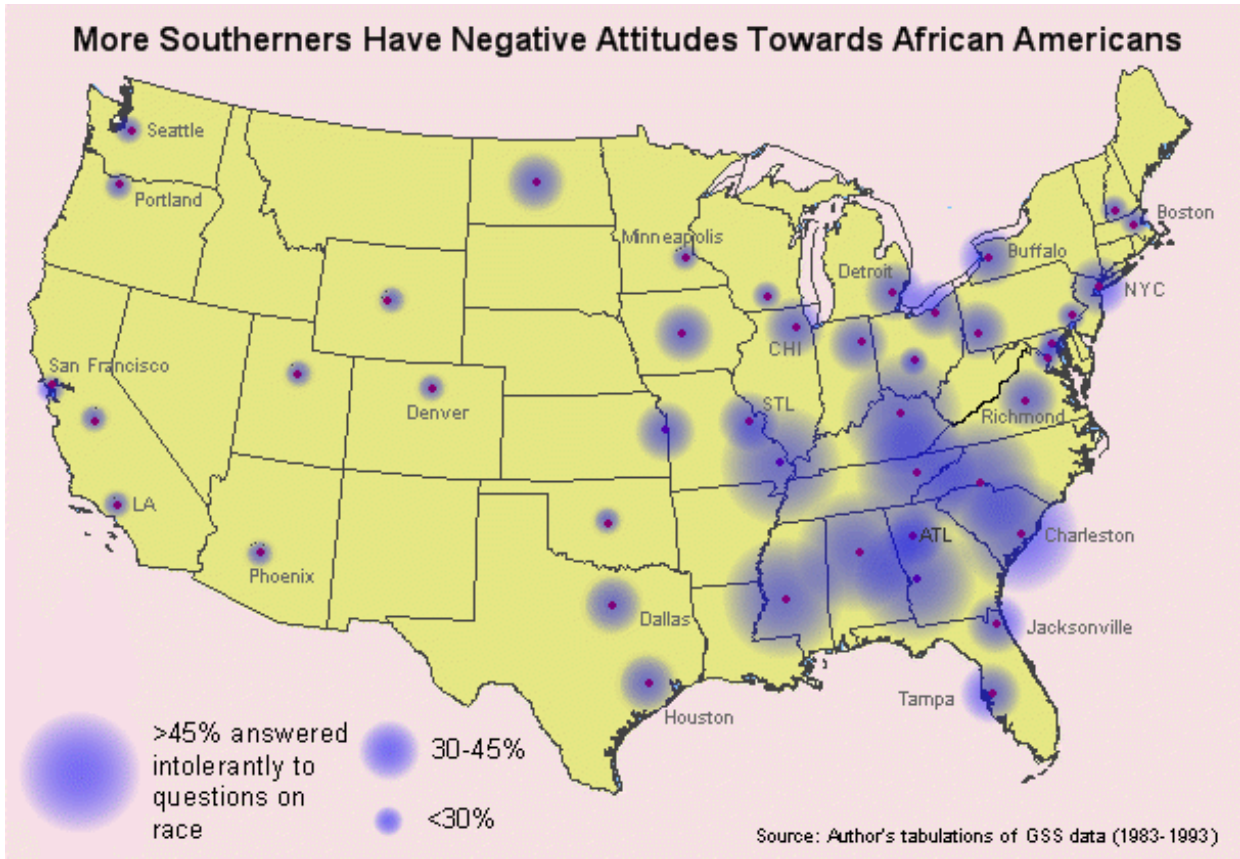
Note: Under Age 65. Education Attainment 11=Some College no degree 12=Associates Degree 14=Bachelors Degree
Source: Author's tabulations of 5% 2000 IPUMS.

