Symbols of Oppression: The Role of Confederate Monuments in the Great Migration

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Abstract

Dominant groups worldwide have historically asserted power by constructing in public spaces monuments that glorify their narrative, vis-à-vis their opponents'. How do divisive public symbols affect the location choices of those who oppose them? I investigate this historically and today, focusing on Confederate monuments in the US South - erected by southern whites in the early 20th century and opposed by Black Americans due to their connection to slavery. Historically, I show that southern counties with monuments saw a sharp decline in the Black share of the population - driven by out-migration - following their construction. However, monuments themselves are outcomes of underlying ideological shifts, making causal claims problematic. I thus construct an instrument for the stock of Confederate monuments based on transportation costs to a quasi-monopolist producer and the years in which it was in business. The IV analysis confirms that monuments caused a substantial reduction of the Black share of the population. I complement the historical analysis with an online experiment to assess whether monuments still influence migration choices today. I randomize Confederate monuments in the visual depiction of hypothetical destination cities and ask respondents to consider job offers there. Black respondents request higher reservation wages and are significantly less likely to accept offers.

1 Introduction

Celebratory monuments shape public spaces around the world. Some honor uncontroversial figures, such as poets or inventors, while others reflect ideological or ethnic divisions in society and are typically imposed by dominant groups to assert power or glorify their narrative. In the 20th century, thousands of Soviet and fascist monuments were erected globally, and hundreds of statues of European colonizers stood across Africa before independence.[1] Divisive monuments continue to attract political attention. Memorials of past authoritarian leaders serve as rallying points for supporters of their legacies, while calls for their removal often spark protests and conflict. For example, in the past decade, Confederate monuments in the US became central to Black Lives Matter protests, while their removals triggered reactions from white supremacist groups. An emerging empirical literature has shown that (removals of) divisive monuments significantly affect voting behavior (Rozenas et al. 2022, Villamil et al. 2021, Taylor 2025) and racial attitudes (Rahnama 2023), but very little is known about their impact on opposing groups' location choices.[2] Moreover, constructions and removals of ideological symbols inherently reflect concurrent local surges in the ideology they represent, which may be the primary driver of the outcomes analyzed. As a result, existing studies struggle to disentangle the direct effect of monuments from such ideological shifts.[3]

This paper fills these gaps by examining whether Confederate monuments — erected by Southern whites in the early 20th century — have influenced Black Americans' location decisions, both historically and today. Understanding whether groups sort in space based on what is represented in public space is particularly important given the profound economic consequences of racial segregation (Cutler et al. 1997, Ananat 2011). While high non-monetary migration costs make people relatively 'rooted' (Sjaastad 1962, Koşar et al. 2022), prominent

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[1] 6,000 statues of Lenin still stand in Russia (source), and 1,400 fascist monuments remain in Italy (source).

[2] Taylor (2025) examines the effects of pre-1912 Confederate monument construction on voting behavior in the US South and finds evidence of changes in racial composition. However, his analysis is limited to 1878-1912, making the 1910 census the last available demographic data. Since most monuments in his sample were built between 1908-1912, with yearly construction peaking in 1911, this leaves insufficient time to observe effects on migration. Moreover, over 40% of monuments were built after 1912, raising sample selection concerns as early-constructing counties may have been wealthier or more ideologically motivated.

[3] A similar issue is faced by papers studying the effect of political protests on policy, in isolation from the shifts in ideology that generate protests in the first place (Madestam et al. 2013).

theoretical predictions suggest that oppressed groups may relocate away from areas perceived as increasingly hostile (Hirschman 1970, Tiebout 1956). In this paper, I address the endogeneity concerns arising from the correlation between monument placement and local ideology and isolate their causal effect in two complementary ways. First, I use detailed historical data on monument unveilings and leverage exogenous variation in construction costs — which made some areas less likely to erect monuments — to construct an instrument for the stock of monuments. This approach complements a more standard difference-in-differences analysis and shows that construction of Confederate monuments induced Black Americans to migrate elsewhere. Second, I conduct an online experiment that randomizes exposure to the presence of monuments. The experiment reveals that monuments still disproportionately influence Black migration patterns, indicating that they continue to shape segregation today.

The construction of Confederate monuments in the early 20th-century South provides an ideal setting to examine the role of divisive symbols for three main reasons. First, the Confederacy's support for slavery during the Civil War made these monuments highly ethnically divisive, with clearly identifiable groups supporting and opposing them: white and Black southerners, respectively. In contrast, other divisive monuments, such as European fascist or communist ones, involve opposing groups identified primarily by ideology, which is endogenous and harder to observe. I provide evidence from historical newspapers confirming that Confederate monument unveilings received extensive coverage and that Black Americans opposed them from the outset. Second, early 20th-century Black southerners lacked viable political counteractions, as they were largely disenfranchised and faced severe risks in protesting. Given the availability of less ostensibly hostile places within the US, Hirschman (1970)'s exit-voice framework suggests that migration was their most viable response to a more hostile environment. Third, the Confederate monument market was highly concentrated, dominated by a quasi-monopolist firm. High transportation costs due to the monuments' size and weight made counties with a better connection to the firm more likely to erect one. This predetermined variation in monument placement, unrelated to local ideology, forms the basis of my IV strategy.

The historical part of the paper begins by presenting strong motivating evidence that the Black share of the population declined following Confederate monument construction. To

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do so, I exploit the geographic and temporal variation in monument construction using a difference-in-differences strategy. Specifically, I first focus on counties that constructed their first monument during the peak construction years after the 1910 census (1910–1915), and I use never-treated counties as the control group. This exercise shows a progressive decline in the Black share of the population in treated counties relative to controls, which accounts for 1.5 percentage point, primarily driven by an immediate negative impact on Black population growth. An event study incorporating all construction years, rather than peak years alone, qualitatively confirms these results, indicating a 5 percentage point decline in the Black share of the population. While county-level data cannot distinguish between demographic shifts due to migration, fertility, or mortality, I use intercensus-linked individual-level data and confirm that Black out-migration drives this effect.

Showing that Black out-migration followed monument constructions is not sufficient to establish causality, because other factors — such as concurrent spikes in local racism or economic growth— could both facilitate the construction of such expensive monuments and influence migration decisions. To address concerns about the endogenous timing and location of monuments, I employ an IV approach based on each county's connection to the McNeel Marble Company (MMC), the quasi-monopolistic producer of Confederate monuments that was located in Marietta, Georgia. Specifically, I instrument the stock of statues with the inverse of each county's transportation cost from Marietta in 1890 (from Donaldson et al. 2016) interacted with the period during which the firm operated, conditioning on a set of controls that include each county's connection to other key destinations (primarily New York City, the main destination of migrants, and Richmond, the Confederate capital). This strategy exploits the fact that monuments were heavy, costly to transport, and difficult to move in the early 20th century, meaning that better connection to the producer reduced costs and increased the likelihood of construction. Under the assumption that the instrument — conditional on controls — affects my outcomes only through monument construction, this provides an exogenous source of variation in the number of statues. As a result, I compare otherwise similar areas, differing only in their chances of having a monument due to their connection to MMC. The IV confirms the direction of the difference-in-differences analysis but indicates a larger effect:

a 13 percentage point decline in the Black share of the population. The discrepancy between the two strategies suggests that the diff-in-diff results may be biased downward due to measurement error and the tendency of economically booming counties to both afford monuments and attract migrants.

Finally, I study the long-run effects of monument construction on the economy by examining changes in the value of farmland and buildings. I find that construction induced a reduction in farm values in treated counties, with a 10-year lag. This suggests that the detrimental effect on farmland values caused by the lower population pressure and by the increased scarcity of agricultural labor may have outweighed the southern whites' initial preference for an all-white county. Consistent with this finding, historical evidence suggests that southern whites became worried by the large Black out-migration during the Great Migration (Feigenbaum et al. 2010, Tolnay et al. 1992, Grossman 1991).

In the contemporary part of the paper, I examine whether the historical findings extend to the present, particularly as Confederate monuments have regained salience, and whether they continue to influence location choices today. To test this, I conduct an online experiment on Prolific, sequentially presenting each respondent with five fictitious cities in the US South, each depicted through a set of images. I randomize the inclusion of Confederate monument images within the set of pictures describing each city, ensuring that each city appears to a respondent either with or without a monument. After viewing each city, respondents are asked if they would consider relocating there for a job similar to their most recent one, for a new job offer (presented with details on sector, hours, and wage), and what their reservation wage for relocating is. To ensure incentive compatibility, respondents receive a list of real job offers in a southern city that aligns with their stated preferences. The results indicate that the presence of a Confederate monument reduces Black respondents' willingness to accept job offers and relocate (between 0.33 and 0.53 standard deviations), while increasing their reservation wage by 21%. A significant effect is also observed among southern whites, reflecting shifts in racial attitudes and the stigmatization of racism, but the magnitude is about half that of Black respondents. These findings provide strong evidence that Confederate monuments continue to shape migration patterns, disproportionately deterring Black Americans from certain locations.

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This paper contributes to the literature on racial segregation in the US.[4] While whites' individual action, such as white flight (Card et al. 2008, Boustan 2010, Baum-Snow et al. 2011), and white collective action, including housing market discrimination (Ondrich et al. 1999; Gotham 2000) and zoning policies (Sahn 2008), are well-documented drivers of racial segregation in American cities, infrastructure development (Mahajan 2023) and race-specific preferences for amenities (Waldfogel 2008) have also been shown to generate racial sorting. I complement this literature by showing that divisive monuments, as ideological (dis)amenities that racialize public spaces, affect migration patterns by race. Similarly, by identifying a new ideological push factor in the Great Migration - contributing to 3%–9% of Black out-migration from the South - I contribute to research on migration driven by political oppression (Buggle et al. 2023) and violence (Engel et al. 2007, Bohra-Mishra et al. 2011), particularly in the context of the Great Migration and the discrimination of Black Americans in the early 20th-century (Derenoncourt 2022, Calderon et al. 2023; Black et al. 2015; Bazzi et al. 2023; Chay et al. 2013; Ottinger et al. (2022), Kuziemko et al. 2018; Cascio et al. 2012).

This article also advances the literature on divisive political symbols. While areas with Confederate street names correlate with larger Black-white labor-market gaps (Williams 2021), removals of divisive monuments can help intergroup reconciliation (Rahnama 2025), but also trigger political backlash by increasing electoral support for parties that defend those legacies (Rozenas et al. 2022, Villamil et al. 2021). This study makes three key contributions. First, I introduce a new outcome — differential racial migration — and show that hostile symbols can lead to the relocation of the oppressed group, in line with Tiebout sorting and Hirschman (1970)'s exit-voice framework. Second, this is the first study to exploit exogenous variation in monument construction, in this case using an IV approach. Third, I introduce the first experimental evidence that randomizes exposure to divisive symbols. Together, these methods address the key endogeneity concern inherent in this literature —namely, that ideological shifts may explain both monument constructions (or removals) and the observed behavioral responses, complicating efforts to establish the direct effect of monuments.

My findings align with concurrent work by Taylor (2025), who shows that between 1878 and

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[4]See Boustan 2013 for a detailed overview of the issue.

1912, Confederate monument constructions were followed by an increase in the Democratic vote share, a decrease in turnout, and a reduction in the Black share of the population. However, my study differs in several ways. First, I extend the sample through 1950, thus including nearly all constructions and allowing sufficient time to observe effects on migration after the peak construction years.[5] Second, I complement county-level data with historical individual-level evidence, ruling out alternative demographic explanations—such as changes in mortality, fertility, or white migration—and demonstrating that Black out-migration drives the results. Third, using newspaper data, I show that Confederate monument unveilings received wide local coverage, but did not increase positive mentions of the Confederacy in the long run, suggesting limited influence on local narratives. Fourth, I introduce an IV strategy to isolate the causal effect of monuments. Fifth, I conduct an online experiment showing that exogenous exposure to Confederate monuments still influences migration decisions today, shedding light on the mechanisms behind racial sorting.

2   Conceptual Framework

Divisive monuments can play an independent role in the relocation decision of the oppressed group, extending beyond the short-term ideological shock that led to the demand for monuments in the first place. The construction of divisive monuments, which may succeed or fail based on exogenous factors such as construction costs, can provoke a shock to the salience of racial hostility and discrimination among the oppressed group (Bordalo et al. 2022). Monuments may also influence the local accepted narrative or mobilize the dominant group, inducing the oppressed group to relocate.

Imagine two identical counties, A and B, where two groups are competing for power. In both counties, the dominant group seeks to assert its supremacy in the public arena by constructing a monument that glorifies their views. However, because of purely random factors (such as

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[5]Monuments built between 1913 and 1950 account for almost 40% of those constructed between 1878 and 1950, raising concerns that the pre-1912 sample may select only certain types of treated counties, such as wealthier or more conservative ones. Moreover, extending the time window beyond 1878-1912 is crucial for studying migration, which may take time to unfold. Indeed, the last demographic data in Taylor (2025)'s sample come from the 1910 census, but 50% of the monuments in his sample were built between 1908-1912, and only 18% before 1900, leaving insufficient time to measure effects on migration.

the exogenously higher cost of the same monument in county B), the dominant group succeeds only in constructing it in county A. I ask whether the random presence of the monument in one of these otherwise identical counties can influence the behavior of the competing groups. In particular, I investigate whether it leads the oppressed group in county A to exhibit higher rates of out-migration in the subsequent years compared to the same group in county B.[6] Obviously, a certain level of rivalry between groups and the perception that the monument represents only one group are necessary conditions for this research.[7]

How can monuments impact the oppressed group, in practice? First, the imposition of the monument in public space may have a *direct* effect on the oppressed group, by significantly heightening the salience of the dominant group's relative power (Rozenas et al. 2022) and, relatedly, the salience of racial discrimination. The oppressed group may thus perceive differential levels of hostility across otherwise similar (oppressive) locations, with hostility being more salient in counties with visible monuments. In the context of Confederate monuments, the successful construction of symbols glorifying the defeated side in the Civil War concretely showed that this side and its ideas were once again in power in the South, visually marking the end of the civil rights advancements characterizing Reconstruction. In a context where discrimination was geographically diffuse and hard to measure, monuments may have acted as a coordination device for Black Americans by signaling which places to leave or to avoid. The direct effect is also consistent with the memory-reactivation mechanism discussed in Ochsner et al. (2017) and Fouka et al. (2013): since the great majority of Black people in the South were slaves before the end of the Civil War, the local glorification of the antebellum era through the construction of commemorative monuments may have locally reactivated the collective memory of slavery, making discrimination even more salient and inducing out-migration. Second, monuments can *indirectly* affect the oppressed groups through direct consequences on the surrounding environment. For instance, Confederate monuments may have acted as a

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[6]As this ideal experiment suggests, for a monument to have a causal effect on out-migration, it is not necessary that each individual deliberately chooses to move in response to the monument. Instead, the presence of the monument may trigger a stronger collective perception of discrimination among Black individuals or induce more aggressive behavior among whites, which in turn induces Blacks to leave.

[7]For instance, a divisive symbol may cease to be *divisive* when the conflict ends or when group divisions fade and it stops to be perceived as partisan (e.g., statues of French kings destroyed during the Revolution, but hardly divisive today). Conversely, it may become divisive if those conditions arise (e.g., Columbus, etc.).

coordination device and a gathering point for the dominant group, becoming a destination for parades celebrating Confederate veterans or for gatherings of white supremacists, which in turn may have induced out-migration. Similarly, in the longer run, the presence of a monument, which glorifies the values and the narrative of one group at the expense of another, may crystallize the accepted set of values of a community. A monument celebrating a period of slavery may thus cause the local narrative to evolve in a way that minimizes the severity of slavery, leading to a more hostile environment for Black Americans.

Following Hirschman (1970), oppressed groups can respond in two ways to the increase in the salience of oppression caused by a political symbol. First, they can *voice* against it through voting or protesting. Second, they can *exit* by relocating away from the symbol.[8] In a context in which no political action is available to the oppressed group - as was the case in the early 20th-century South, where Black citizens could not vote and where protests were extremely rare and dangerous for them - and where limits on emigration where low, relocation becomes the main viable action.

In the real world, I cannot replicate the ideal experiment described above; thus, I use an IV approach to introduce an exogenous shock to the likelihood of a county successfully constructing a monument. This allows me to measure the causal effect of all the direct and indirect mechanisms described above. Moreover, I replicate the ideal experiment as closely as possible by conducting an online experiment. In this case, the results capture the impact of the direct channels only. Exposure to the view of the monument does not involve exposure to the indirect channels listed above, but it captures the signal (or memory-reactivation) effect associated with the monuments.

