Confederate Streets and Black-White Labor Market Differentials

Jhacova Williams[*]

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Abstract

Using a unique dataset, this paper examines the extent to which streets named after prominent Confederate generals reflect an area's racial animus toward blacks and are related to black-white labor market differentials. The analysis shows that Confederate streets are positively associated with a proxy for historical racial animus. Specifically, I show that areas that experienced more historical lynchings have more streets named after prominent Confederate generals today. Examining individual-level data show that blacks who reside in areas that have a relatively higher number of Confederate streets are less likely to be employed, more likely to be employed in low-status occupations, and have lower wages compared to whites. This relationship holds after accounting for levels of educational attainment and race-specific quality of education. I find no evidence that geographic sorting explains these results. Investigating whether these results extend to other groups show that Confederate streets are associated with employment, occupational status, and wage differentials between other minorities and whites.

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[*]Economic Policy Institute, 1225 Eye Street NW, Washington, DC 20005 (email: jwilliams@epi.org). Many thanks to Naci Mocan, Louis-Philippe Beland, Chris Foote, and session participants at the NBER Summer Institute and SOLE for useful comments and discussions.

I Introduction

A 2015 prayer service that turned into a deadly church shooting in Charleston, South Carolina sparked an old debate regarding Confederate symbols after photos depicted the perpetrator displaying the Confederate battle flag. Shortly after the killings of the churchgoers, officials in South Carolina and Alabama ordered the removal of the Confederate flag from state grounds. Additionally, New Orleans became one of the first cities to remove Confederate monuments despite numerous protests, the bombing of the car of a contractor who was hired to remove the monuments, and death threats targeted at local politicians and potential contractors. Considering that many cities and universities have followed suit by removing Confederate symbols from their grounds, some have questioned whether these Confederate symbols represent more than "Southern heritage."

In this paper, I examine whether a particular set of Confederate symbols - streets named after prominent Confederate generals (henceforth Confederate streets) - is associated with labor market differentials between blacks and whites.[1] Prior to the Civil War, many southern states mentioned slavery in their ordinances of succession.[2] Cultural attitudes regarding blacks desired (or lack thereof) position in the economy may have resulted in localities with racist attitudes toward blacks naming Confederate streets. If symbols help create strong bonds among members of a majority group at the exclusion of a minority group, these social bonds can be used to exert power among individuals and impact current conditions (Begić & Mraović 2014, Liu & Hilton 2005, Moeschberger & DeZalia 2014). I hypothesize that present-day symbols of Confederate streets serve as proxies for the persistence of racist attitudes and test whether these proxies are associated with labor market differentials between blacks and whites.

The analysis begins by investigating the extent to which Confederate streets are related to a proxy for an area's historical racial animus.[3] Using data on the number of lynchings the occurred

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[1]Much attention has been devoted to the removal of monuments and flags rather than streets named after Confederate generals. As such, Confederate streets can be viewed as a permanent measure of Confederate symbols since few streets have been renamed.

[2]The Civil War began in 1861 and ended in 1865 with the Confederacy conceding to the Union. Five of the eleven states that succeeded from the Union mentioned slavery in their ordinances of succession with elected representatives in the remaining six stating slavery's integral nature to their economy (Southern Poverty Law Center 2018).

[3]Williams (2018) examines the extent to which historical racial animus, proxied by historical lynchings, continues

from 1882 to 1930, I test whether Confederate streets are associated with lynchings. The results show that areas that experienced more violent racist acts in the past, in the form of lynchings, have more Confederate streets today.

Using individual-level data from IPUMS-USA combined with Confederate street data, the analysis turns to examining whether Confederate streets are associated with labor market differentials between blacks and whites for the outcome variables: employment, occupational status, and wages. After accounting for individual attributes as well as local area characteristics, the results show that blacks who reside in areas with a relatively higher number of Confederate streets are less likely to be employed, more likely to have low-status occupations, and have lower wages compared to their white counterparts.[4] Motivated by the possibility that this finding may be due to differences in quality of education or historical events, the analysis includes additional specifications that account for these potential mechanisms. The results are robust to these alternative specifications.

Next, I examine an alternative explanation for the association between Confederate streets and labor market differentials between blacks and whites - geographic sorting. Since individuals can choose their place of residence, therefore sorting out of (or into) areas that exhibit higher levels of racial animus, my estimates may be biased. I employ two methods to test this alternative explanation. The first method considers an individual's state of birth as random and restricts the sample to individuals who currently live in their state of birth (Charles, Guryan & Pan 2018). The results from this exercise remain statistically significant. The second method examines whether areas with more Confederate streets have higher migration rates during the Great Migration. I find no evidence that geographic sorting explains the relationship between Confederate streets and labor market differentials.

After establishing that there exists a link between Confederate streets and labor market differentials between blacks and whites, I turn to performing a number of falsification exercises. First, I estimate the relationship between streets named after Revolutionary War commanders or

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to influence the political participation of blacks.

[4]Low occupational status includes occupations classified as Craftsmen, Operatives, Service, or Farm Laborers as opposed to occupations classified as Professional, Managerial, or Sales.

Foundering Fathers of the United States (henceforth Revolutionary streets). Considering that the American Revolutionary War arguably did not deal with matters of race, there should not exist a relationship between Revolutionary war commanders and black-white labor market differentials. The estimates from this exercise are statistically insignificant. Next, I consider whether there exists a link between numbered streets (e.g., First, 1st, etc.) and labor market differentials. The estimates from this exercise are close to zero and statistically insignificant.

Lastly, I examine whether this relationship extends to other minority groups. If Confederate streets are symbols which create social bonds among a majority group (Moeschberger & DeZalia 2014), it is plausible that Confederate streets are associated with labor market differentials between other minority groups and whites. The groups of minorities studied are Hispanics, Asians, and foreign-born individuals. The results show that as an area's number of Confederate streets increases, members of each minority group are less likely to be employed, more likely to have low-status occupations, and have lower wages compared to their white counterparts.[5] It is worth noting that while Asians are the only minority group examined that are less likely to be employed in low-status occupations and have higher wages compared to whites in the absence of Confederate streets, Asians who live in areas with a relatively higher number of Confederate streets face an occupational and wage penalty.

The paper is organized as follows. Section II provides the historical background and conceptual framework. Section III describes data and the data sources used in the empirical analysis. The empirical framework, presented in Section IV, is used to motivate the empirical analysis to follow. Section V presents the results and Section VI concludes (to be added later).

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[5]The exception is Hispanics who are more likely to be employed compared to whites in areas with more Confederate streets.

II Historical Background and Conceptual Framework

Historical Background

American slavery utilized free labor from millions of Africans and their descendants and was heavily practiced during the 17th, 18th, and 19th centuries. At the beginning of the American Revolution, all northern and southern colonies practiced slavery and benefited vastly from its practice. Northern colonies engaged heavily in the slave trade and the exportation of products harvested by slaves, whereas southern colonies used slave labor to farm plantations (Office 2011). Due to southerners' use of slave labor, much of the wealth in the south depended on the practice of slavery through the export of products harvested by slaves such as tobacco, rice, and sugar cane. Northern colonies, on the other hand, were able to grow their economy from the influx of immigrants and women leaving farming occupations (Office 2011). At the end of the American Revolution, northern colonies began to discontinue the practice of slavery citing the practice to be a direct contradiction to the Declaration of Independence (Office 2011). Southern colonies, however, continued the practice and vastly increased their wealth after the cotton gin, created in 1793, created a higher demand for cotton pickers on slave plantations.