Chart 9B

Atlanta Is A Universal Favorite, but Mid-Westerners and North-Easterners Have Different Selection Patterns										
Origin	New York, NY	% Chicago	% Boston	% Detroit	% Los Angeles	%	%			
Destination	Nassau Co, NY	10	Gary, IN	6	Brockton, MA	10	Ann Arbor, MI	11	Riverside, CA	27
	Atlanta, GA	8	Atlanta, GA	6	Atlanta, GA	9	Atlanta, GA	9	Las Vegas, NV	7
	Washington, DC	5	Minneapolis-St. Paul, MN	5	Washington, DC	5	Las Vegas, NV	3	Atlanta, GA	4
	Newark, NJ	4	Milwaukee, WI	4	Providence, RI	5	Lansing, MI	3	Orange County, CA	4
	Norfolk, VA	3	Indianapolis, IN	2	New York, NY	5	Chicago, IL	3	Oakland, CA	3
	Fort Lauderdale FL	3	Houston, TX	2	Lowell, MA	3	Kalamazoo, MI	3	San Diego, CA	3
	Orlando, FL	2	Memphis, TN	2	Philadelphia, PA	3	Birmingham, AL	2	Phoenix, AZ	2
	Philadelphia, PA	2	Champaign, IL	2	Orlando, FL	2	Memphis, TN	2	Houston, TX	2
	Baltimore, MD	2	Los Angeles, CA	2	Los Angeles, CA	2	Norfolk, VA	2	Dallas, TX	2
	Bergen-Passaic, NJ	2	Bloomington, IL	1	New Bedford, MA	2	Nashville, TN	2	Washington, DC	2
	Richmond, VA	2	St. Louis, MO	1	Miami, FL	2	Los Angeles, CA	2	Sacramento, CA	2
	Raleigh-Durham, NC	2	Las Vegas, NV	1	Lawrence, MA	1	Cleveland, OH	2	Chicago, IL	1
	Charlotte, SC	2	Phoenix, AZ	1	Fitchburg, MA	1	Flint, MI	2	Seattle, WA	1
	Middlesex, NJ	1	Dallas, TX	1	Tampa, FL	1	New York, NY	2	Bakersfield, CA	1
	Albany, NY	1	Jackson, MS	1	Raleigh, NC	1	Grand Rapids, MI	1	St. Louis, MO	1
	Sum	49		39		53		45		64

Source: My tabulations of 2000 5% PUMS

Chart 10



Map 5

Some of the Most Racially Intolerant Places Have Shown the Most Progress						
1973-1982 (For Non-Black Respondents)		Support Law Against Intermarriage	Won't Vote for Black President	Support Residential Segregation	Object to School Half Black	Blacks Shouldn't Push When They Aren't Wanted
	Birmingham, AL	67%	52%	65%	53%	89%
	Atlanta, GA	56%	40%	52%	30%	72%
	Knoxville, TN	42%	24%	40%	19%	76%
	Houston, TX	39%	25%	30%	24%	65%
	Buffalo, NY	29%	17%	23%	34%	64%
	Chicago, IL	24%	10%	50%	15%	67%
	Baltimore, MD	30%	10%	39%	12%	66%
	Philadelphia, PA - NJ	28%	15%	27%	24%	58%
	Los Angeles-Long Beach	21%	11%	30%	22%	63%
	Boston, MA	18%	13%	30%	24%	61%
	Detroit, MI	14%	5%	27%	31%	66%
	Newark, NJ	21%	20%	13%	30%	48%
	Denver, CO	19%	9%	10%	14%	52%
	All Areas	34%	18%	36%	21%	70%
1983-1993 (For Non-Black Respondents)		Support Law Against Intermarriage	Won't Vote for Black President	Support Residential Segregation	Object to School Half Black	Blacks Shouldn't Push When They Aren't Wanted
	Birmingham, AL	48%	32%	31%	26%	69%
	Knoxville, TN	52%	26%	35%	24%	56%
	Houston, TX	31%	18%	25%	33%	52%
	Atlanta, GA	25%	18%	24%	22%	61%
	Detroit, MI	18%	14%	30%	33%	48%
	Chicago, IL	18%	14%	32%	24%	51%
	Buffalo, NY	28%	13%	24%	18%	51%
	Baltimore, MD	21%	7%	17%	14%	59%
	Newark, NJ	13%	8%	19%	31%	38%
	Philadelphia, PA - NJ	16%	8%	22%	21%	41%
	Boston, MA	13%	10%	17%	12%	41%
	Denver, CO	9%	8%	9%	15%	46%
	Los Angeles-Long Beach	7%	8%	12%	17%	42%
	All Areas	25%	15%	24%	18%	46%

Source: My tabulations of GSS data.

Chart 11

Assaults on White Police Officers and Jews are Strong Instruments		
Endogeneous Variable	<i>Instrument</i>	F-Statistic
Anti-African American Hate Crime Rate	<i>Assaults on White Police Officers per Afr. American</i>	1.4 x 10 ⁶
Total Hate Crimes against African American	<i>Total Hate Crimes Against Jews</i>	2.5 x 10 ⁵

Source: OLS regression of Endogenous Variable on Instrument and Other Exogeneous Variables

Chart 12

African American Migrants Are Less Disposed to Crime				
	<i>Afr. Am Migrant</i>	<i>Afr. Am NonMigrant</i>	White Migrant	White NonMigrant
Unemployment Rate	7.10%	7.30%	3.20%	2.70%
Mean Years Education	11.2	10	12	11
Share < High School Degree	14%	28%	8%	16%
Median Household Income	\$ 31,000	\$ 29,000	\$ 44,330	\$ 45,220