3   Setting

The construction of Confederate monuments in the early 20th-century South provides an ideal setting to study how divisive monuments influence the migration decisions of opposing groups

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[8]A third force, *loyalty*, played an important role according to Hirschman. In the context of migration, this would represent social or cultural ties to the place of origin. The collective nature of migration during the great migration may have weakened *loyalty* to the county of birth.

for three reasons. First, these monuments were ethnically divisive, as southern whites erected them to glorify their past at the expense of Black Americans. Second, the highly concentrated market for monuments (with the McNeel Marble Company as a quasi-monopolist), combined with high transportation costs, made some areas more likely to succed in erecting monuments than others, irrespectively of local ideology. Third, the limited political options for Black Americans suggest that relocation was a the most accessible response to these monuments.

Ethnically Divisive Monuments. Confederate monuments are a typical example of symbols that glorify the narrative of one group at the expense of another. Their divisiveness stems from the central role of slavery in the decision of Southern states to secede. Historians widely agree that the desire to maintain slavery was a primary motive for secession. In fact, all the states that issued declarations of causes justifying their secession cited the preservation of slavery as a primary reason, and these documents discuss the topic extensively (Pierce 2023). In light of this, many historians argue that these monuments were implicitly intended to intimidate Black citizens (Cox 2019).

Confederate monuments have been associated to slavery by Black Americans both today and at the time of contruction. Modern surveys show that Black southerners are significantly more likely than whites to express dislike for Confederate monuments (PRRI-EPU 2022). Similarly, among Southerners recruited in my online experiment, 70% of Black respondents report being disturbed by the presence of Confederate monuments, compared to 50% of white respondents. More importantly, at the time of their construction, Confederate monuments were widely associated with slavery by Black Americans.[9] For example, in 1890, the *Richmond Planet*, one of the most prominent southern Black newspapers, published a series of articles criticizing the unveiling of the monument to Confederate General Robert E. Lee in Richmond. One article argued that "*the honoring of men who represented that cause... serves to reopen the wound of war*". The newspaper also featured articles from other Black publications across the U.S. opposing such monuments. One article stated that "*Lee was one of the greatest generals of modern times... and gave his magnificent abilities to the infamous task of... perpetuating the*

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[9]The False Image of History project collects historical Black newspaper articles across the US that criticized the celebration of the Confederacy. Figures A2, A3 and A4 show a few examples.

system of slavery."[10]

In contrast, white newspapers extensively portrayed monument unveilings in favorable terms.[11] Figure 1 plots the share of newspaper pages containing the words: (*Confederat** and *monument** and (*honor** or *respect**)). These plots demonstrate that unveilings were salient local events, in comparison both with previous years and with counties without a monument. Furthermore, they confirm that newspapers described unveilings in a positive light during the unveiling year and immediately before it, during the fundraising and construction phases. However, discussions about monuments gradually faded, with newspapers in both treated and untreated counties mentioning them at similar rates within a decade. This suggests that monuments had a limited long-term impact on the local narrative.

Figure 1: Share of local newspaper pages about *confedera* + monument* + (honor* or respect*)*
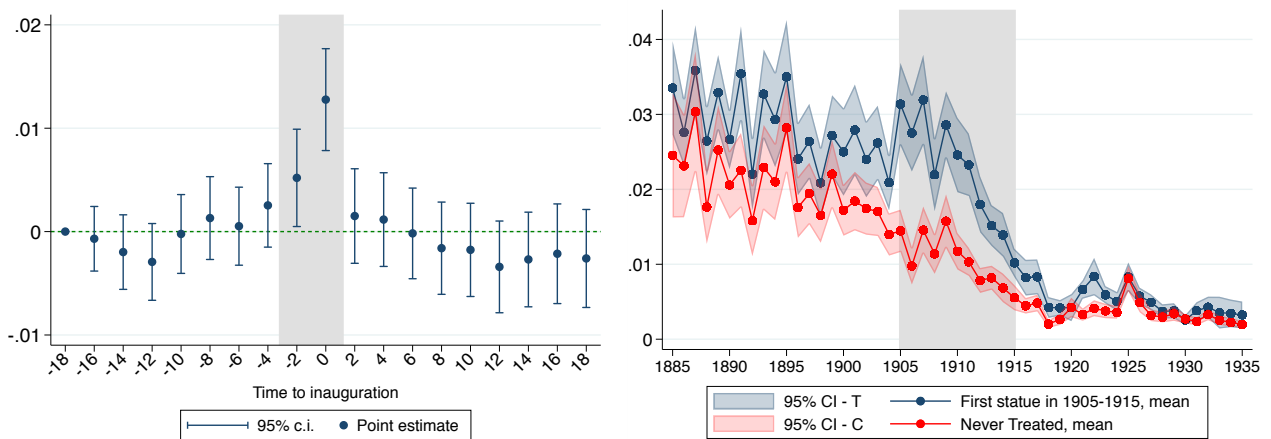
Note: The figure on the left measures newspaper quotes every two years relative to the unveiling of the county's first monument. The figure on the right measures yearly newspaper quotes separately for the treated group of counties with the first monument erected between 1905 and 1915 and for the control group, consisting of counties that were never treated. Sample: counties with at least 100 article pages per year from locally headquartered newspapers. The sample ranges from a minimum of 96 counties in 1885 to a maximum of 220 in 1920.

Monument constructions and connection to McNeel Marble Company   Confederate monuments were purchased by local private groups and primarily produced by the McNeel Marble Company. Given the difficulties in transporting monuments, areas with a better connection to the firm wew more likely to erect them.

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[10]The the Library of Virginia reports a collection of the *Richmond Planet*'s articles opposing constructions.
[11]Figure A1 shows an example of a celebratory article.

The vast majority of Confederate monuments was purchased by white private groups, the most influential of which were the United Daughters of the Confederacy (UDC) and the United Confederate Veterans, which together placed more than two-thirds of all Confederate monuments. The process typically began with fundraising campaigns in the UDC's official newspaper, *Confederate Veteran*. Statues were then acquired and privately placed in public spaces, usually in front of courthouses, with the implicit approval of local authorities. The main purpose of the UDC, often explicitly stated in the Confederate Veteran, was to glorify the Confederacy by promoting the narrative of the "Lost Cause".[12] By 1950, Confederate monuments were present in nearly half of Southern counties (Figure 2), with a strong concentration around Richmond, Virginia, the former Confederate capital.

**Figure 2:** Distribution of all existing Confederate monuments in 1950 by county (509 statues)
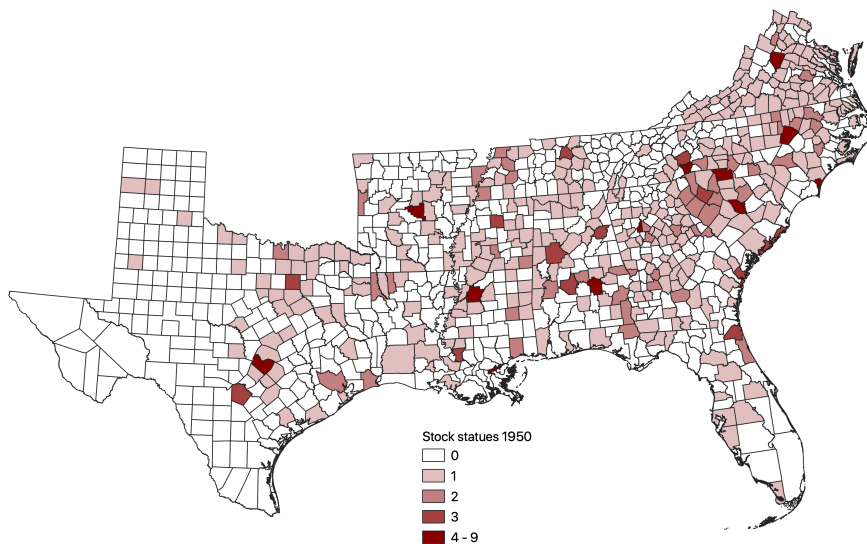
Most Confederate monuments in the South were manufactured and installed by a quasi-monopolistic firm, the McNeel Marble Company (MMC). Founded in 1892 in Georgia, near the quarries of Marietta, the company produced its first Confederate monument for the UDC in 1905. By 1909, MMC had already produced at least 53 monuments for UDC chapters, 29 of which were in Georgia.[13] The firm claimed to have been entrusted with 95% of all

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[12]This narrative erased slavery as a key reason for the Confederacy's decision to secede, instead portraying the Confederate cause as heroic and just.

[13]From MMC's advertisement in the *Confederate Veteran* magazine, December 1909. Figure A7 shows the location of the earliest-known monuments produced by MMC.

Confederate monuments ordered in 1909 - the peak of the construction period - and to have populated the South with thousands of memorials by 1914.[14][15] I argue that MMC emerged as a quasi-monopolist due to two key factors: its preexisting advantages, including its proximity to a granite quarry and specialized expertise in granite and marble carving, and a highly time-concentrated demand for monuments, which made market entry difficult for other firms.[16] As shown in Figure 3, only few Confederate monuments were built before the 20th century and more than half of the monuments were erected between 1905 and 1915. Newspapers and advertisements of the time leveraged anniversaries and the passing of the last surviving veterans to promote monument construction, which indeed peaked in 1911, in anticipation of the Civil War's 50th anniversary.

Figure 3: Number of Confederate monuments constructed by year
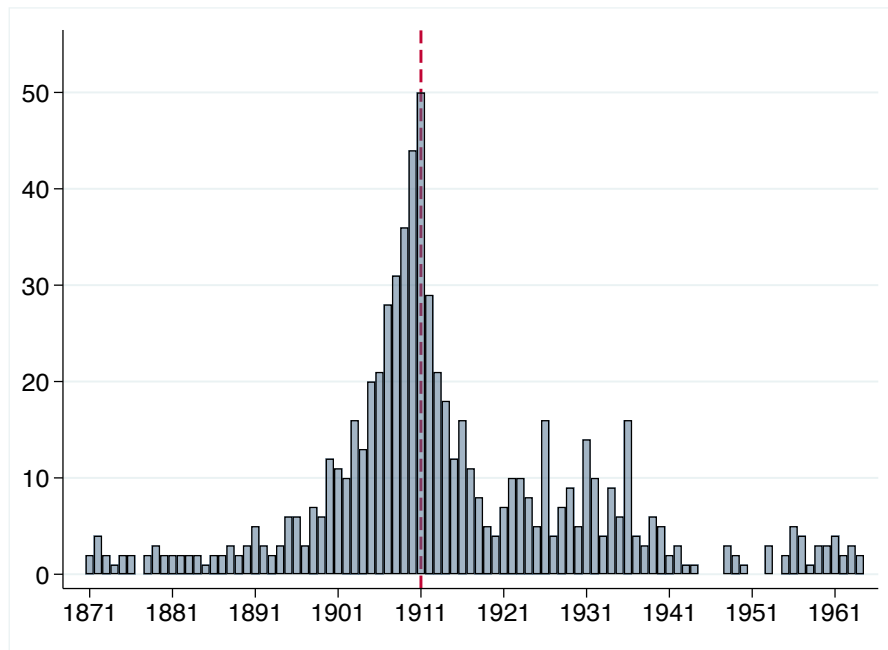
The transportation cost to a county from MMC was an important determinant of the

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[14]Statements published in 1910 and 1914 in the *Confederate Veteran*(Figures A5 and A6). While such statement are hard to verify, and may include sales to privates, a catalog from 1924 lists at least 142 public Confederate monuments produced by the firm (The Atlanta Journal-Constitution, August 2017).

[15]Journalists have suggested that even the demand for monuments may have been artificially induced by MMC (The Southern Scoop, June 2020). In this case, proximity to MMC may not only reduce monument costs but also increase a county's exposure to advertisements (potentially consistent with Figure A22, which shows an increase in newspaper mentions of MMC after 1905, for better connected counties).

[16]The narrow time window of high demand for monuments allowed MMC, a "first mover" in the market, to remain relatively unchallenged. Entering a market with so high fixed costs would have been particularly unprofitable after 1911, when demand started plummeting.

success of construction. Monuments were extremely costly, ranging between $1,600 and $15,000 in 1909, or about 530%-5,000% of the average southerner's yearly income. The discussions and constant calls for funds in the *Confederate Veteran* suggest that the cost of such monuments was generally the only obstacle to construction. Indeed, some fundraising campaigns took years.[17] The typical monument was made of marble or granite, weighed between 8 and 15 tons, and would be transported by railroad, if possible, or trucks owned by MMC, if not. While I cannot obtain the exact transportation cost for the average monument, it is possible to benchmark the cost using estimates for regular freight at the beginning of the last century. Glaeser et al. (2003) estimate an average cost of $0.185 per ton-mile (in 2001 dollars) for transport via railway, implying around $4 (in 2023 dollars) per mile for an average-size monument, to be added to a high interline transfer cost. Donaldson et al. (2016) use transportation costs by wagon in 1900 that are 37 times higher than the cost by train, which would imply a cost of transportation by wagon up to $150 per mile for an average monument. Monuments were likely more expensive to move than regular freights for a fixed weight, but the price was likely concave in distance. All in all, these values suggest that even an additional 100 miles of distance would significantly increase the final price, especially in the absence of the railway.

The combination of a highly concentrated monument market and high transportation costs suggests that proximity to MMC significantly increased a county's likelihood of erecting a Confederate monument. Consistent with this, Figure 9 reveals a significant surge in the stock of statues since 1906 - precisely when MMC commenced its production of Confederate monuments - in counties with stronger connection to MMC, as measured by the inverse of transportation cost in 1890.[18]

Available reactions and Black migration. Another reason the 20th-century South is a useful setting to study reactions to divisive monuments are the different actions available to each group. While whites could express discontent or support at the ballot box, Black citizens, with limited political rights, had migration as their only viable response

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[17]For instance, the fundraising for the Arlington Confederate monument ran from early 1908 to late 1914.

[18]Figure A22 shows even more clearly that counties with stronger connections to MMC engaged in significantly more newspaper discussions about MMC itself (and the Confederacy) since 1905.

At the start of the 20th century, Black Southerners had no means to react to monument construction through voting, as they were largely disenfranchised. Further, the threat of violence made open protests rare and extremely risky for them. The withdrawal of the last northern troops from the former Confederacy in 1877 marked the end of Reconstruction, a period characterized by significant civil rights advances for Black Americans, who could vote and elect local politicians. This was followed by the Jim Crow era, a period of pronounced racism in US history (Logan 1954). During this period, southern Democrats regained full political power and actively enforced policies aimed at limiting Black citizens' civil rights. After 1890, southern states progressively implemented constitutions to impede Black citizens' voting rights, reducing the number of Black registered voters in southern counties to near zero by the early 20th century. These laws remained in place in many cases until 1965. In addition to political oppression, the Civil War left the Southern economy in severe distress. By the early 20th century, the agrarian sector—where most Black Americans were employed—was struggling due to falling international cotton prices and the devastation caused by the boll weevil plague (Feigenbaum et al. 2010).

The combination of an inhospitable economic and political environment in the South and better labor opportunities and political rights in the North led many Black Southerners to migrate. Migration began in the 1870s with about 70,000 individuals heading North. During the 1890s, 185,000 Black Southerners left, and between 1900 and 1950, an additional 3.5 million migrated (Collins 1997). By 1940, 35% of Black Southerners born between 1880 and 1940 had left the South, with peaks of 45% for those born between 1930 and 1940 (see Figure A8). Additionally an even larger within-South migration was taking place.[19]

4   Historical Data

My main dataset consists of decennial census data on the number of inhabitants per county and their ethnicity, as provided by IPUMS USA. I focus on all southern counties between 1870 and

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[19]Using data from the Census Tree between 1880 and 1940, based on 15 milion observations (individal-census year), about 25% of Black southerners in each census had moved to a different southern county by the following census year.

1950.[20] I augment this dataset with Southern Poverty Law Center information on the exact location, year of construction, sponsor, and type of all documented Confederate dedications. I focus on the 509 Confederate monuments constructed in the South before 1950, but I also rely on naming of buildings and streets for secondary analyses. I then merge information from other sources to study alternative outcomes or controls. I use data from the Census of Agriculture to gather information on the average value of farmland and buildings (farms) per acre. I use data from Clubb et al. (2006) to assess how voting patterns changed over time, and data on lynchings from Tolnay et al. (1995) to proxy for the hostility of the local environment. Moreover, I use data from Donaldson et al. (2016), who compute county-to-county matrices of cost of grain transportation accounting for the expansion of the railway network, to proxy for the cost of transport of freight across the South. Tables B1 and B2 report summary statistics for the main variables of interest.[21]

To corroborate my aggregate findings, I rely on individual-level migration data from Census Tree and Census Linking Project. In particular, I use full-census-count data (Ruggles et al. 2021) and the crosswalks by Abramitzky et al. (2020) and Price et al. (2023) to track individuals from different ethnic groups in their migration patterns across counties and decades, taking their age, gender, and migration destination into account.

Finally, I rely on data from *Newspapers.com*, to assess how salient monument construction was among local newspapers, and hand-collected data from the Confederate Veteran magazine and the minutes of annual UDC meetings for information on the existence of UDC chapters and whether chapters purchased a monument from MMC.