Differing views on the practice of slavery became a divisive issue between southern and northern residents and reached its peak in the 1850s as a result of three events. First, many northerners were angered by the passage of the Fugitive Slave Act of 1850. This Act required runaway slaves captured in the north be returned to their previous southern slave owners (Harrold 2010). Second, the depiction of slavery in "Uncle Tom's Cabin" which illustrated the brutality of slavery also angered many northerners (Stowe 1852). Finally, the Kansas-Nebraska Act of 1854 contributed to tensions between the north and the south when settlers from the north argued against slavery in the new territory whereas settlers from the south wanted to expand slavery to the new territory. Due to these events, slavery became the central topic in the 1860 Presidential Election where Abraham Lincoln, the Republican Presidential Nominee, argued against slavery while John C. Breckenridge, the Southern Democratic Nominee, argued for the protection and expansion of slavery.

Before the 1860 Presidential Election, southerners vowed to separate from the Union if Abraham Lincoln won the Presidential Election, fearing that he would end the practice of slavery. After Lincoln was elected, seven states namely, Alabama, Florida, Georgia, Louisiana, Mississippi, South Carolina, and Texas attempted to separate from the Union before President Lincoln was sworn into office (Hummel 2013).[6] This separation included southerners denying the government the right to hold, occupy, and possess fort, arsenals, or custom houses within their territory or to collect duties and imposts (Eggleston 1910). President Lincoln declared in his inaugural address that seceding states were still subject to the laws of the United States (Eggleston 1910).

On April 12, 1861, General Beauregard instructed soldiers of the Confederacy to open fire on soldiers of the Union at Fort Sumter, beginning the American Civil War. In response, President Lincoln commissioned 75,000 soldiers to South Carolina signaling open warfare between northern and southern states (Hummel 2013). This war lasted four years, ending May 9, 1865, with the Confederacy conceding to the Union. In all, more than 640,000 soldiers were killed. Following its end, Confederate generals were commemorated by having streets, schools, museums, and statues erected in their honor with symbols erected as early as 1887 and as late as 2001.

Conceptual Framework

The foundational model of labor market discrimination was developed by Becker (1957). Becker's employer discrimination model posits that aversion to cross-racial interaction with blacks among employers, coworkers, and customers cause employers to behave as if the wages of blacks are higher than they actually are due to the disutility whites incur from interacting with blacks (Charles & Guryan 2008, Charles & Guryan 2011). Recent theories of discrimination have expanded to include explanations that differ from racial animus to explain black-white wage gaps ranging from labor force participation and differences in education and skills (Neal & Johnson 1996, O'Neill 1990, Ritter & Taylor 2011, Stratton 1993).[7] Within this framework, I test whether

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[6]Additionally, Arkansas, North Carolina, Tennessee, and Virginia seceded from the Union. I include Kentucky as a Confederate state since it had significant internal support for the Confederacy (Acharya, Blackwell & Sen 2016)

[7]For summaries of theoretical or empirical summaries of discrimination see Cain (1986), (Darity Jr, Guilkey & Winfrey 1996) and (Lang & Lehmann 2012).

Confederate streets are a proxy for an area's racial animus and whether there exists a relationship between Confederate streets and black-white labor market differentials.

A natural question is why would one expect streets named after Confederate generals to be associated with black-white labor market differentials. One explanation can be found in the psychology literature which views symbols (e.g., flags, commemorations, and other social representations) as forms of communicating heritage that allow individuals to connect with both past and present generations (Moeschberger & DeZalia 2014). Moeschberger & DeZalia (2014) state that symbols function to connect past generations by using collective memory, shared history and social bonds to connect individuals. These collective memories and social bonds preserve the past within the culture by allowing members of the majority group to exert power at the exclusion of others. Additionally, symbols can serve to express and maintain cultural narratives, express values and culture to members of a group, and reflect feelings of hatred or oppression (Moeschberger & DeZalia 2014). Considering these findings in psychology, Confederate streets may maintain and express cultural narratives of racist attitudes that existed toward blacks antebellum.

Another explanation can be found in the field of economics that shows that cultural beliefs are persistent (Alesina, Giuliano & Nunn 2013). Alesina et al. (2013) find that a culture of low female labor force participation persisted in areas which historically practiced plow agriculture even after the practice of plow agriculture was discontinued. Mocan & Raschke (2016) find that a culture of racist and xenophobic feelings persisted in Germany following World War II in that people who live in states that provided above-median support for the Nazi Party in the 1928 elections have stronger anti-Semitic feelings today. Acharya et al. (2016) show the persistence of racial resentment toward blacks in that whites who currently reside in counties with a higher prevalence of slavery in 1860 hold high levels of racial resentment towards blacks. Taken together, research in psychology and cultural economics motivate the analysis to follow.

III   Data

Confederate Streets Data

The Confederate street data are constructed using information from the 2015 Census Tiger/Line Shapefiles (Census Shapefiles). Census Shapefiles contain county-level information on all roads (henceforth called streets) in the United States and include the linear feature identifier, the full name of streets, the type of street, and a five-code classification to describe the street.[8] Data are constructed using street names in the former Confederacy.[9]

To identify streets as Confederate, I use the full name of streets included in the Census Shapefiles.[10] Considering that the full name of streets include the direction of a street (e.g., Jefferson Davis NW, E Wade Hampton, etc.) or a street suffix (e.g., Robert E. Lee Blvd., Richard Ewell Court. etc.), the procedure for identifying Confederate streets is two-fold. First, I identify streets that contain the first name of a Confederate general then I identify streets that contain the last name of a Confederate general.[11] Streets that contain the first and last name of a Confederate general are labeled Confederate streets.

Individual-Level Data

The individual-level data come from the 2011-2015 IPUMS-USA. I obtain a respondent's income, employment status, occupation, race, Hispanic origin, birthplace, education, marital status, gender, age, worker classification, weeks worked, and hours worked from the IPUMS-USA.[12]

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[8]The linear feature identifier relates the address range back to the features file.

[9]This includes the following states: Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Texas, and Virginia. Although Kentucky was not apart of the Confederacy, I include Kentucky as a Confederate state since it had significant internal support for the Confederacy (Acharya et al. 2016).

[10]The names of the prominent Confederate generals used in this study are Robert E. Lee, Jefferson Davis, Stonewall Jackson, P.G.T. Beauregard, Braxton Bragg, Jubal Early, Richard Ewell, Nathan Bedford Forrest, A.P. Hill, John B. Hood, Wade Hampton, Joseph E. Johnston, Joseph Brevard Kershaw, James Longstreet, Robert E. Rodes, JEB Stuart, Earl Van Dorn, Raphael Semmes, Nathan G. Evans, George Pickett, Matthew Fontaine Maury, Albert Sidney Johnston, John Mosby, and Bill Anderson.

[11]The procedure searches for the first and last name separately since some street names contain the middle initial of a Confederate general.

[12]Income is an individual's pre-tax income earned in the previous year. Employment indicates whether an individual is employed, unemployed, or not in the labor force. Individuals who report not being in the labor force are excluded

To examine black-white labor market differentials, I construct three outcome variables. The first variable, hourly wage, is computed by dividing income by the product of weeks worked and hours usually worked. The second variable, employment, indicates whether or not an individual is employed and is restricted to individuals in the labor force. The third variable, occupational status, indicates if an individual is employed in a low-status occupation (e.g., Craftsmen, Operatives, Service, Farm Laborers) or not (e.g., Professional, Managerial, Sales).

PUMA-level Data

The lowest geographic-level for a respondent in the IPUMS-USA is the public-use micro area (PUMA).[13] To ensure each respondent is assigned the appropriate number of Confederate streets based on his or her PUMA of residence, I use a geographic correspondence obtained from the Missouri Census Data Center's (MCDC) website. This correspondence allows for the Confederate streets data to be aggregated to the PUMA-level.