Source: My tabulations of 2000 PUMS

Chart 13A

African American Migrants Are Less Disposed to Racial Intolerance				
	<i>Afr. Am. Migrant</i>	<i>Afr. Am. NonMigrant</i>	White Migrant	White NonMigrant
Trust NO White People (1982)	10.5%	11.3%	N/A	N/A
Think Schools Should Be Separate (1973-85)	3.1%	4.7%	10.7%	13.0%
Would Not Accept Opposite Race Over for Dinner (1973-85)	4.7%	6.8%	23.0%	30.0%
Want Law Against Interracial Marriage (1973-94)	6.7%	7.5%	26.0%	33.0%
Don't Want Kids Going to School With Mostly Opposite Race (1973-94)	10.6%	11.0%	44.5%	46.5%
Average Feeling toward Jews (0 is coldest, 100 is warmest) (1973-94)	62.7	57.6	63.2	61.8
Source: My tabulations of GSS.				

Chart 13B

Data Appendix

The main source of individual migration data for this study is the 2000 5% Census (IPUMS). For robustness purposes, I draw an additional individual migration dataset from the 2000 CPS and use the same specification. As a general point affecting any migration study, Nakosteen and Zimmer (1980) show a fundamental difference between non-migrants and migrants beyond the observable ones in a model. This problem of self-selection poses a potential bias in migration decisions that are modeled using both non-migrants and migrants (Heckman 1979). Typically migration probabilities or inverse Mills ratios for each individual is used to control for selection. In the conditional logit model, these individual -specific correction terms are completely absorbed by the fixed effects. In the estimations, I identify migrants as those moving from one metro area to a different metro area between 1995 and 2000.⁵ All migrants possess the certain unobservable characteristic that generates the selection of migrants from non-migrants. I explain the destination choices of individuals in the selected group comparing them only to other individuals with this same selection. There are 261,202 such non-military migrant households in the IPUMS dataset.

Observed personal characteristics in the IPUMS include age, years of education, race, gender, marital status. I use the race information to form a race indicator for African Americans; those who both report their race as African American and report absence of Hispanic origin are given the value 1 for this dummy. Female respondents correspond to 1 in the gender indicator; the married indicator is 1 if the spouse is present.

I obtained data on racial attitudes from the General Social Survey (GSS) administered by the National Opinions Research Center (NORC) at the University of Chicago for the years 1973 to 1993. Measuring racial tension in different areas is key to my re-

⁵In the tables and charts above migrants included those with non-metro areas as their origin and/or destination. The lack of data on the amenities of non-metro areas prevents me from using them in the estimations.

search question yet these data do not explicitly contain geographic location or employ standard metro area codes. The decoding procedure is extremely costly. In addition to the coding algorithm changing for different sample years, it also changes within a sample. Furthermore, the decoded values are not designed to correspond to the standard metro area codes used in the IPUMS micro data. That said, the standard metro area codes are loosely a function of the alphabetical order of the metro names, thus an alphabetical listing of the GSS areas could facilitate the matching process. Unfortunately, the only source of the GSS metro names paired with their non-standard codes is in hard copy and out of alphabetical order. Thus, manual data entry of the GSS metro names and codes was necessary to match them to the metro areas in the micro data. Finally, the GSS covered several metro areas only partially, and the decoding documentation detailed only the county names without the names of the metro areas these counties fall into. To match the counties in the GSS to their corresponding metro areas in the micro data required searching the documentation of the standard metro area definitions.

All other area characteristics collected outside the IPUMS also required matching by metro area codes. The Uniform Crime Reporting Program (UCRP) provided FBI data on hate crime activity. I constructed a variable for general crimes defined as the sum of burglary, larceny, robbery, and motor vehicle theft also using the UCRP. I used the Bureau of Labor Statistics (BLS) web tables to compile 1994 metro area unemployment rates. Employment and population growth were based on the 1992 and 1994 CPS. The 1994 Consumer Mortgage Home Price Index (CMHPI) provided metro area housing price data. The average temperature and average temperature spread (difference between average high and average low) are also included. WeatherbaseSM organizes data from the National Climatic Data Center (NCDC), and I used their web tables for metro area temperature data. Geographic coordinates to calculate the distance between origin and destination choices were taken from Wikipedia.com.

Finally, because the race of the native population is not an attribute that changes

as a result of new arrivals, I calculated the African American population share of native residents in each metro area using the IPUMS. Native residents are those who were in the location before the migration period started. I also used the number of native residents before the migrants arrived as the total population variable.