5   The Historical Effect of Monuments on Migration

To isolate the historical effect of monuments on migration, I rely on two groups of identification strategies, which differ in the set of assumptions they entail.

The first group includes difference-in-differences and event-study specifications comparing

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[20]More specifically I focus on the 11 states that were part of the Confederacy. I also use data from the Atlas of Historical County Boundaries to test the robustness of my results to changes in county boundaries.

[21]Counties with monuments tend to be larger and have a higher proportion of Black residents.

demographic patters after the construction of a monument. The advantage of these strategies is that I can precisely check the validity of the parallel-trends assumption in the preconstruction period. These strategies are based on the relatively strong assumption that in the absence of a monument, treated and control counties would have behaved in the same way. Thus, it amounts to assuming that the time and location of a monument's construction is exogenous to concurrent local shocks affecting migration decisions. I thus consider these results as a strong motivating evidence that the events surrounding monuments' construction determined outmigration. These results however cannot entirely shed light on the causal effect of monuments in isolation: indeed, the exogeneity assumption may be violated if monuments were a symptom of a local increase in racial discrimination, also affecting migration.

The second identification strategy relaxes this assumption by relying on an IV for the stock of monuments in a county, namely the inverse of the cost of transportation from the main producer of Confederate monuments interacted with the period in which it produced monuments. This allows me to isolate the effect of monuments (rather than of shifts in ideology) on migration, as long as the exclusion restriction conditional on controls is not violated - that is, under the assumption that the connection to the producer affects migration only through the increased number of monuments.

5.1 Difference-in-Differences and Event-Study Analyses

5.1.1 Identification Strategy

County level. My first specification is a difference-in-differences in which never-treated counties are used as a control group for counties with their first monument erected between 1910–15. The advantage of focusing on those peak construction years that closely follow the 1910 census is that it rules out the reverse-causality concern that monument construction temporally followed out-migration. Moreover, given the strong push for construction, common to all the South around the celebration of the 50th anniversary of the Civil War, construction during these years is less likely to be driven by endogenous local factors. With this specification, I can observe preconstruction trends in the two groups and ensure they were not diverging

before the construction of a monument. My preferred outcome of interest is the Black share of the population, as it symmetrically reflects dynamics of both Blacks and whites, but I also study alternative population outcomes.

My main specification is as follows:

$$Y_{c,t} = \sum_{t=1880}^{1950} \gamma_t Treated_c * Decade_t + \beta X_{c,t} + \chi_c + \gamma_{s,t} + \epsilon_{c,t} \tag{1}$$

where, $Y_{c,t}$ is the Black share of the population in county c and decade t. $Treated_c$ is an indicator for counties whose first monument was constructed in 1910–15. χ_c and $\gamma_{s,t}$ are respectively county and state-by-year fixed effects, while $X_{c,t}$ controls for the lagged county population.[22] Standard errors are clustered at the county level. My identifying assumption is that the two groups of counties would have followed the same population pattern in the absence of treatment. Since people could migrate from treated to untreated areas in response to a monument, this effect has to be interpreted as the differential effect across areas.

I corroborate the diff-in-diff estimates with a simple event study wherein my event is the first construction date in each county. This approach allows me to exploit the full time range of constructions, not restricting the period to the peak construction years.[23] As a robustness test, I also exclude counties whose first construction was in the peak years to rely more on the tails of the distribution of monuments' construction years. This approach rules out the possibility that the peak construction years were too specific and may have coincided with other economic or political shocks in the treated counties. Finally, I use the staggered diff-in-diff methods of Sun et al. (2021) and Borusyak et al. (2023) to validate the results.

Both specifications include county and state-by-year fixed effects, ruling out the possibility that time- or county-fixed unobservables or yearly shocks that differently affect each state explain my results. For instance, it rules out the explanations that treated counties were

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[22]Not controlling for lagged population (potentially a "bad control") does not qualitatively affect results.

[23]The event study is described by the following equation, where DC_t is decade relative to the unveiling of the county's first monument, all never-treated counties are among the reference group at $j = -1$ and the other components are like in 2. Table B3 reports the distribution of first unveilings per decade:

$$Y_{c,t} = \sum_{j=-5}^{+5} \gamma_j \mathbb{1}_{\mathbb{DC}t=j} + \beta X_{s,c,t} + \chi_c + \gamma_{s,t} + \epsilon_{c,t} \tag{2}$$

permanently more racist or richer than control ones or that the state-level introduction of Jim Crow laws led to both more constructions and more out-migration.

Individual level. The aggregate county-level analysis shows changes in the racial composition but cannot rule out that these changes were driven by dynamics other than migration, such as shifts in fertility or mortality. To confirm that migration is driving the results, an individual-level analysis is necessary. I replicate Equation 1 at the individual level, using data from the Census Linking Project and Census Tree. Here, the outcome variable is the probability that an individual residing in a county in decade t is found in a different county in decade $t + 1$. This allows to directly assess whether individuals in treated counties are more likely to outmigrate (or less likely to immigrate) after a monument is constructed, controlling for individual characteristics such as education, urban status, occupation, and age.[24]

5.1.2 Results

I find a strong impact of monuments' construction on the outflow of Black Americans from treated counties. The direction of the effect is consistent across specifications.

County level. The results from the difference-in-differences analysis described in Equation 1 are plotted in Figure 4, panel (a). The figure shows parallel trends between the two groups in the pre-treatment period and a decline in the Black share of population right after construction. Because the treated counties unveil monuments between 1910-1915, the change in population (observed from 1920) follows in time the monument constructions, ruling out the reverse causality concern that the decline in the Black population led to monument construction. To better understand what drives the relative decline in the Black population, Figure A10 replicates the analysis for other outcomes, namely Black population growth and intercensal absolute change in population and Figure A9 plots their raw means. These figures make clear that the Black population in treated counties, which were substantially larger, was growing more than in control ones but in a parallel way. Population growth in treated counties dropped

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[24]My individual-level dataset is a repeated cross section of all individuals matched with the following census by the Census Tree. When focusing on immigration rather than out-migration, my outcome variable takes value 1 if the individual residing in the reference county in census year t was in a different county at $t - 1$.

dramatically after the unveilings, to the point that the control ones eventually outperformed them. Therefore, all the outcomes point to a sharp change in the growth of the Black population after the first unveilings, consistent with out-migration. The fact that whites did not follow the same pattern — and, if anything, increased in treated counties — caused the Black share of the population to decline.[25] The effect on Black population growth starts in the first census following unveilings, and the relative decline in the Black population continues for the following decades. This effect is consistent with both a long-lasting impact of the monuments and a story of demographic cumulative causation, where migration from certain areas triggers further migration in the subsequent years (Massey 1990).

Figure 4: Black share of population

(a) Difference-in-differences, equation 1 **(b)** Event study, equation 2
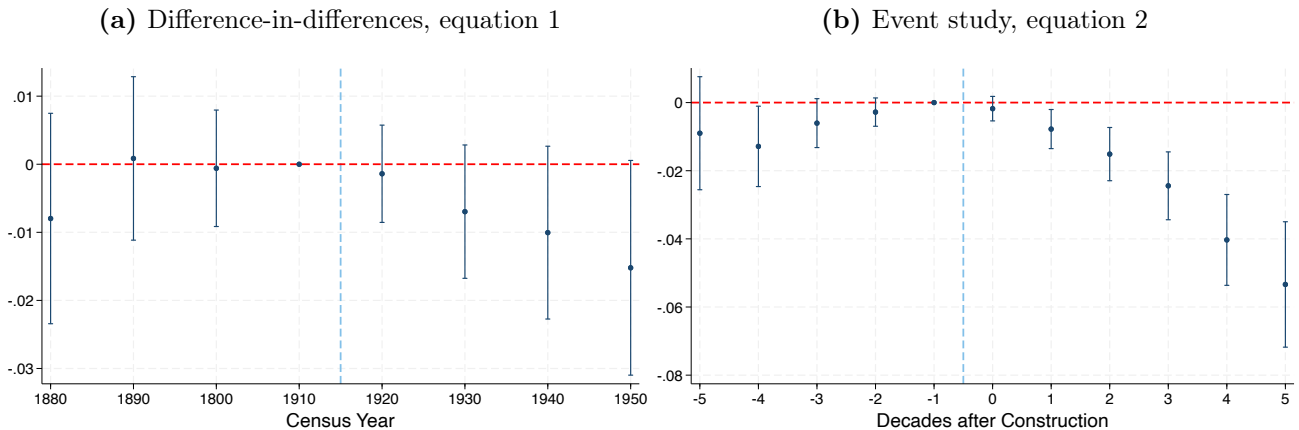
Note: Controls: lag of population; county and state-by-year fixed effects; clustering at county level. 95% c.i.

The difference-in-differences specification, although highly suggestive, relies only on treated counties where the first monument was constructed within a relatively narrow time window (1910-1915). As the Great Migration intensified from the 1880s onward, peaking after the 1940s, one concern is that counties constructing monuments during the peak construction years also experienced a disproportionate upsurge in migration flows around the 1910s for reasons unrelated to the monuments themselves. To reduce this concern, I present results from the event-study strategy, which uses each county's first monument construction as the event date, whenever that occurred. That the construction of the monument marks the beginning of the decline of the Black share of the population is apparent from the trend of the raw

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[25]Figure A11 reports the trend of the white population.

data, displayed in Figure A12. The coefficients from Equation 2 are plotted in panel (b) of Figure 4 and show an even larger change in the Black share of the population, compared to the difference-in-differences specification, following unveilings. The result is virtually unaffected when relying even more on the tails of the distribution of the construction period, by excluding counties with first constructions during 1910–1915.[26]

Both the magnitude and the absence of pre-trends are confirmed when using alternative estimation methods, such as the staggered difference-in-differences methods of Sun et al. (2021) and Borusyak et al. (2023).[27] These results suggest that the construction of a monument, regardless of the decade in which it happened, changed the migration patterns and reduced the Black share of the population by 5 percentage points. Looking at the change in population by race, the effect is driven by a decrease in the Black population while no effect is visible for whites in terms of the average change in units.[28] However, I do find a relative increase in the white population's growth after the construction, a discrepancy suggesting that whites may have migrated to, or avoided leaving, relatively small counties with monuments. I replicate both the event-study and difference-in-differences analyses after redefining fixed effects to account for changes in county borders, as provided by the *Atlas of Historical County Boundaries*. Reassuringly, the results of this analysis confirm my main estimates, showing an even more parallel pre-trend and more significant effects.[29]

Individual level. The county-level analysis shows clearly that the construction of a Confederate monument induces a change in the local demographic composition. While migration is the most likely explanation for these changes, the measures presented so far (and in Taylor (2025)) cannot show this. In theory, shifts in fertility or mortality (Black et al. 2015) are sufficient to generate these results. I use individual-level data to confirm that migration is

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[26]This exercise, reported in Figure A13, further rules out the threat that monuments happened to be constructed at the beginning of the Great Migration in counties that were, for other reasons, more likely to experience migration. Indeed, this analysis assigns more uniform weight to event dates spanning six decades. Thus, the identification threat would require the Great Migration to have "started" at very different times in different counties. Additionally, the construction of monuments would need to precisely, but spuriously, anticipate the beginning of outmigration across counties and decades.

[27]Results are reported respectively in FigureA14 and A15.

[28]See results for Blacks in Figure A16 and for whites in Figure A17.

[29]Results are reported in Figures D34 and D35.

the driver of these results. To do so, I link all individuals that can be tracked across censuses to their location in the following decade, for each census between 1870 and 1940. Therefore, for each county and decade I know the share of individuals who leave or arrive. Then I use Equation 1 and ask whether this share changes, by race, after the first monument is constructed (between 1910 and 1915), in comparison to never-treted counties.[30] Figure 5 confirms that after a monument is constructed, Black individuals are more likely to leave their county, whereas this is not the case for whites. Interestingly, Figure A19 shows that this effect is driven by Black out-migration away from the state and, in particular, away from the South, suggesting that they are choosing a less discriminatory destination. Similarly, Figure 6 shows that Black individuals are slightly less likely than whites to migrate to a county if a monument was constructed. In this case, Figure A19 shows that within-state migration drives the results, consistent with the fact that Black migrants in proximity, who are more likely to know about a Confederate monument in their destination, avoid moving there.
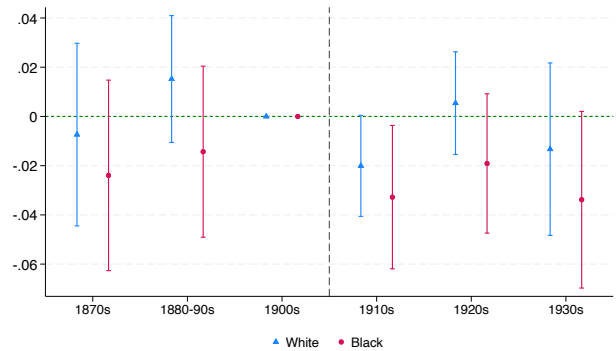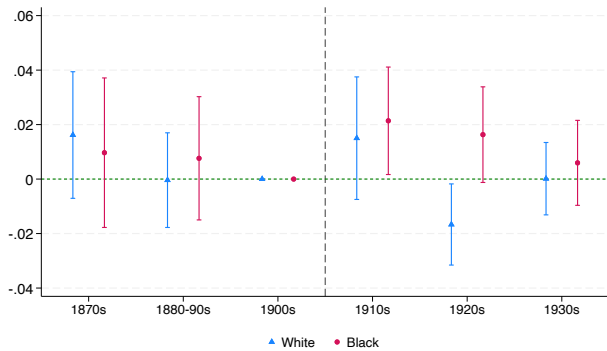
Figure 5: Out-migration: probability that person located in county X in census year t is located in a different county in census year $t+1$

Figure 6: In-migration: probability that person located in county X in census year t was located in a different county in census year t-1

The individual-level effects of monuments on both out-migration and immigration together explain the aggregated effect at the county level. However, comparisons between the two analyses should be made with caution. First, the individual-level data include about 62 million

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[30]I use Equation 1 rather than Equation 2 because individual-level data are not available for the 1890 census. Therefiore, for one decade I cannot assess the probability of migrating within 10 years, but only within 20 years (1880–1900), jeopardizing the event study's pre-trend. This issue is minimized with a the difference-in-differences specification, in which the 20-year migration probability is compared to the same-time-span probability for the control group.

observations—slightly more than half of the total population, specifically those who could be matched in a subsequent census. Second, each person found in the reference county is only matched once with the following decade. This implies that each year, I am conditioning on the set of individuals who are present in the census year and who have chosen not to leave in the previous decade. This differs from the county-level figures, which use the Black share of the population as the outcome, as in that case the coefficients indicate the cumulative change in levels compared to the last pre-construction year.

The results presented in this section show that the construction of a monument in a specific county induced a disproportional outflow of Black Americans from treated counties, which began since the first census after the monuments' unveiling. However, these analyses cannot rule out the possibility that some concurrent (time-changing) local economic or ideological shocks may have induced both Confederate constructions and Black out-migration.

5.2 Instrumental-Variable Approach

In this section I outline my IV approach and show that the results confirm an independent role of monuments in migration.

### 5.2.1 Identification Strategy

The identification strategies described in the previous section show that Black Americans disproportionately left treated counties after monuments were constructed, suggesting monuments may have actively influenced outmigration. However, this is not sufficient to establish that monuments had an independent effect on migration patterns. Indeed, other time- and place-varying factors also affecting migration may explain why monuments were constructed in a given county. For instance, it is possible that during the first decade of the 20th century racial hostility sharply escalated only in some southern counties, which in turn may explain both the construction of monuments and Black Americans' decision to leave.

To address this potential endogeneity problem, I construct an instrument for the stock of monuments. The instrument is based on a county's connection, in terms of freight transportation costs, to the McNeel Marble Company (MMC) in Marietta, Georgia. MMC played a

pivotal role in the proliferation of Confederate monuments in the South by extensively advertising them and ultimately constructing a significant share of those built between 1905 and 1960. Better connection to MMC reduced transportation costs, thereby increasing the likelihood of erecting a monument. Under the assumption that a county's connection to MMC affects migration only through the construction of monuments, conditional on controls, this provides a predetermined source of variation in monument construction. This approach allows for a comparison between otherwise similar areas, where monuments exist only in those with better connectivity to MMC.

As a measure of connection to MMC, I use the inverse of Donaldson et al. (2016)'s county-to-county minimum-cost path, which estimates the lowest grain transportation cost from a county centroid to any other county's centroid. This measure assigns a cost per ton-mile to different means of transportation, including water, rail, and wagon, plus a transfer cost when railroads are disconnected. Notably, the cost assigned to wagon transportation is approximately 37 times higher than rail transportation. To rule out potential endogeneity from railway expansion in response to MMC's needs, I use transport cost values from 1890, before MMC began operating. The first panel of Figure 7 illustrates the geographical variation in the connection to MMC across the South.