The MCDC provides a geographic correspondence that maps counties to PUMAs as well as an allocation factor that provides the share of a county's land area (in square miles) that is contained in a PUMA. The allocation factor is needed because a PUMA can contain one county or multiple counties, and a county can span multiple PUMAs. Using the allocation factor, I assign the number of Confederate streets by computing the product of the county-level number of Confederate streets and the allocation factor. For example, if county A contains 10 Confederate streets and 60% of the county A's land area is contained in PUMA B, then the number of Confederate streets in PUMA B from county A is 6. This method is computed for all county to PUMA mappings

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from this part of the analysis. The IPUMS-USA categorizes occupations under 284 occupational codes which are collapsed into the following categories: Professional/Technical, Manager/Officials/Proprietors, Sales Workers, Craftsmen, Operatives, Service Workers, and Farm Laborers. Education denotes an individual's highest level of education and is collapsed into two categories to represent at least some college experience or less. Marital status denotes an individual's current marital status and is collapsed into two categories to denote married or single. Workers who identify as self-employed are excluded from analysis. Weeks worked indicates the number of weeks a respondent worked in the previous year and is a categorical variable. The categories include 1-13 weeks, 14-26 weeks, 27-39 weeks, 40-47 weeks, 48-49 weeks, and 50-52 weeks. I use the midpoint of each category as the number of weeks worked for each individual. Hours worked also indicates the number of hours a respondent usually worked in the previous year.

[13]The IPUMS-USA does not identify all counties in the United States to protect the privacy of respondents. PUMAs are areas in which housing units are located and contain 100,000 or more residents yet do not cross state boundaries.

and summed across PUMAs to obtain the PUMA-level Confederate street measure. The main explanatory variable, Confederate streets, is the PUMA-level number of Confederate streets per 1,000 total streets.

To include additional area controls, I obtain county-level data from the 2011-2015 American Community Survey (ACS) to be aggregated to the PUMA-level. The ACS provides the marital status for the population 15 years and older, the highest educational attainment for the population 25 years and older, and the median age of individuals. I compute the share married and the share of individuals with at least some college experience aggregated to the PUMA-level using the allocation factor obtained from the MCDC.[14] The allocation factor is not used to construct the PUMA-level median age. Instead, I use the county to PUMA mapping to calculate the average median age in each county.

IV Empirical Framework

To estimate the relationship between Confederate streets and black-white labor market differentials, I estimate the following:

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\begin{aligned}
y_{ipt} =& \delta_0 + \delta_1 Confederate\ streets_{ip} + \delta_2 black_i + \\
& \delta_3(black_i * Confederate\ streets_{ip}) + \delta_4 X_{it} + \delta_5 Z_{ip} + \mu_s + \kappa_t + \epsilon_{ipt},
\end{aligned}
\tag{1}
$$

where i indexes individuals, p indexes PUMA, and t indexes year. The variable y_{ipt} denotes an indicator for employment status, an indicator for occupational status, and log hourly wage. $Confederate\ streets_{ip}$ denotes the number of Confederate streets per 1,000 total streets, $black_i$ is an indicator variable to indicate whether an individual is black, non-Hispanic, US born and X_{it} denotes the set of individual-level covariates which includes a respondent's age (and its square), gender, educational attainment, and marital status. Z_{ip} represents the PUMA-level controls which include median age, the share of individuals with college experience or more, and the share of

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[14]The share married is constructed by computing the product of a) total married and the allocation factor b) males married and the allocation factor, c) female married and the allocation factor and summing males and females married and dividing by total married. Similarly, the share of some college of experience or more is constructed.

individuals married. μ_s and κ_t represent state and year fixed effects respectively. Standard errors are clustered at the PUMA-level. The coefficient of interest, δ_3, estimates the relationship between Confederate streets and black-white labor market differentials.[15]

V Results

Table 1 presents the descriptive statistics. On average, there are 0.196 Confederate streets per 1,000 total streets with a maximum number of 3.587 Confederate streets per 1,000 streets. The length of Confederate streets range between 0 and 18 miles per total miles.[16] Figure 1 shows that the number of Confederate streets varies across PUMAs. A higher percentage of whites are employed compared to blacks with 95% of whites reporting being employed and 88% of blacks reporting being employed. A higher percentage of blacks are in low-status occupations compared to whites with 48% and 32% respectively. Blacks' hourly wages are lower than whites with the log hourly wage of blacks equaling 2.6 and the log hourly wage of whites equaling 2.9.

Confederate Streets and Racial Animus

The analysis begins by estimating the extent to which Confederate streets are associated with a proxy for an area's historical racial animus. Similar to Williams (2018), I obtain data from the Historical American Lynching Data Collection Project (Project HAL) to proxy an area's historical racial animus. These data include all lynching victims' records in Southern counties from 1882 to 1930.[17]

Combining data on the number of lynchings that occurred in a county from 1882 - 1930 with the number of Confederate streets in a county in 2015, I examine whether there exists a relationship between Confederate streets and a proxy for racial animus. Considering that the number (or

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[15]The analysis is restricted to states in which data on the main explanatory variable and control variables are available namely, Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, and Tennessee.

[16]I also compute the number (and length) of Revolutionary streets and Numbered streets to be used in a falsification exercise. See Table 1 for details.

[17]Southern counties include counties in Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, and Tennessee. See Williams (2018) for a detailed discussion of the lynching data.

mileage of streets) may be related to population density, I include historical and contemporary measures of population density. Population density data are obtained from the 1900 and 2010 Census with population density defined as the total population in 1900 (2010) per land area in 1900 (2010).

Figure 2 shows the relationship between Confederate streets and lynchings.[18] This figure shows a positive and strong relationship between Confederate streets and lynchings in that counties with more lynchings in the past having more Confederate streets today. Similarly, there exists a positive and statistically significant relationship between the mileage of Confederate streets and historical lynchings.

Figure 3 shows the relationship between a falsification exercise that examines the relationship between Revolutionary streets and lynchings.[19] The estimates are close to zero and are statistically insignificant showing that there does not exist a relationship between Revolutionary streets (or mileage) and a proxy for historical racial animus.

Taken together, Figures 2 and 3 show that areas that were exposed to more historical lynchings have more Confederate streets today, yet this relationship does not exist for lynchings and Revolutionary streets.[20] Hence, it is plausible that current measures of Confederate streets may represent the persistence of racial animus within an area.

Black-White Labor Market Differentials

Estimates of Equation 1 are reported in Table 2. Columns (1), (2), and (3) report the preferred estimated coefficients when the dependent variable is an indicator for employment, an indicator for low-status occupation, and low wage respectively. These estimates from this specification also

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[18]Figure 4 is obtained from a binned scatter that controls for population density in 1900 and 2010

[19]Revolutionary streets are streets named after George Washington, William Alexander, Benedict Arnold, John Ashe, George R. Clark, George Clinton, William L. Davidson, Charles Lee, Henry Lee, Benjamin Lincoln, Horatio Gates, Nathanael Greene, William Heath, Robert Howe, Issac Hunger, John Paul Jones, Henry Knox, Marquis de La Fayette, John Lacey, Francis Marion, William Maxwell, Richard Montgomery, Daniel Morgan, Andrew Pickens, Casimir Pulaski, Israel Putnam, Dickinson Raritan, Arthur St. Clair, Philip Schuyler, John Stark, John Sullivan, Anthony Wayne, Artemas Ward, Thomas Jefferson, John Adams, James Madison, Benjamin Franklin, Samuel Adams, Patrick Henry, Thomas Paine, and Alexander Hamilton.

[20]Henceforth, the analysis will focus on the number of Confederate streets rather than the mileage of Confederate streets. For results on the mileage of Confederate streets, see Appendix A.

include individual controls, PUMA controls, state and year fixed effects.[21]

Column (1) shows two main findings. First, blacks are nearly five percentage points less likely to be employed compared to their white counterparts. Second, blacks who reside in areas that have an additional Confederate street per 1,000 total streets are one percentage point less likely to be employed than their white counterpoints. This finding is consistent with the hypothesis that Confederate streets, which plausibly represent the persistence of racial animus, are associated with labor market differentials. In particular, this finding suggests that blacks face an employment penalty when they reside in areas with Confederate streets.

The results in Column (2) are consistent with the employment results seen in Column (1). Specifically, blacks are more than 15 percentage points more likely to be employed in low-status occupations compared to whites. Additionally, for one additional Confederate street per 1,000 total streets, blacks are one percentage point more likely to be employed in low-status occupations compared to their white counterparts, yet this result is not statistically significant.

The final column of Table 2 shows that black wages are 21% lower than whites. For one additional Confederate street per 1,000 total streets, black wages are 3.1% less than whites.

In summary, Table 2 shows that after accounting for individual and PUMA attributes (e.g., education, age, etc.), blacks who reside in areas that have more Confederate streets are less likely to be employed, more likely to be employed in low-status occupations, are have lower wages compared to whites. The findings from Table 2 suggests that blacks, who reside in areas with more Confederate streets, face a labor market penalty. This labor market penalty may be due to areas that held racial resentment toward blacks choosing to name streets after Confederate generals and this racial resentment remaining and persisting in these areas.

Quality of Education

Although the main specification includes an individual's highest level of educational attainment and the PUMA-level share of individuals with at least some college experience, the results

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[21]The baseline results, which do not include individual and PUMA controls, can be seen in the Appendix Table A1. The results are consistent with the findings in the preferred specification.

seen in Table 2 may be biased if there are differences in the quality of education that blacks and whites receive. As such, I include a race-specific quality of education index from Carruthers & Wanamaker (2017) in the preferred specification.[22]

The results, which include the quality of education index, can be seen in Table 3. Similar to Table 2, blacks who reside in areas with a higher number of Confederate streets are less likely to be employed, more likely to be employed in low-status occupations, and have lower wages compared to their white counterparts. Additionally, the estimates from the specification that includes race-specific quality of education remain stable and statistically significant. This finding suggests that differences in quality of education between blacks and whites has little bearing on the relationship the exists between Confederate streets and black-white labor market differentials.

Historical Events

Next, I examine whether these results can be explained by past events rather than current symbols of racial animus. That is, I examine the extent to which historical lynchings or the prevalence of slavery is related to labor market differentials between blacks and whites. If current-day measures of Confederate streets are correlated with historical lynchings or the share of slaves in an area, then these findings may be the result of past acts and not the persistence of racial animus that is represented in present-day symbols of Confederate streets.

To examine whether these findings are the result of past events. I include the black lynching rate and the share of slaves in 1860 into the preferred specification.[23] The results are seen in Table 4. The results show that the results are robust to the inclusion of these additional variables in that blacks who reside in areas with a relatively higher number of Confederate streets are less likely to be employed, more likely to be employed in low-status occupations, and have lower wages compared to whites.

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[22]See Appendix B for details on the race-specific quality of education index.

[23]The blacks lynching rate is the number of blacks lynched from 1882 to 1930 per 1,000 black population. The share of slaves in 1860 is the number of slaves per total population. Both variables are defined at the county-level and are aggregated to the PUMA-level by averaging lynching rates and the share of slaves across counties contained within a PUMA.

Geographic Sorting

While the analysis thus far has shown that there exists an association between Confederate streets and black-white labor market differentials, an alternative explanation for this relationship could be geographic sorting. During the Great Migration, which lasted from 1916 to 1970, millions of blacks migrated away from southern states to northern and western states in search of better economic and social conditions. If blacks with higher incomes or blacks who were employed in occupations with higher status are more likely to move away from areas with higher levels of racial animus, the results may be an artifact of this phenomenon.

To investigate this possibility, I employ two methods. The first method follows Charles et al. (2018) by restricting the sample to individuals who currently live in the same state in which he or she was born. Charles et al. (2018) argues that background discrimination (the state in which someone is born) is as good as random. This form of discrimination may influence the norms and skills that a person attained while young and brings into adulthood (Charles et al. 2018). By restricting the analysis to individuals who currently live in their birth state, the estimates obtained from this exercise are less likely to suffer from outward (or inward) migration given that these individuals did not choose their state of birth. The results, seen in Table 5, support the previous findings. Specifically, blacks are less likely to be employed, more likely to be employed in low-status occupations, and have lower wages compared to whites.

Although the first method examines labor market differentials of individuals who did not choose their current state of residence, it still does not entirely ascertain that geographic sorting during the Great Migration does not explain the results. Hence, the second method examines whether black migration rates during the Great Migration are a function of Confederate streets. In order for geographic sorting to explain the results, high patterns of migration rates would be needed in areas with higher numbers of Confederate streets.

To test for differences in migration rates as a function of Confederate streets, I estimate the following:

$$migration\ rate_c = \alpha_0 + \alpha_1 Confederate\ streets_c + \omega_s + \epsilon_{cs}, \qquad (2)$$

where $migration\ rate_i$ represents a county's percent increase (or decrease) in black population from the previous decennial census. It is worth noting that Equation 2 is estimated for each decennial census from 1910 to 1980.

The coefficient estimates from estimating Equation 2 are plotted in Figure 4. The coefficients are all close to zero and statistically insignificant indicating that there does not exists patterns of higher migration rates from blacks who resided in areas with more Confederate streets during the Great Migration.[24]

Falsification Exercise

Next, I perform two falsification exercises. First, I consider whether Revolutionary streets are associated with labor market differentials between blacks and whites. Considering that the American Revolutionary War did not deal with issues of race in that it was not a result of or a reaction to the possible end of slavery, there should not exist a relationship between Revolutionary streets and labor market differentials. Table 6 presents the results. In each case, there does not exist a statistically significant relationship between Revolutionary streets and labor market differentials between blacks and whites.

Similarly, I examine the relationship between Numbered streets (e.g., First/1st, etc.) and labor market differentials. The results can be seen in Table 7. In each case, the estimates are close to zero and are statistically insignificant.

In summary, the results from two falsification exercises shows that Confederate streets are statistically associated with labor market differentials, yet this relationship does not exist from Revolutionary streets or Numbered streets.

Minorities Labor Market Differentials

Next, the analysis turns to examining whether the association between Confederate streets and labor market differentials extends to other minorities and whites. Specifically, I examine differ-

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[24]See Figure 5 for migration patterns of whites during the Great Migration. The estimates show that whites were more likely to migrate into areas with more Confederate streets in 1950 and 1960.

ences between Hispanics, Asians, and foreign-born individuals compared to whites. If Confederate streets reflect the persistence of feelings of oppression or hatred, it is possible that these negative feelings extend toward "others" in general and is related to labor market differentials.

Table 8 shows the estimates when the dependent variable is an indicator of whether or not a respondent is employed. Column (1) is identical to the previous result obtained from estimating black-white differences in employment propensities and is included for comparison purposes. Column (2) reports the Hispanic-white employment propensity difference. The results show that Hispanics are one percentage points less likely to be employed compared to whites. For one additional Confederate street per 1,000 total streets, Hispanics are 0.9 percentage points more likely to be employed compared to whites. Column (3) reports the Asian-white employment propensity difference. For one additional Confederate street per 1,000 total streets, Asians are 3.8 percentage points less likely to be employed compared to whites. Column (4) reports the estimates comparing individuals who report being born outside of the United States and whites. The estimates show that for one additionasl Confederate street per 1,000 total streets, foreign-born individuals are 0.8 percentage points less likely to be employed compared to whites. While Table 8 shows that Asians and foreign-born individuals are less likely to be employed compared to whites when these groups reside in areas with more Confederate streets, these estimates are statistically insignificant.