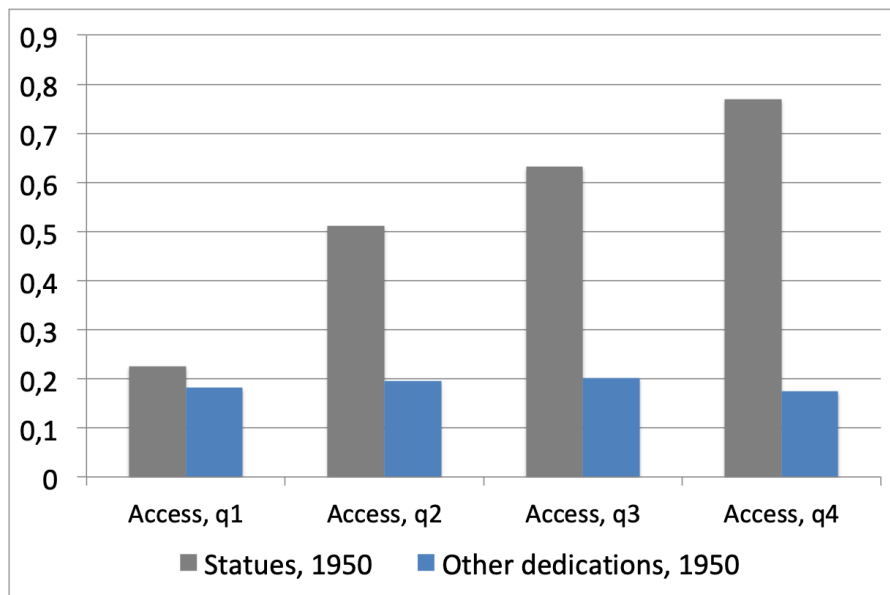**Figure 7:** Connection to MMC in 1890
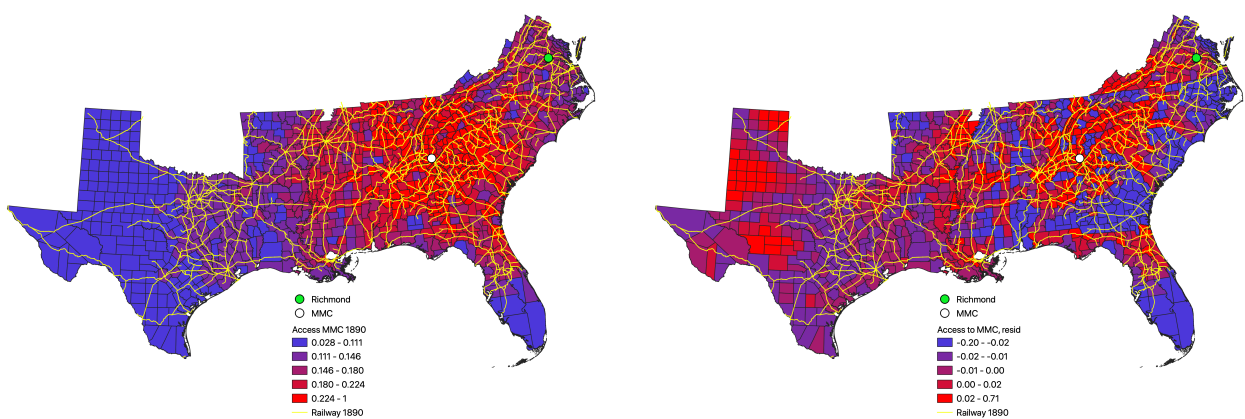
Note: The left figure measures *connection to MMC* in 1890; the figure on the right reports the residuals of *connection to MMC* regressed on connection to NYC and connection to Richmond in 1890, population in 1880, and state fixed effects.

Using connection to MMC as an instrument for monuments while studying Black migration

may raise some concerns. First, places with strong connections to MMC may simply be more pro-Confederacy. If this were true, it could explain both higher demand for monuments and greater hostility toward Black Americans, increasing the likelihood of out-migration. I rule this out by showing that connection to MMC is uncorrelated with ideological attachment to the Confederacy. Figure 8 shows that while counties better connected to MMC had substantially more monuments by 1950 — consistent with monuments being logistically easier for them to obtain — we observe no correlation when examining other types of Confederate dedications, such as naming schools or parks after Confederate leaders. These alternative dedications do not involve logistical difficulties or transportation costs, like monuments do, but instead purely reflect local decisions to celebrate the Confederacy, without frictions.

Figure 8: Confederate statues and other Confederate dedications

Note: Average number of monuments or other dedications by quartile of connection to MMC in 1950

Another concern with the instrument is that a strong connection to MMC — if due to the railway — suggests that a county may also be well-connected to the railway system more in general, potentially facilitating migration and thereby violating the exclusion restriction. Similarly, while 1890 transportation cost to MMC predates both the monuments and the migration waves I study, the historical expansion of the railroad network was non-random, as railways primarily connected major cities. For instance, Richmond played a central role in the railway network's development, being the South's second-largest city in the late 19th century

and the former Confederate capital.[31] I address this concerns in two ways.

First, I include a set of controls — primarily connection to Richmond, connection to Manhattan, lagged county population, historical lynchings, and state fixed effects — and rely on the residuals of the connection to MMC after regressing it on these controls. The second panel of Figure 7 shows the geographical variation of the residualized measure. As depicted in the map, this approach places less emphasis on raw distance from MMC and more on the relative connection to MMC via railway. By controlling for connections to Richmond and New York, I hold constant a county's overall connection to the railway network and instead rely relatively more on its specific connection to MMC, through the ramification of the railway's network. Much of the variation comes from relatively small counties that may have had stronger connections to MMC depending on whether they were located relatively close to railroads connecting major cities. The IV results are presented for both specifications: using connection to MMC alone and after accounting for the aforementioned controls.

Second, and most importantly, the measure of connection to MMC is expected to become relevant only after MMC began constructing Confederate monuments, namely in 1905. Indeed, Figure 9 confirms that connection to MMC predicts a county's stock of monuments more strongly after 1905, highlighting MMC's role in monument construction.[32] I therefore use the interaction between connection to MMC and years after 1905 as an instrument for the stock of monuments. This temporal variation allows me to introduce county and state-by-year fixed effects in my IV specification, further controlling for time-invariant, unobservable cross-county differences that could violate the exclusion restriction (e.g., a county being permanently more racist or wealthier than others).

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[31]During the Civil War, Union troops made significant efforts to disrupt the South's railroad network, aiming to isolate the Confederate capital. After the war, southern railways underwent reconstruction and expansion and by 1890, the Richmond and Danville Railroad Company — connecting Richmond to New Orleans — had become the most developed railway network in the South.

[32]Figure A22 provides additional evidence that the post-1905 surge in the number of statues in counties better connected to MMC is due to MMC's role. In this figure, I replicate the findings in Figure 9, using as the dependent variable the stock of newspaper articles that explicitly reference both MMC and the Confederacy. To do so, I use *Newspapers.com*'s data and link a newspaper to the county where it is headquartered. Even though less than a quarter of all counties host a local newspaper, this analysis reveals that counties with stronger MMC connections engaged in significantly more discussions about MMC and the Confederacy in the years following 1905.

Figure 9: Dynamic first stage: stock of monuments and 1890 connection to MMC by year.
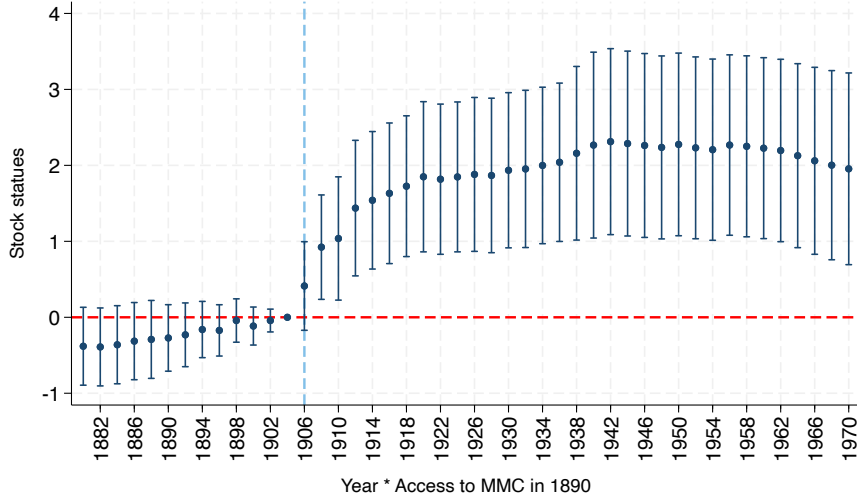
Note. Stock of monuments regressed on *year * connection to MMC in 1890*. Controls: interpolated lagged population, *1890 connection to Richmond * post 1905, connection to NYC, stock of lynchings*, and county and state-by-year FE

Therefore, my IV model is described by the following first- and second-stage equations:

$$First\ Stage : StockMon_{c,t} = \delta Acc1890_c * Post1905_t + \beta X_{c,t} + \chi_c + \gamma_{s,t} + \epsilon_{c,t} \qquad (3)$$

$$Second\ Stage : Y_{c,t} = \delta \widehat{CuMon}_{c,t} + \beta X_{c,t} + \chi_c + \gamma_{s,t} + \epsilon_{c,t} \qquad (4)$$

where $Y_{c,t}$ is the Black population share in decade t, county c, state s; $StockMon_{c,t}$ is the existing stock of monuments; $Acc1890_c$ is connection to MMC in 1890; and $Post1905_t$ is an indicator for years after 1905, when MMC started producing monuments. In both equations, $X_{c,t}$ includes an interaction between the connection to Richmond and $Post1905_t$ to mimic the structure of the instrument and control for possible post-1905 differential increases in attachment for the confederacy (possibly stronger the closer to Richmond); a yearly changing measure of connection to Manhattan to control for the ease of out-migration; the lagged county population; and the stock of lynchings. County and state-by-year fixed effects are always included.[33]

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[33]Table B5 uses a slightly different set of controls to show that they do not affect results.

5.2.2 Results

In what follows I show that monuments had an independent effect on Black out-migration. Table 1 reports the first and second stages of the IV specification outlined in Equation 4. Column (1) shows that the stock of statues at the county level is positively and significantly correlated with my instrument, namely the interaction between connection to MMC in 1890 and years after 1905, conditional on county and state-by-year fixed effects. An increase in connection to MMC from 0 to 1 increases the number of monuments by 2.8. Since connection to MMC ranges from 0.03 to 0.52, with a standard deviation of 0.08, a 1 standard deviation increase in connection increases the average number of monuments by 0.2 units. Column (2) of Table 1 shows that the correlation remains positive and significant after I include my controls, namely connection to Richmond in 1890 interacted with a post-1905 indicator, yearly connection to New York City, lagged county population, and stock of lynchings. In this case, a 1 standard deviation increase in connection to MMC induces a rise in the average number of statues by 0.14. Importantly, the instrument does not correlate with possible predictors of the underlying ideology, other than the monuments. In Table B4 I show that the instrument does not correlate with the stock of lynchings or the stock of Confederate dedications other than monuments (naming schools, parks, and so on after Confederate leaders), after including my set of controls. Since implementing the other dedications does not involve any cost nor economic constraint, they are much better proxies of underlying ideological proximity to Confederate ideals. This suggests that it is the cost of monuments, rather than ideology, that explains why better-connected areas had more monuments.[34] The F-stat passes Staiger and Stock's rule of thumb for weak instruments for both the regressions without and with controls, being respectively 27.7 and 12.9.

Columns (5) and (6) of Table 1 show the second-stage results. The presence of statues substantially reduces the Black share of the population conditional on county and state-by-year fixed characteristics. The result is virtually unaffected by including the set of controls described in the previous paragraph. Both specifications show that the presence of a Confed-

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[34]The insignificant coefficient in column (2) of Table B4 and the lack of trend for other dedications in Figure 8 also rule out the possibility that monument construction (on one side) and school/park/street naming (on the other) may act as substitutes.

Table 1: IV strategy

	FS	FS	OLS	OLS	IV	IV
	(1)	(2)	(3)	(4)	(5)	(6)
	Stock statues	Stock statues	Black share	Black share	Black share	Black share
Connection to Marietta 1890*post1905	2.789***	1.850***				
	(0.530)	(0.519)				
Stock statues			-0.013***	-0.010***	-0.132***	-0.133***
			(0.003)	(0.003)	(0.030)	(0.044)
Connection to Richmond 1890*post1905		0.435		-0.384***		-0.127
		(0.865)		(0.084)		(0.150)
Connection to NYC, yearly		-0.790		0.672***		0.454***
		(0.820)		(0.107)		(0.151)
Numb. past lynchings		0.020***		-0.003***		-0.001
		(0.006)		(0.001)		(0.001)
Lagged population		0.000***		0.000		0.000**
		(0.000)		(0.000)		(0.000)
Observations	7989	7989	7989	7989	7989	7989
R^2	0.680	0.713	0.970	0.972	-1.146	-1.041
County FE	Yes	Yes	Yes	Yes	Yes	Yes
State-by-Year FE	Yes	Yes	Yes	Yes	Yes	Yes
County Cluster	Yes	Yes	Yes	Yes	Yes	Yes
Fstat	27.678	12.893				

Note: Dependent variable: existing stock of statues at time t (columns (1), (2)); share of county population classified as Black in census (columns (3)–(6)). The first stage (FS) is reported in columns (1) and (2), and the two-stage least-squares results are presented in columns (5) and (6). The first stage is reported in columns 1 and 2 and the 2SLS results are presented in columns 5 and 6. *Connection to Marietta 1890*post1905* measures the inverse of county-to-county 1890 minimum transportation cost to MMC when it became relevant for monuments. *Connection to Richmond 1890*post1905* measures the (inverse of) county-to-county 1890 minimum transportation cost to Richmond when it became relevant for monuments. *Connection to NYC* is a yearly estimate of the connection to New York City. Stock of lynching measures the total number of lynchings in the county up to time t. *Lag population* measures population in the previous census. Standard errors clustered at the county level in parentheses. * p<0.10, ** p<0.05, *** p<0.01.

erate statue reduces the Black share of the population by 13 percentage points, compared to counties without statues. Similarly, Table B8 shows the IV result using as the outcome the decennial change in the Black population, indicating an average effect for treated counties of 143 individuals per year. Figures 9 and A21 show respectively the dynamic equivalent of my first-stage and reduced-form equations. The figures show that after 1908 connection to MMC starts to significantly explain the stock of statues and that the Black share of the population starts decreasing soon after, namely during the 1910s.

Robustness. I run several robustness tests to assess the sensitivity of my IV analysis to different specifications. To begin with, in Table D10 I replicate the analysis after redefining fixed effects to account for changes in counties' borders. In this case the IV analysis reports a significant decrease in the Black share of the population by 9 percentage points.

In my main specification in Table 1 I include a yearly measure of connection to the main migration destination, namely New York City, and an interaction between years after 1905 and connection in 1890 to the most relevant Confederate city, namely Richmond, which could in part explain where monuments are located. With the former I control for the most accurate measure of emigrants' cost of migration, while with the latter I mimic the structure of my instrument for where monuments are located. In Table B5 I redefine these controls, showing that results are unchanged if I use the yearly measure of connection to Richmond or the interaction between connection to New York in 1890 and the indicator for years after 1905.

In Tables B6 and B7, I report the first and second stages, respectively, when also including connection to other destinations as additional controls. The idea here is to hold constant how well a county is connected to the rest of the U.S., leveraging more the county's residual connection to MMC. In column (1), I include a yearly measure of connection to Chicago to better control for the cost of migrating northward. In column (2), I drop counties containing state capitals from my sample, as these counties are more likely to erect statues for institutional reasons, regardless of their connection. In column (3), I include a measure of market access in 1890, interacted with the indicator for years after 1905, mimicking the structure of my instrument. This follows Mastrorocco et al. (2024) and holds constant how connected a county is to the rest of the U.S., while leveraging residual variation in connection to MMC.[35] Finally, in column (4), I also control for a decennial measure of connection to New Orleans (the largest city in the South) and each county's state capital to account for within-South migration and within-state rural–urban migration. All these exercises confirm a positive impact of the instrument on monuments and a negative impact of monuments on the Black share of the population.

5.3 Discussion

Magnitudes. The coefficient of the IV specification confirms the negative and significant effect of Confederate monuments on the Black share of the population. However, the magnitude is substantially larger than the one found with the event-study specification in Figure 4.[36]

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[35]I take the 1890 measure of market access from Hornbeck et al. (2021).

[36]The coefficient of the diff-in-diff specification cannot be compared to the IV, as it relies on a very different set of treated counties, namely only the ones with first construction during peak years.

Table D10 shows that after accounting for changes in borders, the IV estimates indicate a 9 percentage point decrease in the Black share of the population, an effect about twice as large as in the event study. Given the large point estimate, the coefficient, both in isolation and in comparison with the other identification strategies, deserves careful discussion.