Table 9 depicts the estimates when an indicator of occupational status is the dependent variable. Column (1), black-white propensity differentials in occupational status, is identical to the previous result in Column (3) Table 2 and is included for comparison purposes. Column (2) reports the Hispanic-white propensity difference in occupational status. The results show that Hispanics are more than 7 percentage points more likely to be employed in low-status occupations. For one additional Confederate street per 1,000 total streets, Hispanics are 6 percentage points more likely to be employed in low-status occupations compared to whites. While Column (3) shows that Asians are less likely to be employed in low-status occupations, Asians who reside in areas with more Confederate streets face an occupational-status penalty. Specifically, for one additional Confederate street per 1,000 total streets, Asians are 2.4 percentage points more likely to be employed in

low-status occupations. Column (4) reports the estimates from comparing foreign-born individuals to whites. The estimates show that for one additional Confederate street, foreign-born individuals are 0.8 percentage points more likely to be employed in low-status occupations. In all, this exercise shows that Confederate streets are associated with occupational status differentials between minority groups and whites, yet these differences are only statistically significant for Hispanics.

Table 10 presents the estimates when log wage is the dependent variable. Column (1) is identical to the previous result in Column (3) Table 2 and displays the black-white wage gap. Column (2) reports the Hispanic-white wage gap. For one additional Confederate street, Hispanics have hourly wages that are nearly 8% less than that of whites. Column (3) shows that for one additional Confederate street, Asians have hourly wages that are 10% less than whites. The final column shows that for one additional Confederate street, foreign-born individuals have wages that are nearly 3% less than whites. It is worth noting that the wage gap is only statistically significant for blacks and Asians (in comparison to whites).

Taken together, Tables 8, 9, and 10 show that labor market differentials extend to other groups of minorities who reside in areas with a higher number of Confederate streets.

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Confederate Streets

- 0 - 1
- 2 - 3
- 4 - 7
- 8 - 15
- 16 - 25
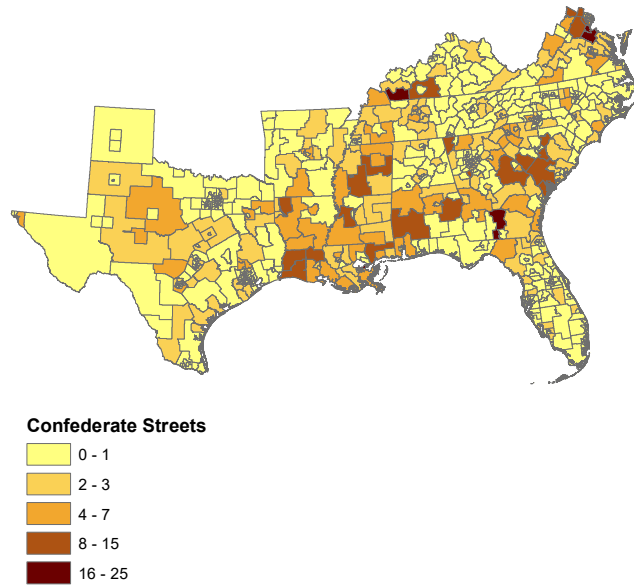
Figure 1
Map of Confederate Streets

Figure 2
Binned scatter of Lynchings and Confederate Streets

Note: Controls for Population density in 1900 and 2010
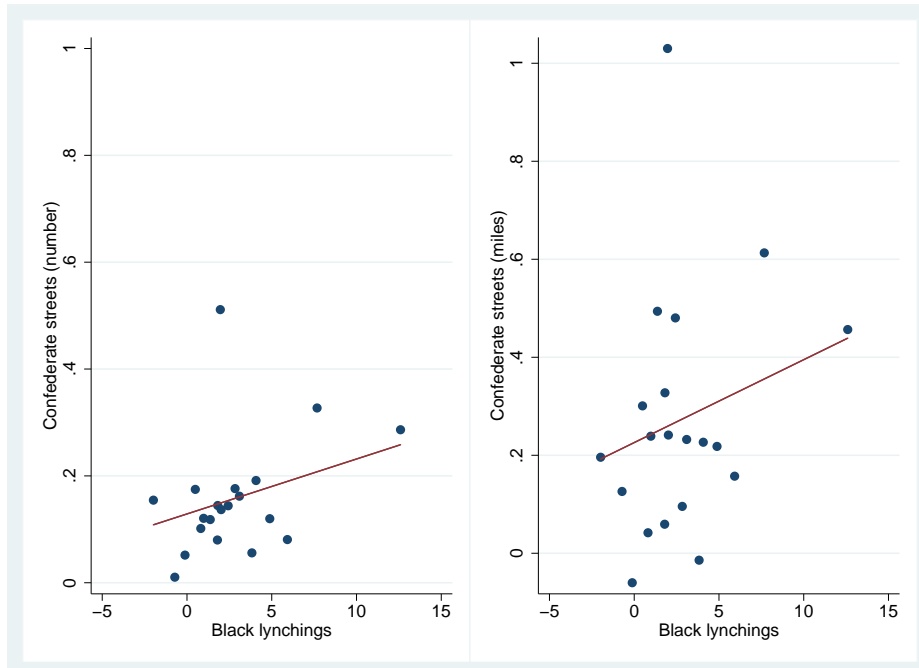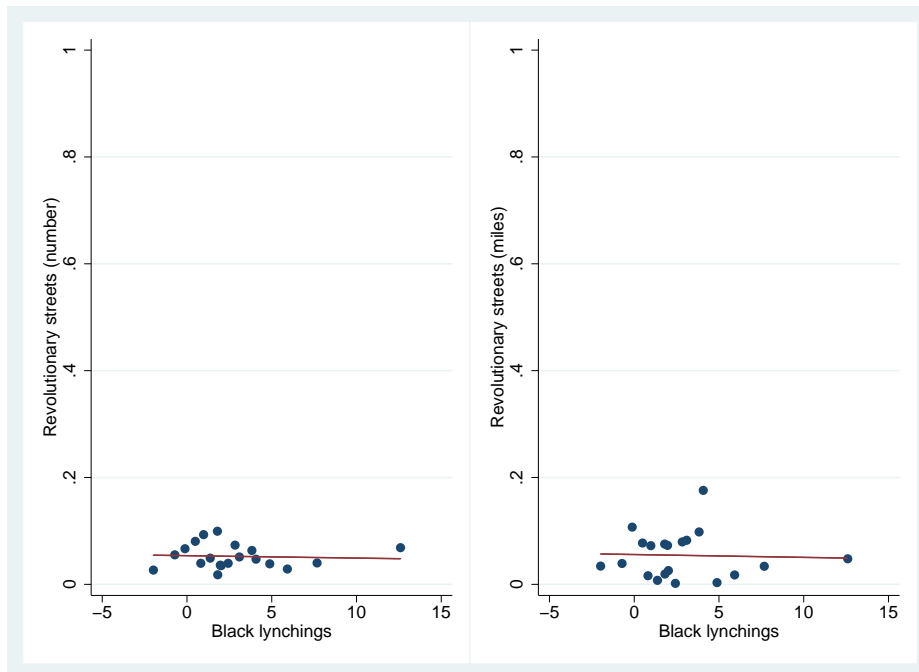

Figure 3
Binned scatter of Lynchings and Revolutionary Streets

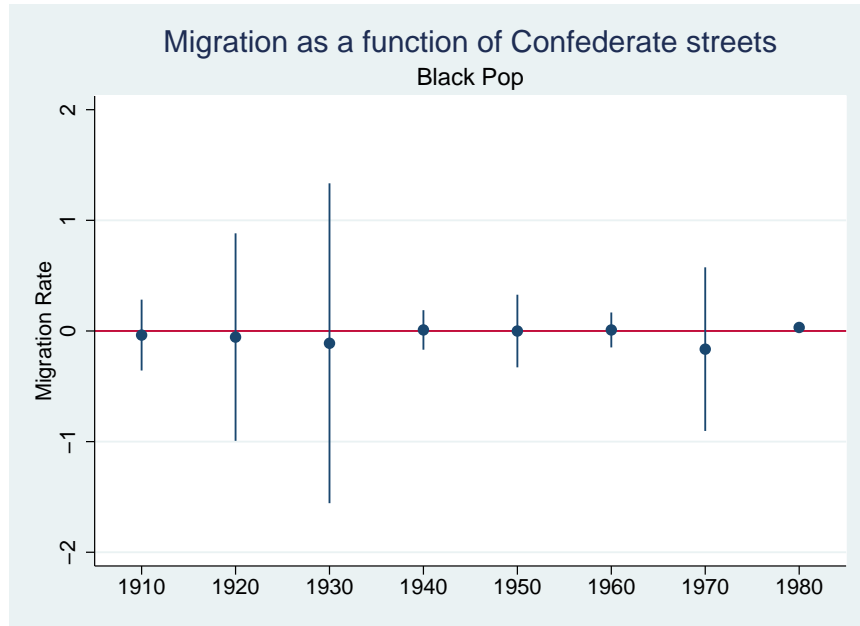Note: Controls for Population density in 1900 and 2010

Figure 4
Great Migration Sorting Patterns
Blacks Only

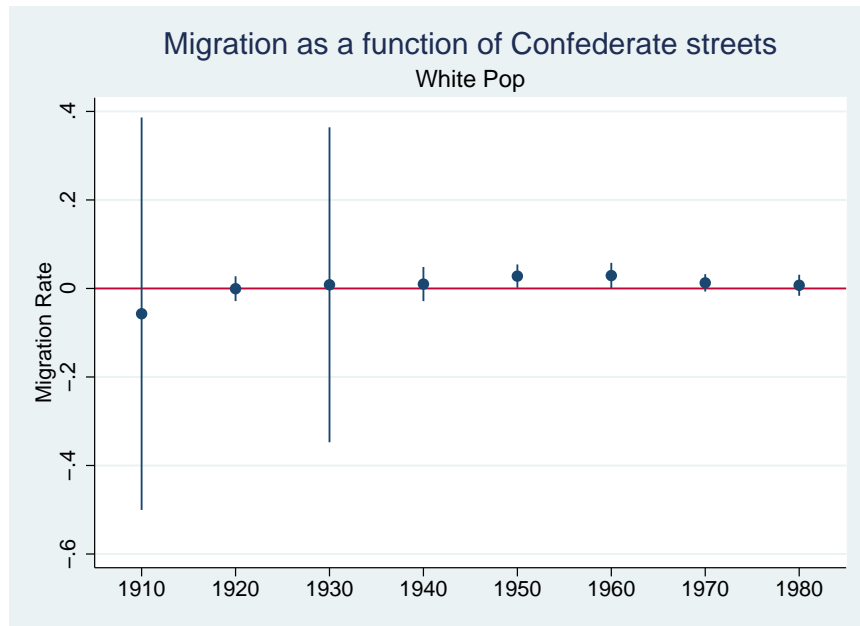Note: State fixed effects included

Figure 5
Great Migration Sorting Patterns
Whites Only

Note: State fixed effects included

Table 1
Descriptive Statistics

Panel A: Individual/PUMA-Level Controls for Blacks	Mean	Standard Deviation	Min	Max	N
Employed	0.879	0.326	0.000	1.000	109,353
Labor-intensive occupation	0.481	0.500	0.000	1.000	106754
Hourly wage	2.640	0.677	-6.234	8.276	100,671
Confederate streets (number)	0.263	0.552	0.000	3.587	109,353
Confederate streets (miles)	0.624	2.003	0.000	18.547	109,353
Age	43.925	10.961	25.000	64.000	109,353
Some college	0.545	0.498	0.000	1.000	109,353
Female	0.588	0.492	0.000	1.000	109,353
Married	0.480	0.500	0.000	1.000	109,353
Median age	37.192	3.222	26.100	50.000	109,353
Share married	0.479	0.058	0.312	0.666	109,353
Share with at least some college	0.552	0.101	0.316	0.790	109,353
Quality of education	-0.354	0.313	-0.993	3.720	109,353
Panel B: Individual/PUMA-Level Controls for Whites	Mean	Standard Deviation	Min	Max	N
Employed	0.945	0.228	0.000	1.000	450,322
Labor-intensive occupation	0.318	0.466	0.000	1.000	446,885
Hourly wage	2.937	0.691	-6.458	9.210	437,016
Age	44.532	11.087	25.000	64.000	450,322
Some college	0.618	0.486	0.000	1.000	450,322
Female	0.491	0.500	0.000	1.000	450,322
Married	0.711	0.453	0.000	1.000	450,322
Median age	38.604	3.408	26.100	50.000	450,322
Share married	0.517	0.054	0.312	0.666	450,322
Share with at least some college	0.534	0.105	0.316	0.790	450,322
Quality of education	0.242	0.335	-0.484	1.431	4503,22
Panel C: Additional Variables	Mean	Standard Deviation	Min	Max	N
Confederate streets (number)	0.196	0.434	0.000	3.587	559,675
Confederate streets (miles)	0.410	1.449	0.000	18.547	559,675
Revolutionary streets (number)	0.099	0.169	0.000	1.225	559,675
Revolutionary streets (miles)	0.972	3.248	0.000	44.437	559,675
Numbered streets	1.337	2.286	0.039	20.791	559,675
Black lynching rate	0.332	0.552	0.000	5.243	559,675
Share slaves in 1860	0.246	0.204	0.003	0.874	559,675

Confederate streets represent the number of streets named after prominent Confederate generals per 1,000 total streets. Confederate streets data are obtained from the 2015 Census Tiger-Shapefiles. Similarly, Revolutionary streets and Numbered streets are constructed using data from the 2015 Census Tiger-Shapefiles. Individual-level data are obtained from the 2011-2015 IPUMS-USA. PUMA data come from the 2011-2015 American Community Survey. The black lynching data come from the Historical American Lynching Project and represents the number of blacks lynched from 1882 to 1930 per 1,000 black population in 1900. The share of slaves come for the 1860 Census. Quality of education come from Carruthers & Wanamaker (2017) and represent the race-specific education index based on school resources from 1910 to 1940.

Table 2

Association Between Confederate Streets and Labor Market Differentials

Number of streets

Dependent Variable:	Employed	Low-status Occ	Log Wage
Black*Confederate streets (number)	-0.009***	0.011	-0.031**
	(0.003)	(0.007)	(0.014)
Black	-0.044***	0.155***	-0.213***
	(0.002)	(0.003)	(0.007)
Confederate streets (number)	0.002	0.001	0.013
	(0.002)	(0.005)	(0.011)
Individual Controls	Yes	Yes	Yes
PUMA Controls	Yes	Yes	Yes
State Fixed Effects	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes
Number of observations	559,675	649,399	561,690
R-Squared	0.039	0.243	0.208

Note: Standard errors are in parentheses and are clustered at the PUMA-level. *$p < 0.10$, **$p < 0.05$, *** $p < 0.01$. Confederate streets are the number of streets named after prominent Confederate generals per 1,000 total streets. Individual controls include age (and its square), marital status, an indicator for some college experience or more, and sex. PUMA controls include median age, population density, the share of individuals with at least some college experience and the share of individuals married. Regressions are weighted using individuals weights provided by IPUMS-USA. See Table 1 for a complete list of data sources.