Taken at face value, both the event study and the IV analysis suggest a very large magnitude. Looking for simplicity at Figure A10 (a), which use absolute numbers, the coefficient implies that a monument caused on average 50 Black Americans to leave a treated county every year. Around 400 counties had at least one monument constructed between 1880 and 1940, suggesting a total effect for the South of 20,000 migrants per year. To give a sense of the magnitude, around 70,000 Black Americans per year left the South between 1900 and 1950 and around three times as many migrated across counties within the South. This implies that about 6.5% of southern Black migrants moved because of monuments. However, this coefficient is an upper bound. Indeed, all my specifications measure the differential impact of the monuments between treated and control counties. Thus, the stable unit treatment value assumption (SUTVA) is violated because a monument in a treated county may induce migration toward the control counties. For example, considering two counties with the exact same demographics - one treated and one not - the movement from the treated to the control county of 100 people would produce a measured coefficient of 200. This would suggest that, according to the event study, 3.25% of all Black migrants did so because of monuments (similar estimates from the IV analysis of Table B8 would indicate around 9.8%). The same logic applies for the Black share of the population, but in that case the larger the differential in population across treated and control counties, the more the coefficient has to be deflated.

The previous considerations are true for all my identification strategies, and yet the IV coefficient is substantially larger than the OLS. Several reasons could explain this. First, the IV analysis may be correcting for time-changing omitted-variable bias. If the demand for statues was uniform among the southern counties, local economic conditions would be the main obstacle to obtaining one. In this case, the wealthier and faster-developing urban areas were both more likely to erect a monument and more likely to receive migrants, which would bias my non-IV estimates downward. Second, the IV measures a local average treatment effect

on compliers rather than an average treatment effect, where compliers in this case are counties who wanted to construct a monument but only did so if they were exogenously well connected to Marietta because of economic constraints. These counties are likely less populated, and the movement of a fixed number of people accounts for a large change in their share of the population. Third, the IV analysis may be correcting for measurement error.[37] Finally, that the instrument is by construction highly spatially correlated suggests that counties with strong access will tend to be clustered. This is not necessarily the case for monuments, which are relatively uniformly distributed across the South; the presence of a monument may even reduce the need for another one in a neighboring county. This would artificially reduce the first stage and thus inflate the IV estimates. This potential issue can be corrected by choosing units of observation larger than the county and thus less spatially correlated. Indeed, Table B9 replicates my IV analysis after collapsing neighboring counties by latitude and longitude within a state, the IV coefficient remains highly significant and the size closely matches the difference-in-differences results.[38]

Mechanisms. Monuments may influence migration in two ways (see Section 2). First, they may have a *direct* effect, increasing the salience of racial discrimination or reactivating the collective memory of slavery, leading the oppressed group to relocate. Second, they may have an *indirect* effect: monuments celebrating the Confederacy may influence the local narrative, making it more racist or conservative. This mechanism should affect newspaper rhetoric, local celebrations, the activity of organized groups such as the Ku Klux Klan and the UDC, and even voting patterns in the decades following the construction. I do not find evidence that the latter mechanisms played a role, indicating that *direct* effects may be the primary drivers of Black out-migration.

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[37]Misclassification may also explain the discrepancy. Southern Poverty Law Center data do not include about 2,600 markers and cemeteries mentioning the Confederacy because they are deemed as merely describing historical events (Gunter et al. 2016); moreover, some of MMC's advertisements mention its creation of thousands of artistic memorials. This suggests that smaller unmapped markers may be more frequent close to the firm. The reduced-form specification would then be correctly estimated, but the first stage may be too low, inflating the second stage.

[38]In Table B9 the new units of observation (subregions) are obtained by using the county's centroid to divide each state in eight latitudinal and eight longitudinal bands, generating up to 64 "cells" per state. I then collapse all counties whose centroid falls in each cell.

I do not find much evidence of indirect mechanisms. As I discuss in more detail in Appendix C, there is no significant long-run increase in local newspapers' positive mentions of the Confederacy, anti-Black slant, or Confederate celebrations. Similarly, I find no evidence that counties with monuments experienced heightened activity during the second wave of the Ku Klux Klan (in the 1920s), as measured by newspaper coverage. However, I do find evidence of stronger UDC activity in treated counties before and at the time of the monuments' unveiling. This is unsurprising, given the group's central role in sponsoring the Confederacy and its monuments. Notably, treated counties continued to receive significantly more newspaper coverage of the UDC even a decade after the unveilings, which may suggest that the UDC played a role in shaping a less favorable environment for Black Americans. Finally, I find only minor evidence that monuments influenced voting behavior. The absolute number of votes for the Democratic Party increased discontinuously in treated counties after the unveilings, possibly due to the relative rise in the white population in a context where Black citizens were disenfranchised. However, the Democratic vote share continued to rise at a relatively constant rate, without any visible change in trajectory after the monuments were constructed.

The experiment in Section 6 is consistent with direct mechanisms. First, I show that merely seeing a monument is sufficient to decrease one's willingness to settle in a particular location, independent of any confounding events at the time of construction (such as the presence of white supremacists using monuments as gathering sites). Second, I directly survey both Black and white respondents in the South, asking how they feel when they encounter a Confederate monument. The responses highlight the enduring association between these monuments and racism, a sentiment that is more pronounced among Black respondents. Both analyses confirm that the signaling power of Confederate monuments is a crucial mechanism in explaining the results.

5.4   The Historical Effect on Land Value

Black out-migration from counties with monuments was only partially compensated by white immigration (see Figures 5, A11, A17). The consequence of this asymmetry was a reduced amount of agricultural labor and lower population pressure in counties with monuments, as

shown in Figure A18. In the long run, these dynamics should thus lead to a reduced value of farmland and agricultural buildings in counties that constructed monuments compared to other ones. Indeed, Figure 10 shows that this is precisely what happened in the South.

Figure 10: Average value of farmland and farms ($ per acre)
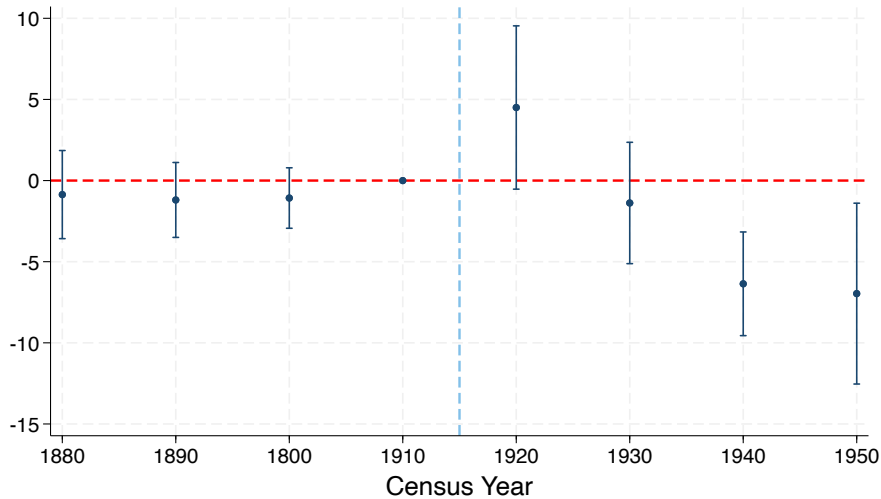
Note: Coefficients from Equation 1. Controls: lag of population; county and state-by-year fixed effects.

The dynamics of land value, however, differ from the dynamics of the population. After a period of stable prices, the value of land and farms first increases following the first constructions and the beginning of the migration. This is consistent with the fact that southern whites valued living in a whiter county in the short run. Historical anecdotal evidence and empirical studies (Feigenbaum et al. 2010, Tolnay et al. 1992, Grossman 1991) suggest that whites eventually became worried by Black out-migration - as it reduced the size of the labor force - and sometimes actively tried to limit out-migration. This pattern is visible in Figure 10.[39] Figure A20 replicates this analysis using my instrument. In particular, it shows the dynamic reduced form, plotting the coefficients of a regression of land value on the interaction between decade and connection to MMC. While the size of the coefficients is larger, since the reduced form needs to be scaled down by the first stage, the figure shows a similar dynamic.[40]

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[39]Figure D36 replicates the same analysis with county fixed effects defined at the stable county level to account for any territorial variation.

[40]The IV coefficient of the same regression is non significant as the increase in the first decade and the decrease in the following periods average out.

6 Online Experiment: Randomizing Monuments

The historical analysis shows the *real-world* impact of Confederate monument construction on Black migration. This approach relies on certain assumptions, such as the exogeneity of constructions or the validity of the exclusion restriction in my IV strategy. While purely random variation in exposure to monuments is not possible in the historical setting, an online experiment allows for causal inference with fewer identifying assumptions, complementing the historical analysis. At the same time, the historical analysis leaves some key questions open: do Confederate monuments still influence location decisions today? Do individuals who oppose these monuments continue to experience a welfare cost due to their presence? How are these monuments perceived? To answer these questions, I conduct an experiment in which respondents are randomly assigned to alternative visual depictions of the same hypothetical city—one featuring a Confederate monument and one without. Participants are then presented with job opportunities in these cities and asked whether they would consider relocating, as well as their minimum acceptable wage for such a move.

The experiment confirms that the presence of Confederate monuments in a city discourages respondents from relocating there. Furthermore, it significantly raises their reservation wage for relocation. Notably, while the impact is statistically significant for both white and Black respondents, it is substantially larger for the latter. This suggests that although attitudes among southern whites may have shifted toward a more negative view of the Confederacy (Bobo et al. 2012), the intensity of this aversion still varies by race. These findings are further supported by respondents' qualitative evaluations of Confederate monuments. Among Black respondents, 69% express discomfort with the hypothetical presence of a Confederate monument in their neighborhood, and 64% indicate that such a monument could motivate them to relocate (compared to 52% and 55% for whites, respectively). The gap in racial attitudes is also evident in responses to open-ended questions about how participants perceive these monuments. As Figure 11 shows, Black respondents generally associate them with concepts such as *racism* and *disgust*, whereas whites tend to emphasize their connection to *history*.

For a few reasons the experiment cannot perfectly replicate the historical analysis. First,

(a) Southern Blacks

(b) Southern whites

Figure 11: "How do you feel when you think about or encounter a Confederate monument?"

respondents are likely aware of the existence of a monument in their own city or in the largest cities; therefore, I use fictitious cities, thus unknown to respondents, and ask them to consider relocation. This approach does not parallel the historical decision to leave, but it is in line with the historical decision of choosing the new city to move to (thus reflecting Figure 6). Second, respondents are also likely aware that monuments are a historical feature of a city, not a new one, while in the past constructions came as a novelty. However, even in the past the monument played their role for several decades, long after they were considered a novelty; moreover, respondents may interpret the fact that the monuments was not recently removed, in a similar way to the original construction. Third, opinions on these symbols may have evolved as time passed.

The Online Experiment. The experiment was conducted online through the Prolific platform and involved a 10/15-minute survey. Respondents were compensated with $2.20 upon survey completion. The study was advertised as an investigation into the city characteristics that matter to individuals considering relocation, but no specific mention of monuments was made ex ante.[41] In terms of incentives, participants were informed that the cities mentioned in the study were hypothetical, but they also knew that the study would match them to real cities (and jobs therein) based on their responses. It was emphasized that providing precise

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[41]Respondents were debriefed ex post about the goals of the experiment.

answers in the survey would result in a better match to an actual city and its list of jobs. The structure of the incentives thus follows the Incentivized Resume Rating (IRR) method in Kessler et al. 2019.[42]

The survey consists of three main parts. The first part collects standard demographic information and details about respondents' most recent job. The second part contains the experiment, in which five hypothetical cities, appearing either with or without monuments, were presented to respondents. After being presented with each city, respondents were asked city-specific questions, including their willingness to move there. The final part of the survey includes questions aimed at understanding respondents' views and knowledge regarding Confederate monuments. No question about the monuments was asked before the experiment.

Sample. My primary sample of interest consists of individuals aged between 18 and 50 who currently reside in the southern United States and are actively seeking employment. The sample, stratified by race due to Prolific's policies on prescreening, comprises 132 Black and 198 white respondents. The age and occupation criteria were applied to select for individuals with a relatively high likelihood of migration, who may be interested in the job offers and the list of jobs I provide, and to align participants with the socioeconomic status of migrants during the Great Migration. Prolific relies on a rigorously screened pool of participants, which enhances data quality but results in a reduced pool of respondents, particularly when the focus is on specific demographics and minority groups. Consequently, I encountered limitations in reaching the target of 200 respondents for both races.[43] Table E11 shows that respondents are relatively similar across races; they are on average 34 years old, and their most recent income

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[42]The recruitment material, displayed in Figure E37, states: "Your response to the survey will be used to provide you with a recommendation for an actual city in the US South that is a good fit for you, along with a list of publicly accessible jobs in that city. The more carefully you complete the survey, the better we will be able to match you with the city that is a good fit for you". In practice, I use some responses (how much respondents dislike Confederate monuments, or value the presence of a waterfront) to match them with a real city. A link will direct respondents to the city's *indeed.com* list of jobs posts. While I did not measure the time they spent on the link, I measured both the total time to complete the survey and the time spent on 66 of the 71 questions. Black respondents spent a median time of 11 minutes on the 66 measured questions and 3 minutes on the 5 non-measured tasks, including time spent on the link (the *mean* time spent on the 5 non-measured questions together is actually even higher than the time spent on the 66 measured ones). Using the average response time per question, we can estimate a median time of about 2 minutes on the link.

[43]Data collection was open for precisely 2 weeks. To increase the sample of Black respondents, I also surveyed an additional sample of 78 Black respondents not from the South, which I used in robustness tests.

was around \$36,000. A majority of respondents are women, and the most frequent political identification is Democratic. Table E12 shows that the control set of city-respondents are more likely to refuse the tailored job offer than the generic one and that the reservation wage for moving to the destination city is about \$75,000.

Figure 12: The two possible versions of the same city. Column (a) shows the control version of the city, while column (b) shows the version with the monument

Hypothetical Cities. I created five hypothetical cities by combining real photos and Google Street View images sourced from various locations throughout the South.[44] Each city was introduced to the respondents using a set of five images, with each image requiring four seconds of viewing before proceeding. Two versions of the same city exist: one with a Confederate monument (treatment group) and one with an uninformative picture (control group). More specifically, four of the five images, representing a residential street, a city hall, a public park, and a commercial street, were identical in both versions. The fifth image distinguished the versions, either showcasing the Confederate monument or providing an additional, and thus uninformative, image of the same residential street shown earlier. Figure 12 shows the two versions for one of the five cities.[45] Each respondent only saw one of the two versions of each city.

Design. The treatment consists of randomizing the presence of a monument in the depicted city. Each respondent was exposed to five different cities, but they would only encounter each city either in the version featuring a monument or the one without (similar to Macchi 2023). My analysis is thus run at the city-respondent level, which gives me a large sample of 1650 observations. I can thus isolate the causal effect of Confederate monuments on migration decisions, using a within-subject specification that controls for both city and individual fixed effects, thus accounting for potential sources of sample imbalance. This is particularly important because the randomization is performed on a relatively small sample size. The structure of the experiment is exemplified in Figure 13.

Outcomes. For each city, following exposure to the images, respondents were presented with three questions, the answers to which serve as my primary outcome variables. The first question measures the extensive margin of willingness to move to the city: *If offered a job similar to your most recent one, would you be open to the possibility of relocating in the depicted city?* This question keeps the participant's job situation constant in an abstract sense and aims to capture their overall evaluation of the city. The second question presents a more concrete job

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[44]More precisely, the images are introduced as representing a "typical neighborhood" of a city.

[45]See the example of a slideshow for another city and respondents' precise view in Figures E39 and E38.

Figure 13: Experiment design

offer, including details such as the job sector, weekly working hours, and wage, which was determined as a randomized percent increase over the respondent's most recent wage.[46] The final question asks: *What is the minimum annual income that would convince you to accept a job and relocate to the depicted city?* This question aims to determine respondents' reservation wage, shedding light on the welfare cost that respondents suffer when they learn that the city has a Confederate monument. The treatment effect emerges clearly by simply comparing the distribution of the answers to each question by treatment status, as I do in Figure 14. The treatment dramatically increased the rejection rate for both types of job offers and shifted the distribution of reservation wages to the right.

Specification and Results. To estimate the impact of having a monument in the city when considering whether to relocate there, I estimate the following equation:

$$Y_{i,c} = \beta CM_{i,c} + \chi_i + \gamma_c + \epsilon_{i,c} \tag{5}$$

where, $Y_{i,c}$ indicates respondent i's decision regarding jobs in city c, namely their willingness

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[46]The exact question is: *Consider a job with the following characteristics, located in the depicted city. Sector: [sector of respondent's most recent occupation, from a previously asked question]; hours per week: 40h; pre-tax yearly wage: [most recent respondent's yearly wage + X%] dollars. Would you accept the job (and move to that city) if it were offered to you?* I randomized high (ranging between 16% and 40%) or low (between 2% and 8%) percent increases of their wage, such that either the high or low offer could appear in each city. In particular, the pairs of wage increases were 2% vs. 16%; 3 vs. 17%; 5% vs. 18%, 7% vs. 32%, and 8% vs. 40%.

(a) Would move (last job)

(b) Would move (tailored job offer)

(c) Reservation wage

(d) Reservation wage, CDF
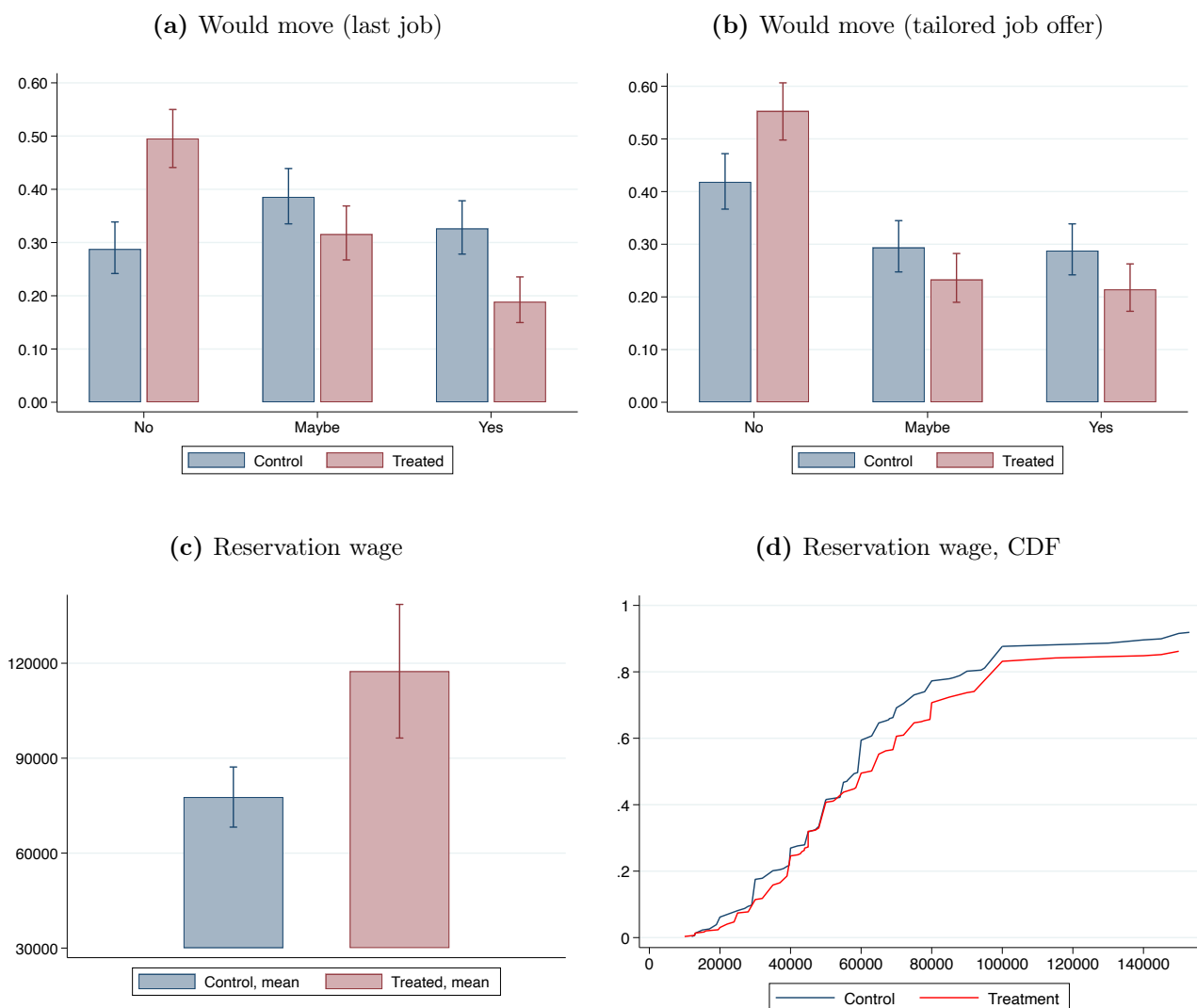
Figure 14: Raw distribution of the responses to the main outcomes, by treatment status

to relocate and their reservation wage, and $CM_{i,c}$ is an indicator for whether respondent i was exposed to the monument version of city c. χ_i and γ_c are respondent and city fixed effects, respectively.

Results for each of the three outcomes, using Equation 5, are reported in Table 2. The coefficient on *Monument* represents the treatment effect among whites. The coefficient on *Monument*Black* represents the differential effect for Blacks compared to whites. Column (1) shows the causal effect of the presence of a Confederate monument on respondents' willingness to relocate to that city, following an abstract job offer similar to their most recent job. The presence of the monument reduces whites' willingness to move by 0.301 standard deviations. The effect is significantly larger for Blacks, with a reduction of 0.533 standard deviations.

Column (2) shows that monuments also influence responses to more concrete and tailored job offers, including information such as wage, sector, and weekly hours. In this case, the monument decreases whites' willingness to move by 0.189 standard deviations, and it decreases Blacks' willingness to move by 0.333 standard deviations. Finally, column (3) shows that the treatment increases reservation wages. The increase is by 8.3% for whites and by 20.7% for Blacks, equivalent to an average of more than $15,000. To sum up, the treatment effect is strong and significant in both groups, but the effect for Blacks is about twice the size of the effect for whites.

Table 2: Effect of sight of monument on relocation decision and reservation wage

	All Southerners		
	(1) Move (s.d.)	(2) Move, tailored (s.d.)	(3) Res. wage, log
Monument	-0.301***	-0.189***	0.083***
	(0.055)	(0.052)	(0.019)
Monument*Black	-0.232**	-0.144*	0.124**
	(0.096)	(0.087)	(0.051)
High Offer		0.498***	
		(0.044)	
Observations	1650	1649	1650
R^2	0.577	0.622	0.868
Respondent FE	Yes	Yes	Yes
City FE	Yes	Yes	Yes

Note: The unit of observation is the city-per-respondent. The outcome captures whether the respondents want to move to a specific city for a job similar to their most recent one (columns (1)), for a tailored job offer (columns (2)), and what their reservation wage for relocation is (columns (3)). Outcomes in columns (1) and (2) correspond to a scale of 1-3 (corresponding to *No*, *Maybe*, *Yes*) and are expressed in standard deviations. The log of the reservation wage is taken after winsorizing the top 2% of reservation wages by race to preserve the intensity of the preference without having outliers jeopardize estimates. *Monument* is an indicator for whether the city is shown to the participant in the version with a monument. Standard errors are clustered at the participant level in parentheses. * p<0.10, ** p<0.05, *** p<0.01.

To better understand results, I run several heterogeneity analyses. First, I find that the effect is entirely driven by individuals who, at the end of the survey, reveal they felt bothered by Confederate monuments. This result is reassuring on the validity of the experiment as it confirms that respondents' answers reflect their views towards Confederate symbols. Similarly, I find that the negative effects of monuments are virtually offset among Republicans. Third,

I investigate how the effect changes by age and I find that it does not substantially vary with age among Blacks, while it seems relatively stronger among younger whites. Finally, I leverage my sample of Black respondents from the North to see whether the effect differs across regions. I do not find a statistically significant difference in the effect, suggesting that proximity to the south and presumably better knowledge of the area does not significantly reduce the effect.[47]

Alongside the presence of the monument, I also randomized the wage of the tailored job offers, represented as a percentage increase above the respondent's most recent yearly income. Results of this experiment are presented in Table E16. As expected, the presence of a higher offer (an average 20% increase in yearly income, or $6,000) significantly boosts the probability of accepting the offer and relocating. This confirms that respondents are evaluating offers seriously. Perhaps surprisingly, the effect of the monument is similar irrespective of the type of offer among Black respondents, suggesting that relatively small monetary incentives do not diminish the negative effect of the monument. Among whites, the effect is actually driven by high offers. This counterintuitive result may be due to the fact that whites are generally less likely to accept the offer to begin with, especially if it is low, leading to more variation among high offers.

Robustness. A potential alternative experimental design would exploit between-subject rather than within-subject variation. This approach has the advantage of showing each respondent only one monument, preventing them from recognizing the focus on monuments and adjusting their responses accordingly. However, it comes with strong disadvantages, such as reduced sample size, lower statistical power, and potential imbalances across subjects (each respondent would only see one city, preventing from including individual fixed effects). My data allow for a between-subject analysis if I restrict responses to only the first city respondents see. In this case 50% of respondents are treated and 50% are in the control group. Table E17 displays this analysis for Black respondents. The findings qualitatively align with the within-subject analysis, even though only one of the three outcomes is significant due to the small sample size. In columns (4) to (6) of the same table, I conduct a secondary

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[47]Results of these exercises are displayed in Tables E13 to E15.

robustness check on a randomly selected subgroup of 16 respondents primed to think about racism. At the beginning of the survey, they were exposed to a fake CAPTCHA featuring a Confederate flag and the Black Lives Matter symbol.[48] If the result of the experiment were a pure effect of priming on racism in an abstract way, unrelated to the destination city, this special control group should behave like a treated group. That the point estimates using this primed control group closely resemble, and in some cases even exceed, those of the full set of control respondents suggests that the treatment is not merely priming respondents on racism. Instead, it appears to be specifically related to the presence of the Confederate monuments in the destination city.

Discussion. The results of the experiment demonstrate that monuments continue to influence location decisions. Consistent with the historical analysis and with a strong aversion to monuments among the Black population, the effect remains asymmetric among races to this day. While the pool of participants corresponds to individuals particularly inclined toward migration, and the effect on people who are not currently seeking a job may be attenuated, the experiment vividly confirms that a non-inclusive public space influences migration patterns and, ultimately, segregation.

7 Conclusion

In this paper, I show that divisive monuments in public spaces can influence location decisions for groups with opposing views on such symbols. To illustrate this, I focus on Confederate monuments, which were constructed in the U.S. South during the early 20th century, supported by white Southerners endorsing the Confederate legacy, and opposed by Black Americans. Given their lack of political rights, Black Americans' primary response to the presence of these monuments was the choice to either remain or relocate.

First, I show that the time of construction of a monument marked a breaking point for Black out-migration patterns. To do so, I rely on a difference-in-differences specification that

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[48]Before the experiment, all respondents were shown images of vegetables and asked how many represented fruit. A randomly selected subsample, instead, received this question using ideological symbols. This group was always shown the first city without a monument.

compares counties whose first monument was unveiled in peak construction years to those without a monument and find a reduction in the Black share of the population following construction. This result shows that the increase in racial hostility surrounding unveilings played a crucial role in fostering the Great Migration.

Second, I shed light on the independent effect of monuments, in isolation from other time varying shocks, by using an instrumental variable for the stock of monuments in a county. I exploit the high transportation cost for these heavy monuments and the existence of a quasi-monopolist producer of monuments in the South - the McNeel Marble Company (MMC), which started producing Confederate statues around 1905 - to predict what counties are more likely to erect a monument, based on the cost of transportation from MMC and the period in which the firm is in business. The IV analysis has a strong first stage and shows a large effect of the stock of monuments on the decline of the Black population.

Finally, I demonstrate that monuments continue to influence migration preferences to this day. To do so, I conduct an online experiment in which I present images of five hypothetical cities to each respondent and I randomize the presence of images of Confederate monuments in the slideshow describing each city. I then ask respondents their willingness to relocate for a job offer in these cities and their reservation wage. The results reveal that the sight of a monument significantly reduces Black respondents' propensity to relocate there and raises their reservation wage. I also find a significant effect for southern whites, but the effect size is roughly half that observed for Black respondents.

In terms of mechanisms, I find no evidence that the historical construction of monuments significantly altered newspapers narrative in the long run, the prevalence of Confederate celebrations, or the activities of the Ku Klux Klan in the affected counties. Instead, the experiment suggests that the sight of monuments exerts a short-term impact on migration decisions. Therefore, the findings align with theories proposing that public symbols reactivate the collective memory of tragic historical events or serve as signals amplifying the salience of local discrimination, which may be otherwise hard to compare across similar locations.

These findings have important political implications in contexts with significant migration flows that are concentrated within specific demographic groups. Minority groups are likely to

consider divisive public monuments when deciding where to settle, making these symbols key drivers of ethnic segregation — in itself an important determinant of inequality (Ananat 2011). Local governments seeking to reduce segregation, attract migrants, or curb out-migration should carefully consider the symbols that shape their public spaces.

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Appendix

A   Appendix Figures

Figure A1: Example of newspaper celebrating monuments. Columbus Daily Enquirer, May 1892

THE DALTON MEMORIAL

TO THE SLEEPING HEROES OF THE CONFEDERACY.

A COSTLY MONUMENT UNVEILED YESTER-
DAY—WITNESSED BY GREAT CROWDS.
MILITARY PARADE — ELOQUENT
ADDRESS BY COL. AVERY.

DALTON, Ga., May 10.—[Special.]—Dalton had her Confederate monument unveiling today. It was a big affair. The city was packed in spite of the rain, and the enthusiasm was overwhelming. Two thousand people were out, of all ages. Captain A. P. Craberts, commander of the Veterans, and Mrs. Brasdleton, president of the

Figure A2: Example of Black newspapers' articles criticizing monuments. Images kindly provided by Olivia Haynie, Donovan Schaefer and Justin Seward. Reproduced with permission of the copyright owner. See https://falseimage.pennds.org/

The Appeal. [volume] (Saint Paul, Minn. ;) 1889-19??, April 11, 1914, Image 2

Image provided by Minnesota Historical Society; Saint Paul, MN
Persistent link: https://chroniclingamerica.loc.gov/lccn/sn83016810/1914-04-11/ed-1/seq-2/

Print this image | Download this image

JEFF DAVIS IN THE CAPITOL.
A statue of Jeff Davis, the arch traitor who tried to disrupt the Union in order that human slavery should be preserved and extended, is soon to be added to the collection in Statuary Hall in the Capitol at Washington. The statue will be a contribution to the Nation from the state of Mississippi.

The more or less grand old Commonwealth of Mississippi has contributed the arch demagogue Vardaman who represents the state in the United States Senate, because its Afro-American citizens have been robbed of their votes.

Mississippi has also contributed to the world the greatest number of lynchings which have taken place in any state in the Union. The unlawful and unjustifiable slaughter of Afro-Americans has made Mississippi a veritable shambles.

Whither are we drifting? What is to be the end of a Nation which permits its citizens to be murdered by mobs; accepts as Senators men who openly boast in the Senate Chamber of the murder of their fellows; a Nation which attempts to degrade some of its citizenry by discriminatory laws and allows the segregation as lepers of men and women who have won their places after severe tests and in spite of the prejudice against them?

A statue of Jeff Davis in the Capitol at Washington!
God preserve our Nation!

MONUMENTS OR JUSTICE--WHICH?
The Chicago Defender (Big Weekend Edition) (1905-1966); May 30, 1914; Black Studies Center
pg. 8

MONUMENTS OR JUSTICE—WHICH?

CONFEDERATE VETERANS AT THEIR REUNION at Jacksonville, Fla., recently passed a resolution urging that monuments be erected in the capital of each slave-holding state to commemorate the fidelity to their masters by the slaves during the war. It is argued that had the slaves been hostile, the soldiers of the South could not have fought at all. Says the Times-Union: "The men of the South went out with confidence, leaving the defenseless ones they loved under the protection of their loyal slaves, and during the four years of strife and over the whole extent of the confederacy not one Negro was unfaithful to his trust. One who thinks of this wonderful record, must see in it reason for pride for both races. Good will is never one-sided." This, of course, is one side of it. It is well enough to praise the slaves for that fine quality of loyalty which they showed, but it is not well to use that loyalty in these days, as a half-way implication that slavery was a just and pleasant institution. The very loyalty of the slaves seems pathetic. Their eyes were not open to see the vision of freedom. Slavery had hemmed them in and kept them down intellectually and spiritually. They did not know enough to strike for themselves the blow that lay in their refusal to raise food for the masters who were fighting against their cause. Is it to be wondered

Figure A3: Example of Black newspaper's article criticizing monuments: *The New Journal and Guide (VA)*. Images kindly provided by Olivia Haynie, Donovan Schaefer and Justin Seward. Reproduced with permission of the copyright owner. See https://falseimage.pennds.org/

UP-TO-DATE

By MARY CHURCH TERRELL

Vice President Of Confederacy Lauded

If you had happened to be passing through Statuary Hall of the Capitol the other day, you would have heard the "Rebel Yell" shouted with a right good will. You would also have heard the Vice President of the United States lauding to the skies the Vice President of the Confederacy, Alexander Stephens, as he accepted for the Federal Government, if you please, the statue of the man who did everything he could to destroy it. The State of Georgia has given the statue of Stephens to represent her in the Nation's Hall of Fame.