Table 3

Association Between Confederate Streets and Labor Market Differentials

Quality of Education

Dependent Variable:	Employed	Low-status	Log Wage
Black*Confederate streets (number)	-0.009***	0.009	-0.027*
	(0.003)	(0.007)	(0.014)
Black	-0.040***	0.149***	-0.190***
	(0.003)	(0.005)	(0.010)
Confederate streets (number)	0.002	0.002	0.012
	(0.002)	(0.005)	(0.011)
Quality of education	0.005*	-0.009	0.034***
	(0.003)	(0.006)	(0.012)
Individual Controls	Yes	Yes	Yes
PUMA Controls	Yes	Yes	Yes
State Fixed Effects	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes
Number of observations	559,675	649,399	561,690
R-Squared	0.039	0.243	0.208

Note: Standard errors are in parentheses and are clustered at the PUMA-level. *$p < 0.10$, **$p < 0.05$, *** $p < 0.01$. Confederate streets are the number of streets named after prominent Confederate generals per 1,000 total streets. Quality of education come from Carruthers & Wanamaker (2017) and represent the race-specific education index based on school resources from 1910 to 1940. Individual controls include age (and its square), marital status, an indicator for some college experience or more, and sex. PUMA controls include median age, population density, the share of individuals with at least some college experience and the share of individuals married. Regressions are weighted using individuals weights provided by IPUMS-USA. See Table 1 for a complete list of data sources.

Table 4

Association Between Confederate Streets and Labor Market Differentials

Lynching and Slavery

Dependent Variable:	Employed	Low-status Occ	Log Wage
Black*Confederate streets (number)	-0.010***	0.012*	-0.031**
	(0.003)	(0.007)	(0.014)
Black	-0.044***	0.154***	-0.213***
	(0.002)	(0.003)	(0.007)
Confederate streets (number)	0.002	0.001	0.013
	(0.002)	(0.005)	(0.011)
Black lynching rate	-0.001	0.009***	-0.012**
	(0.001)	(0.003)	(0.005)
Share slaves in 1860	-0.010**	0.029**	0.010
	(0.005)	(0.012)	(0.025)
Individual Controls	Yes	Yes	Yes
PUMA Controls	Yes	Yes	Yes
State Fixed Effects	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes
Number of observations	559,675	649,399	561,690
R-Squared	0.039	0.243	0.208

Note: Standard errors are in parentheses and are clustered at the PUMA-level. *$p < 0.10$, **$p < 0.05$, *** $p < 0.01$. Confederate streets are the number of streets named after prominent Confederate generals per 1,000 total streets. Black lynching rate is the number of blacks who were lynched from 1882 to 1930 per 1,000 black population in 1900. Individual controls include age (and its square), marital status, an indicator for some college experience or more, and sex. PUMA controls include median age, population density, the share of individuals with at least some college experience and the share of individuals married. Regressions are weighted using individuals weights provided by IPUMS-USA. See Table 1 for a complete list of data sources.

Table 5

Association Between Confederate Streets and Labor Market Differentials

(For Stayers)

Dependent Variable:	Employed	Low-status Occ	Log Wage
Black*Confederate streets (number)	-0.009**	0.012**	-0.046***
	(0.004)	(0.006)	(0.014)
Black	-0.043***	0.165***	-0.207***
	(0.003)	(0.003)	(0.007)
Confederate streets (number)	0.001	-0.003	0.021*
	(0.003)	(0.005)	(0.011)
Individual Controls	Yes	Yes	Yes
PUMA Controls	Yes	Yes	Yes
State Fixed Effects	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes
Number of observations	337,023	391,858	337,140
R-Squared	0.045	0.250	0.188

Note: Standard errors are in parentheses and are clustered at the PUMA-level. *$p < 0.10$, **$p < 0.05$, *** $p < 0.01$. Confederate streets are the number of streets named after prominent Confederate generals per 1,000 total streets. Individual controls include age (and its square), marital status, an indicator for some college experience or more, and sex. PUMA controls include median age, population density, the share of individuals with at least some college experience and the share of individuals married. Regressions are weighted using individuals weights provided by IPUMS-USA. See Table 1 for a complete list of data sources.

Table 6

Association Between Revolutionary Streets and Labor Market Differentials

Dependent Variable:	Employed	Low-status Occ	Log Wage
Black*Revolutionary streets (number)	-0.014	-0.015	-0.032
	(0.011)	(0.018)	(0.035)
Black	-0.044***	0.159***	-0.216***
	(0.002)	(0.004)	(0.007)
Revolutionary streets (number)	-0.003	-0.015	0.035+
	(0.005)	(0.012)	(0.022)
Individual Controls	Yes	Yes	Yes
PUMA Controls	Yes	Yes	Yes
State Fixed Effects	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes
Number of observations	559,675	649,399	561,690
R-Squared	0.039	0.243	0.208

Note: Standard errors are in parentheses and are clustered at the PUMA-level. *$p < 0.10$, **$p < 0.05$, *** $p < 0.01$. Revolutionary streets are the number of streets named after prominent American Revolutionary War commanders per 1,000 total streets. Individual controls include age (and its square), marital status, an indicator for some college experience or more, and sex. PUMA controls include median age, population density, the share of individuals with at least some college experience and the share of individuals married. Regressions are weighted using individuals weights provided by IPUMS-USA. See Table 1 for a complete list of data sources.

Table 7

Association Between Numbered Streets and Labor Market Differentials

Dependent Variable:	Employed	Low-status Occ	Log Wage
Black*Numbered streets	-0.000	0.001	-0.004
	(0.001)	(0.002)	(0.002)
Black	-0.046***	0.155***	-0.215***
	(0.002)	(0.004)	(0.007)
Numbered streets	0.001***	-0.001	0.000
	(0.000)	(0.001)	(0.002)
Individual Controls	Yes	Yes	Yes
PUMA Controls	Yes	Yes	Yes
State Fixed Effects	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes
Number of observations	559,675	649,399	561,690
R-Squared	0.039	0.243	0.208

Note: Standard errors are in parentheses and are clustered at the PUMA-level. *$p < 0.10$, **$p < 0.05$, *** $p < 0.01$. Numbered streets are the number of numbered streets (First/1st, Second/2nd, etc.) per 1,000 total streets. Individual controls include age (and its square), marital status, an indicator for some college experience or more, and sex. PUMA controls include median age, population density, the share of individuals with at least some college experience and the share of individuals married. Regressions are weighted using individuals weights provided by IPUMS-USA. See Table 1 for a complete list of data sources.

Table 8

Association Between Confederate Streets and Employment Propensity

(Including Additional Minorities)

Dependent Variable: Employed	(1)	(2)	(3)	(4)
Black*Confederate Streets (number)	-0.009***			
	(0.003)			
Black	-0.044***			
	(0.002)			
Hispanic*Confederate streets (number)		0.009		
		(0.021)		
Hispanic		-0.013		
		(0.015)		
Asian*Confederate streets (number)			-0.038	
			(0.028)	
Asian			-0.001	
			(0.010)	
Foreign-born*Confederate streets (number)				-0.008
				(0.005)
Foreign-Born				-0.001
				(0.002)
Confederate streets (number)	0.002	0.002	0.002	0.002
	(0.002)	(0.002)	(0.002)	(0.002)
Individual Controls	Yes	Yes	Yes	Yes
PUMA Controls	Yes	Yes	Yes	Yes
State Fixed Effects	Yes	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes	Yes
Number of observations	559,675	459,338	459,809	504,906
R-Squared	0.039	0.026	0.026	0.023

Note: Standard errors are in parentheses and are clustered at the PUMA-level. *$p < 0.10$, **$p < 0.05$, *** $p < 0.01$. Confederate streets are the number of streets named after prominent Confederate generals per 1,000 total streets. Individual controls include age (and its square), marital status, an indicator for some college experience or more, and sex. PUMA controls include median age, population density, the share of individuals with at least some college experience and the share of individuals married. Regressions are weighted using individuals weights provided by IPUMS-USA. See Table 1 for a complete list of data sources.