Vice President Dawes praised Alexander Stephen's "force of character which irresistibly held him to his high convictions." He declared this man who was a traitor to his country "possessed commanding intellect and was born with instinctive sympathy for the poor, the weak and the suffering." Mr. Dawes could not have eulogized Abraham Lincoln any more forcibly and more heartily than he did this leader of the Confederacy. Our Vice President evidently forgot all about the "poor, weak and suffering" slaves whom Alexander Stephens was working hard forever to hold in this cruel deplorable state.

In no other country in the wide world would such a scene be possible as was witnessed in the Capitol a few days ago, when the statue of a man who had tried to destroy his government was received with gratitude and praise by one of its highest representatives! If this attitude toward a traitor teaches any lesson to the youth of this country at all, it is that the effort to wreck and ruin the government under which one lives, so far from being criminal may be actually commendable. The only difference between Benedict Arnold, the traitor, and Alexander Stephens of Georgia is that the former betrayed his country to a foreign foe, while the latter tried to destroy it in a civil war. If some one claims that since Georgia has come back into the Union, she has just as much right to present the statue of a man who was a leader of the Confederacy as Maine who has to give the statue of an officer in the Union Army. I reply that if it was disloyal and wrong for Alexander Stephens to plot against his government for any reason whatsoever, it was establishing a bad precedent and was unwise for the Vice President of the United States to eulogize him to the skies, when a State which seceded from the Union added insult to injury, so to speak, by giving to the Nation's Hall of Fame the statue of a man who helped her try to cut the country in two.

If the old soldiers who fought in the Union Army and saved the country from ruin could have heard that Rebel Yell in the Nation's Capitol, they would have had reason to wonder who really won the war after all.

* * * * *

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Figure A4: Example of Black newspaper's article criticizing monuments. Images kindly provided by Olivia Haynie, Donovan Schaefer and Justin Seward. Reproduced with permission of the copyright owner. See https://falseimage.pennds.org/

DETERMINED TO WIN.
Philadelphia Tribune (1912-); Feb 10, 1912; Black Studies Center
pg. 4

DETERMINED TO WIN.

Some time ago the Southern democrat started a movement to have a bust of Jeff Davis placed in the Hall of Fame in Washington. This proposition created such a storm of objections that it was abandoned.

Not to be outdone, the Southern Schemers have brought another proposition forward. This time the proposal comes from the legislature of Kentucky which has under consideration a bill providing that the blue grass commonwealth place in the Hall of Fame at Washington the statues of Lincoln and Jefferson Davis.

It is pointed out by the promoters that inasmuch as Kentucky was the birthplace of the two leaders of the Civil War, it could, with propriety, place statutes of both in the Hall of Fame. The authors of the proposition say that they are anxious to again test the sentiment of the nation on this subject.

By some it is declared that the bitterness and rancor growing out of the Civil War has disappeared. This, of course, would be symbolized more than any other thing the disappearance of old "war spirit."

But the promoters of this scheme should remember that the South is doing all in its power to keep alive the "old war" spirit. The obstinacy of the South in not allowing colored citizens to enjoy the Right of Franchise. Its determination to do all in its power to make null and void all the Amendments to the Constitution furnishes people with ample proof that the "old war" spirit is very much alive in the South.

Let him who is without sin cast the first stone.

MURDERERS!: THE ORIGINATOR OF THE NOTORIOUS I
The Schutinizer
The Chicago Defender (Big Weekend Edition) (1905-1966); Oct 14, 1916; Black
pg. 2

MURDERERS!

The Originator of the Notorious Ku Klux Klan to Be Honored by a Statue at Shelby, N. C.

By the Schutinizer

Shelby, N. C., Sept. 13.—The notorious leader of murderers, "Col." McAfee, who gained fame as a spiller of human blood during the days of the reconstruction, is to be "honored" by the "whites" of this God-forsaken burg with an equestrian statue. It is a settled fact that the statue will be erected, the only drawback at this time being the question as to whether the fiend will be dressed in the trademark of his murderous klan or in the uniform of the Confederate army. While one of these rotten uniforms is as bad as the other, the one being the insignia of a gang of cold blooded murderers, rape and fire fiends, the other the uniform of the traitors of '61-65, it is hard for the Crackers of these parts to choose between them. The entire proposition was a luke warm one until the Times of New York, which represents nothing, took the stand of justifying the organization of the Klux and advises that the "Col." be depicted in the regalia of that notorious gang. To show that there is a skittinish feeling in reference to the statue, the Charlotte, N. C., Observer says, that if the Klan draperies are used it would "impose upon the people of this and succeeding generations the duty of perpetual explanations and defense, a duty that might become irksome with the passing of the years, and that might, in the end, he repudiated." The Observer wants the "Col." garbed in a Confederate uniform.

Figure A5: McNeel marble advertisement in the Confederate Veteran magazine

Figure A6: McNeel marble advertisement in the Confederate Veteran magazine, 1914

Figure A7: McNeel's first Confederate monuments
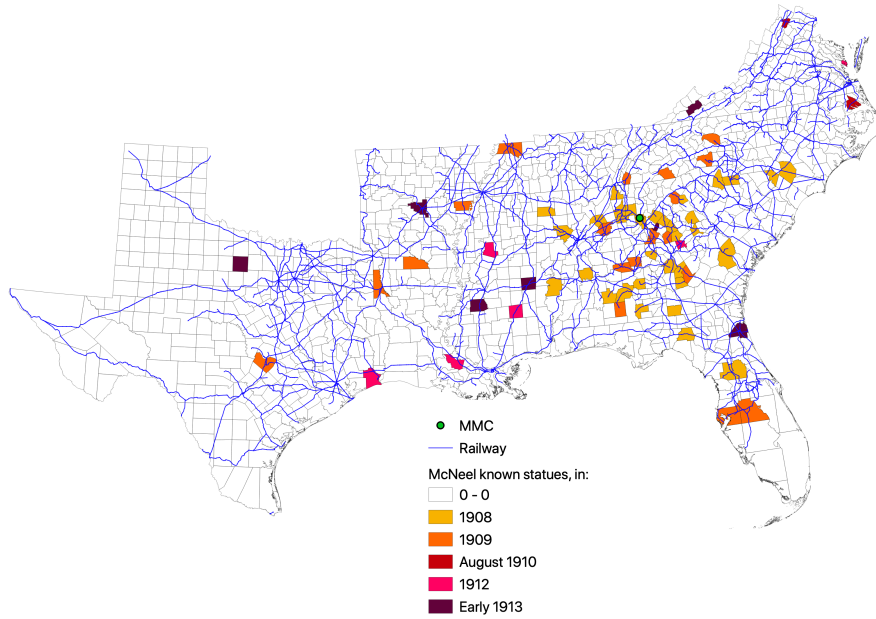
Note. First 61 statues produced by McNeel Marble (1905-1909). Plus all statues produced in august 1910, 1912 and the first month of 1913. MMC erected at least other 35 statues in 1910 and many others until 1960, a full account of which is however non-available.

Figure A8: % of southern-born Blacks residing outside the South, by birth cohort. Collins (2021)

(a) Decennial change in Black population, units

(b) Decennial growth in Black population

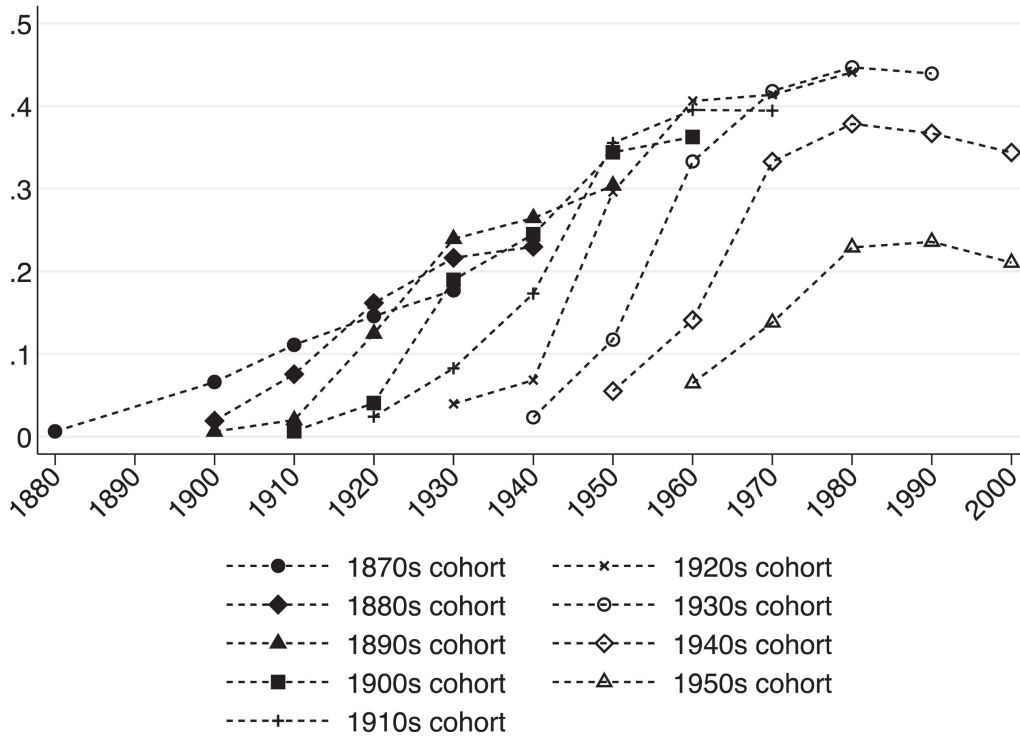**(c)** Black share of population, normalized to 1910 mean
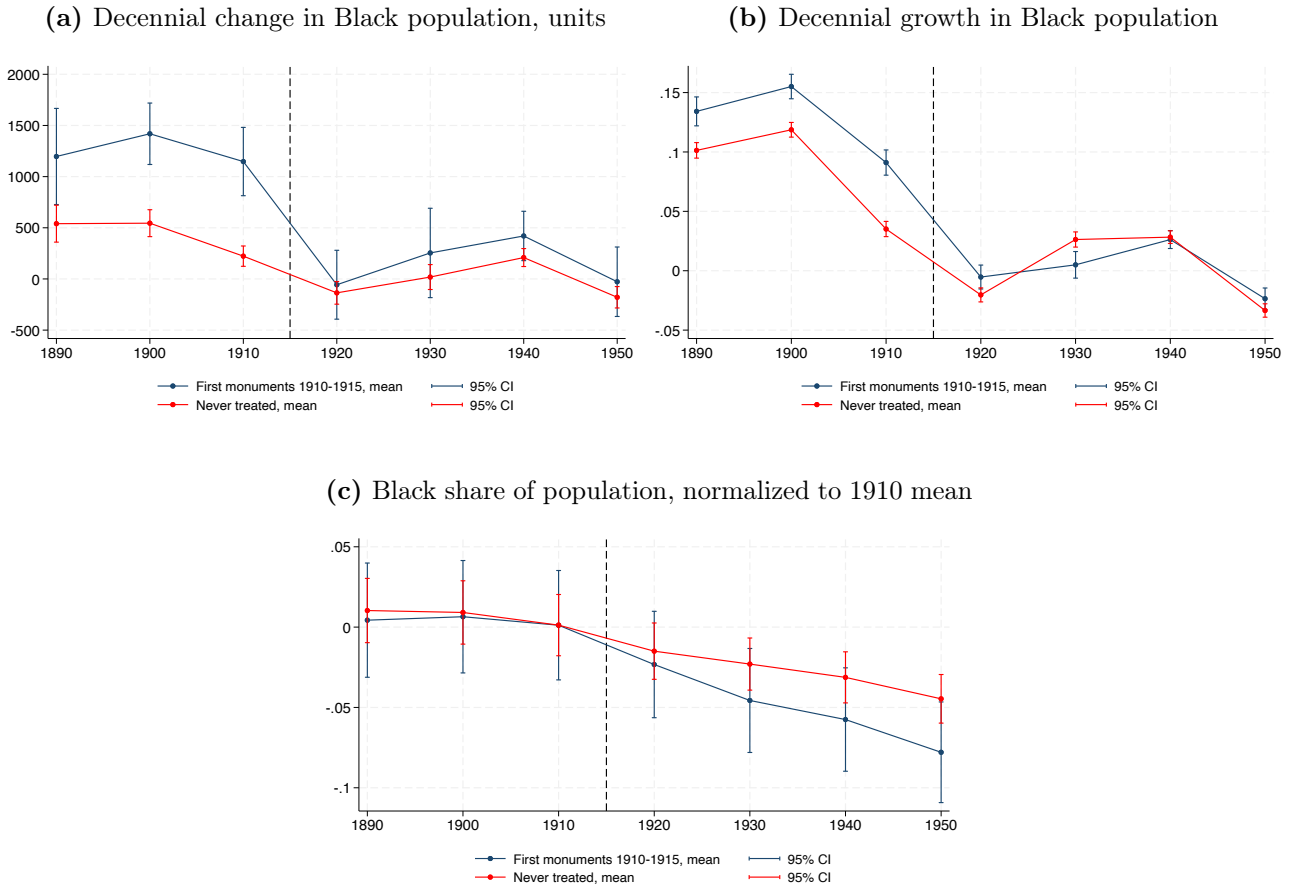
Figure A9: Diff-in-diff specification of Equation 1 using Black share of population, Black population change and growth as outcomes. Population growth is 15% winsorized.

(a) Change in Black population since last census

(b) Growth in Black population since last census
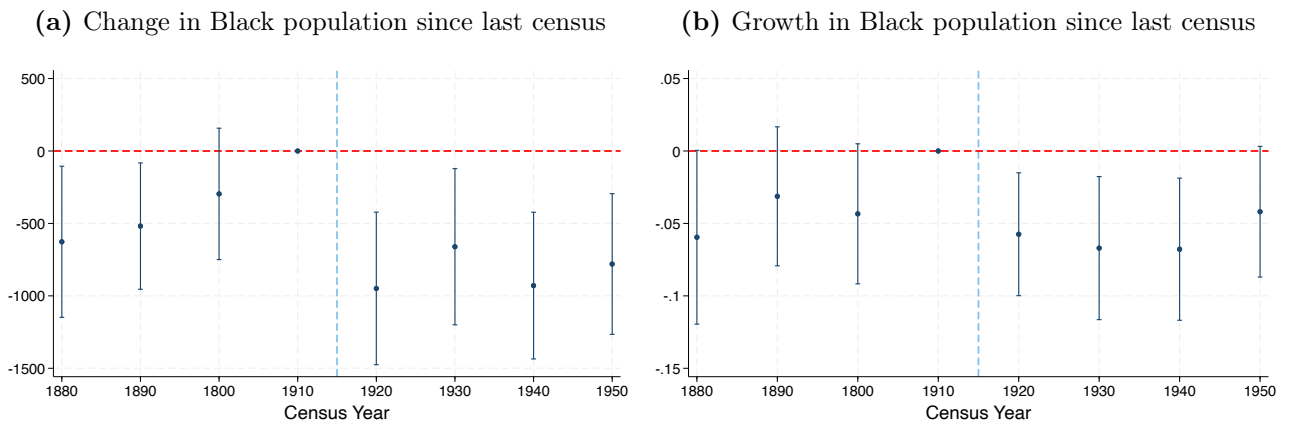
Figure A10: Diff-in-diff specification of Equation 1 using Black population change and growth as outcomes. Population growth is 15% winsorized. Controls: lag of population, state-by-year and county FE. Cluster level: county

(a) Change in white population since last census

(b) Growth in white population since last census
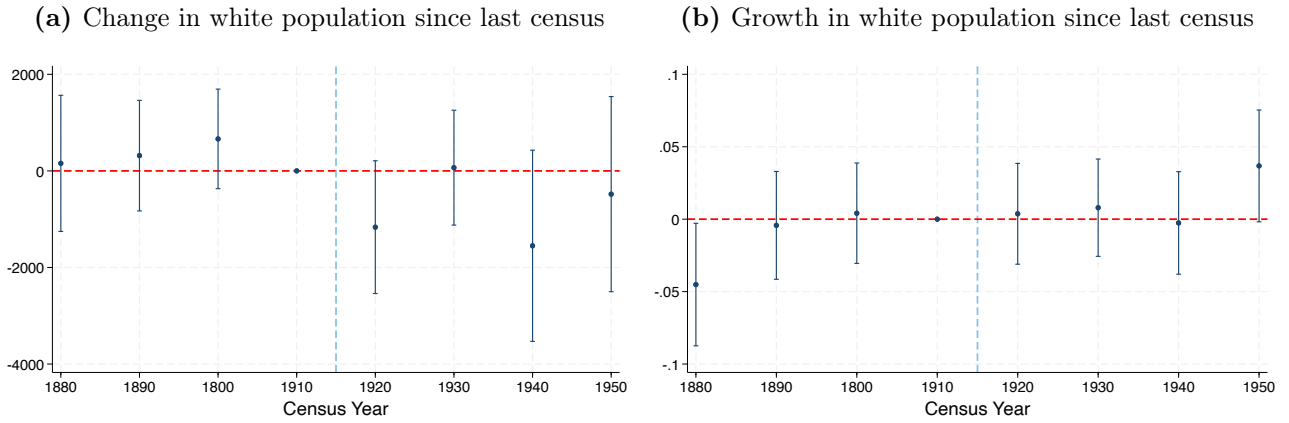
Figure A11: Diff-in-diff specification of Equation 1 using white population change and growth as outcomes. Population growth is 15% winsorized. Controls: lag of population, state-by-year and county FE. Cluster level: county