Table 9
Association Between Confederate Streets and Occupation
(Including Additional Minorities)

Dependent Variable: Labor Intensive Occupation	(1)	(2)	(3)	(4)
Black*Confederate Streets (number)	0.011			
	(0.007)			
Black	0.155***			
	(0.003)			
Hispanic*Confederate streets (number)		0.064*		
		(0.033)		
Hispanic		0.077***		
		(0.017)		
Asian*Confederate streets (number)			0.024	
			(0.029)	
Asian			-0.037**	
			(0.015)	
Foreign-born*Confederate streets (number)				0.008
				(0.012)
Foreign-Born				0.143***
				(0.006)
Confederate streets (number)	0.001	0.002	0.002	0.004
	(0.005)	(0.005)	(0.005)	(0.005)
Individual Controls	Yes	Yes	Yes	Yes
PUMA Controls	Yes	Yes	Yes	Yes
State Fixed Effects	Yes	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes	Yes
Number of observations	649,399	530,863	531,336	581,397
R-Squared	0.243	0.231	0.231	0.247

Note: Standard errors are in parentheses and are clustered at the PUMA-level. *p < 0.10, **p < 0.05, *** p < 0.01. Confederate streets are the number of streets named after prominent Confederate generals per 1,000 total streets. Individual controls include age (and its square), marital status, an indicator for some college experience or more, and sex. PUMA controls include median age, population density, the share of individuals with at least some college experience and the share of individuals married. Regressions are weighted using individuals weights provided by IPUMS-USA. See Table 1 for a complete list of data sources.

Table 10

Association Between Confederate Streets and Wage

(Including Additional Minorities)

Dependent Variable: log wage	(1)	(2)	(3)	(4)
Black*Confederate Streets (number)	-0.031**			
	(0.014)			
Black	-0.213***			
	(0.007)			
Hispanic*Confederate streets (number)		-0.078		
		(0.051)		
Hispanic		-0.107***		
		(0.023)		
Asian*Confederate streets (number)			-0.100*	
			(0.057)	
Asian			0.083***	
			(0.025)	
Foreign-born*Confederate streets (number)				-0.027
				(0.022)
Foreign-Born				-0.186***
				(0.010)
Confederate streets (number)	0.013	0.007	0.007	0.008
	(0.011)	(0.011)	(0.011)	(0.011)
Individual Controls	Yes	Yes	Yes	Yes
PUMA Controls	Yes	Yes	Yes	Yes
State Fixed Effects	Yes	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes	Yes
Number of observations	561,690	464,690	465,160	510,166
R-Squared	0.208	0.203	0.202	0.208

Note: Standard errors are in parentheses and are clustered at the PUMA-level. *$p < 0.10$, **$p < 0.05$, *** $p < 0.01$. Confederate streets are the number of streets named after prominent Confederate generals per 1,000 total streets. Individual controls include age (and its square), marital status, an indicator for some college experience or more, and sex. PUMA controls include median age, population density, the share of individuals with at least some college experience and the share of individuals married. Regressions are weighted using individuals weights provided by IPUMS-USA. See Table 1 for a complete list of data sources.

Appendix A: Supplemental Material

Table A1
Association Between Confederate Streets and Labor Market Differentials
Baseline Results

Dependent Variable:	Employed	Low-status Occ	Log Wage
Black*Confederate streets (number)	-0.011***	0.022*	-0.044**
	(0.003)	(0.013)	(0.020)
Black	-0.060***	0.159***	-0.281***
	(0.003)	(0.006)	(0.010)
Confederate streets (number)	0.005**	-0.033***	0.055**
	(0.002)	(0.013)	(0.022)
State Fixed Effects	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes
Number of observations	559,675	649,399	561,690
R-Squared	0.013	0.023	0.034

Note: Standard errors are in parentheses and are clustered at the PUMA-level. $*p < 0.10$, $**p < 0.05$, $***p < 0.01$. Confederate streets are the number of streets named after prominent Confederate generals per 1,000 total streets. Individual controls include age (and its square), marital status, an indicator for some college experience or more, and sex. PUMA controls include median age, population density, the share of individuals with at least some college experience and the share of individuals married. Regressions are weighted using individuals weights provided by IPUMS-USA. See Table 1 for a complete list of data sources.

Table A2

Association Between Confederate Streets and Labor Market Differentials

Length of streets

Dependent Variable:	Employed	Low-status Occ	Log Wage
Black*Confederate streets (miles)	-0.002**	-0.001	-0.003
	(0.001)	(0.002)	(0.004)
Black	-0.045***	0.158***	-0.218***
	(0.002)	(0.003)	(0.006)
Confederate streets (miles)	0.001*	0.001	0.002
	(0.000)	(0.001)	(0.004)
Individual Controls	Yes	Yes	Yes
PUMA Controls	Yes	Yes	Yes
State Fixed Effects	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes
Number of observations	559,675	649,399	561,690
R-Squared	0.039	0.243	0.208

Note: Standard errors are in parentheses and are clustered at the PUMA-level. *$p < 0.10$, **$p < 0.05$, *** $p < 0.01$. Confederate streets (miles) is the mileage of streets named after prominent Confederate generals per total miles of all streets. Individual controls include age (and its square), marital status, an indicator for some college experience or more, and sex. PUMA controls include median age, population density, the share of individuals with at least some college experience and the share of individuals married. Regressions are weighted using individuals weights provided by IPUMS-USA. See Table 1 for a complete list of data sources.

Appendix B: Data Appendix - Quality of Education

Carruthers & Wanamaker (2017) transcribe county-level measures for race-specific school resources obtained from the U.S. state's department of education or its equivalent state office from 1910 to 1940 from ten southern states.[25] The state department provides eight metrics for school resources for black and white students separately: expenditures per enrolled pupil, expenditures per pupil in average daily attendance (ADA), teachers per enrolled pupil, teachers per pupil in ADA, certified teachers per enrolled pupil, certified teachers per pupil in ADA, term length, and average teacher salary. As in Carruthers & Wanamaker (2017), the quality of education measure is constructed by calculating the Z-score for each metric related to all other counties that report the same metric for the same academic year.[26] The Z index is computed as follows:

$$Z_{scyr} = \frac{M_{scyr} - \overline{M}_{sy}}{\sigma_{sy}}, \tag{3}$$

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[25]Southern states include Alabama, Arkansas, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, and Texas. I assume that the race-specific quality of education remains constant between the historical period and the contemporary period.

[26]Carruthers & Wanamaker (2017) state that at least one race-specific school resource metric is reported each year for each county. Additionally, in most cases, if a white specific metric is reported than the corresponding black metric is reported in the same year.

where s indexes school resource metric, c indexes county, y indexes year, and r indexes race. M_{scyr} indicates the school resource metric; $\overline{M}_{sy}$ and σ_{sy} are the mean and standard deviation of school resource metric s across all county-race observations reporting the same metric in year y respectively. In the case where multiple school metrics are reported in the same county and year, I use the average of Z_{scyr} as the race-specific quality of education measure. The school quality indexed value is aggregated to the PUMA-level with each individual assigned a race-specific school quality index based on his or her PUMA of residence.