Figure A12: Black share of population
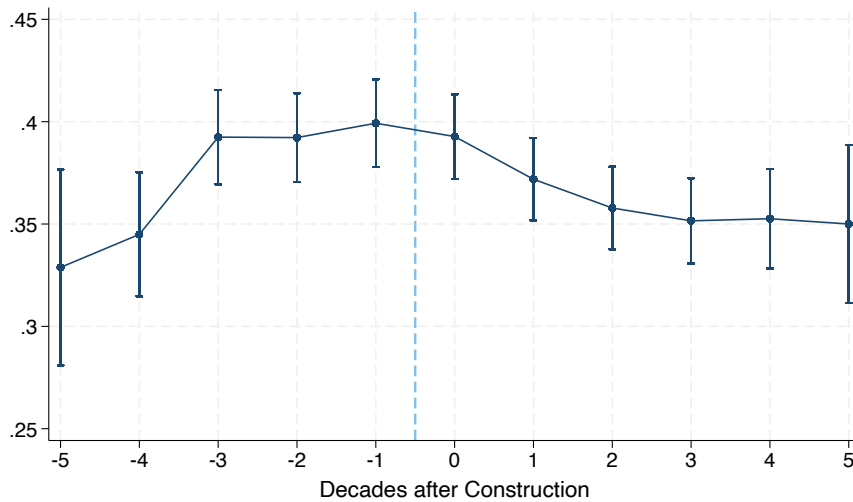
Note. Average Black share of population, by decade relative to the unveiling of the county's first monument

Figure A13: Black share of population
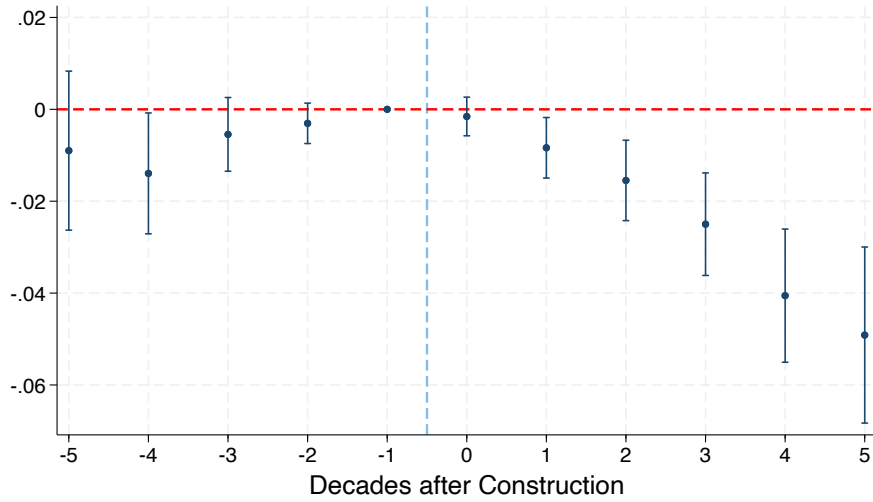
Note. Coefficients from Equation 2. Controls: lag of population, county FE, state-by-year FE. Cluster level: county. Dropping counties with first dedications in peak construction years.
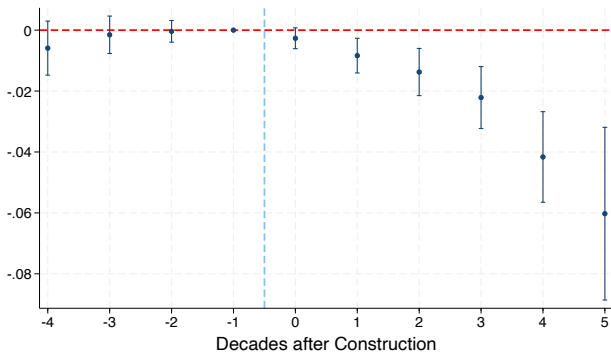
Figure A14: Staggered diff-in-diff using Sun et al. (2021). Outcome: Black share of population; controls: lag of population, county FE, state-by-year FE. Cluster level: county.
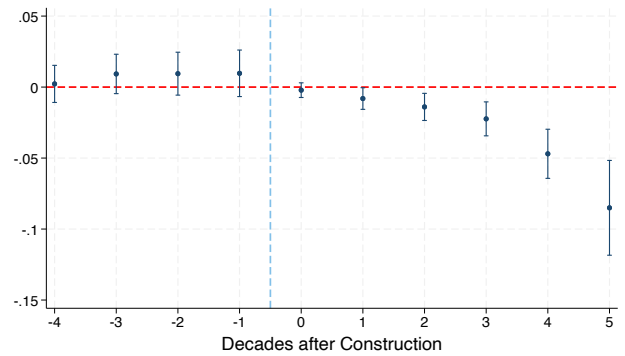
Figure A15: Staggered diff-in-diff using Borusyak et al. (2023). Outcome: Black share of population; controls: lag of population, county FE, state-by-year FE. Cluster level: county.

(a) Change in Black population since last census, units

(b) Growth in Black population since last census
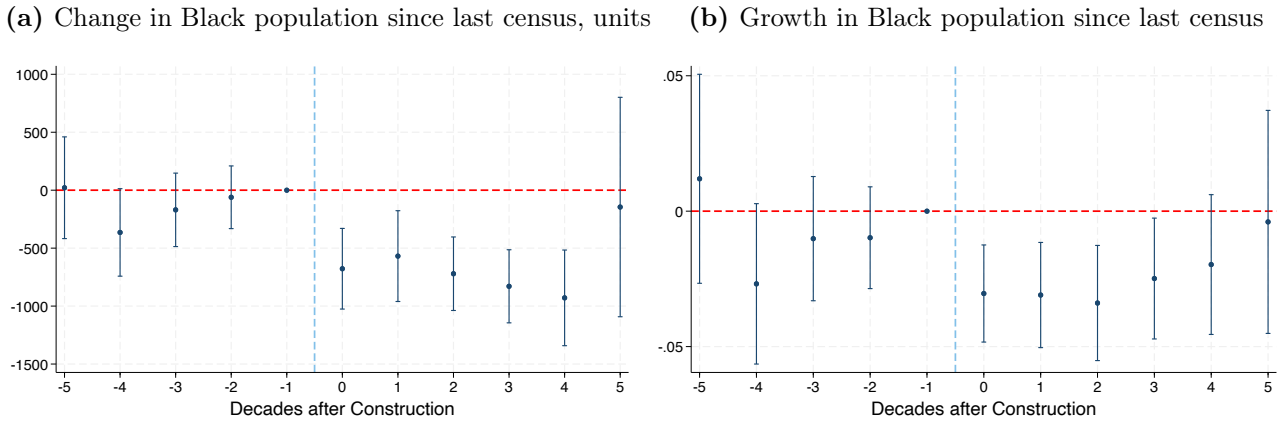

Figure A16: Event-study specification of Equation 2 using Black population change and growth as outcomes. Population growth is 15% winsorized.

(a) Change in white population since last census

(b) Growth in white population since last census
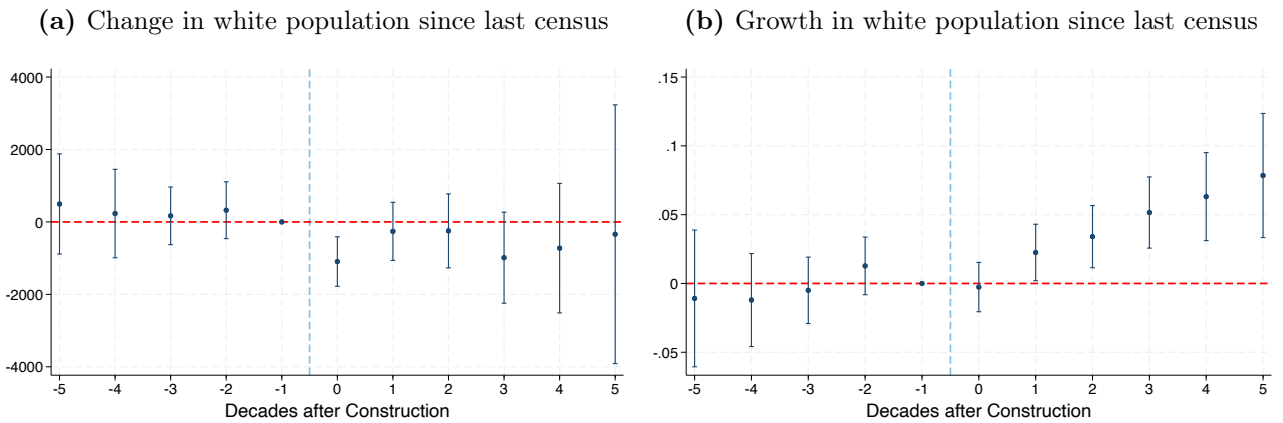
Figure A17: ES specification of Equation 2 using white population change and growth as outcomes. Population growth is 15% winsorized. Controls: lag of population, state-by-year and county FE. Cluster level: county

(a) Diff-in-Diff: change in population

(b) Event-study: change in population
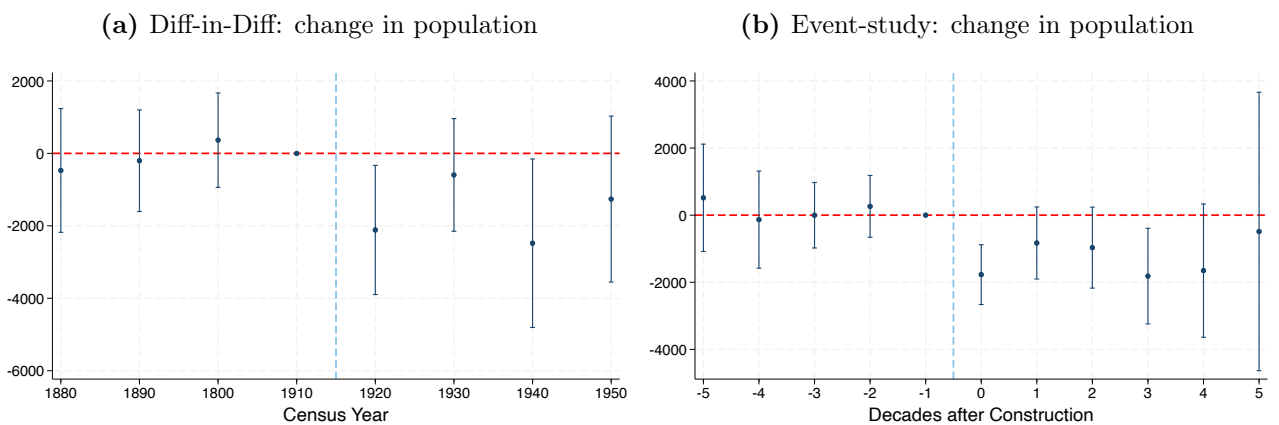
Figure A18: Decennial change in total population, units. Diff-in-diff specification of Equation 1 and Event-study specification of Equation 2

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(a) Outmigration to other-state

(b) Outmigration away from the South

(c) Immigration from other-state

(d) Immigration from within-state
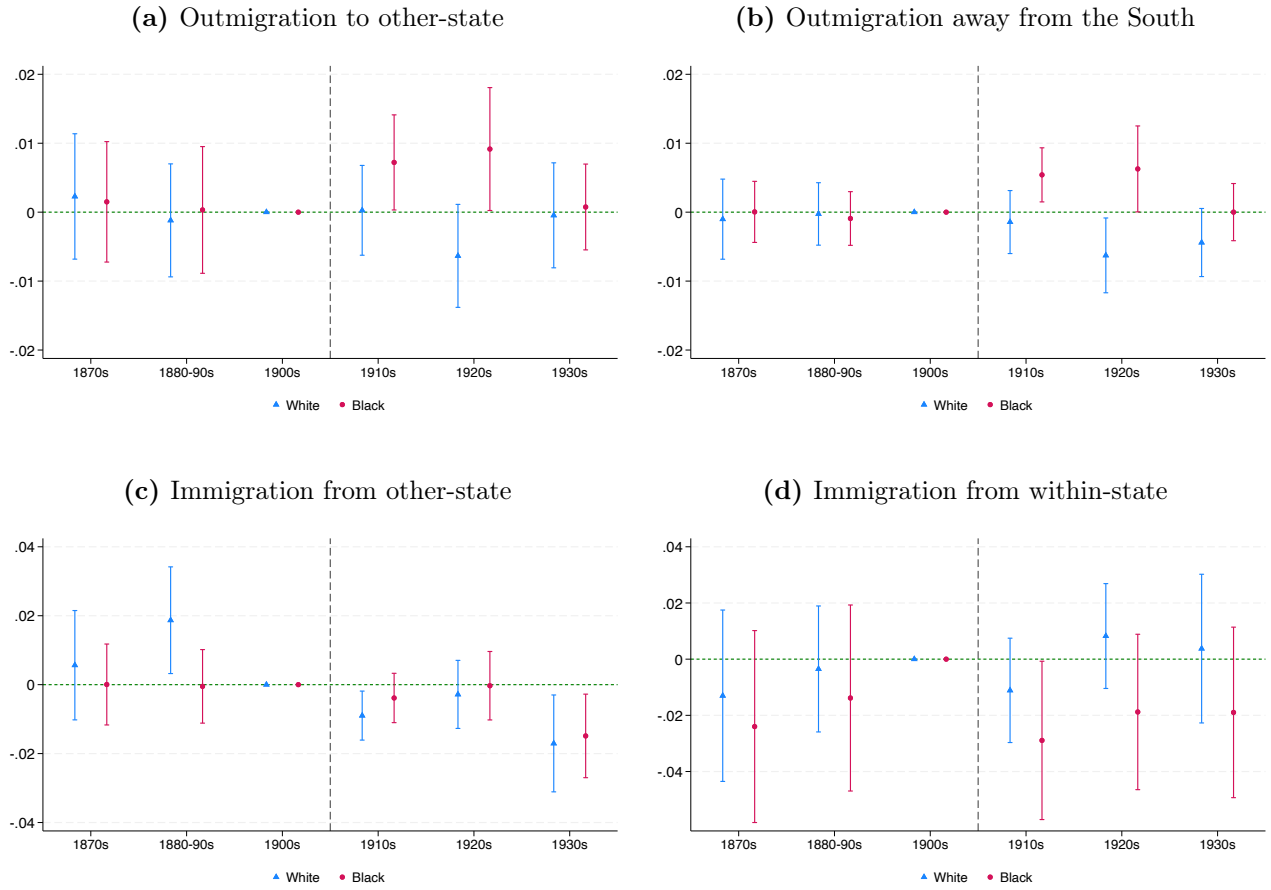
Figure A19: Individal-level migration

Figure A20: IV dynamic reduced form: value of the land
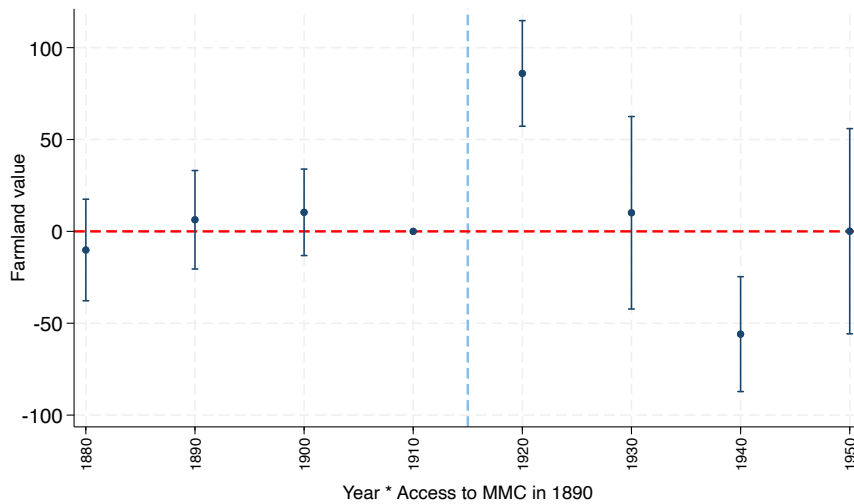
Note. Outcome: value of the land. Coefficients of the regression on the interaction between connection to MMC in 1890 and decade dummies. Same controls as in Table 1

Figure A21: Dynamic reduced form
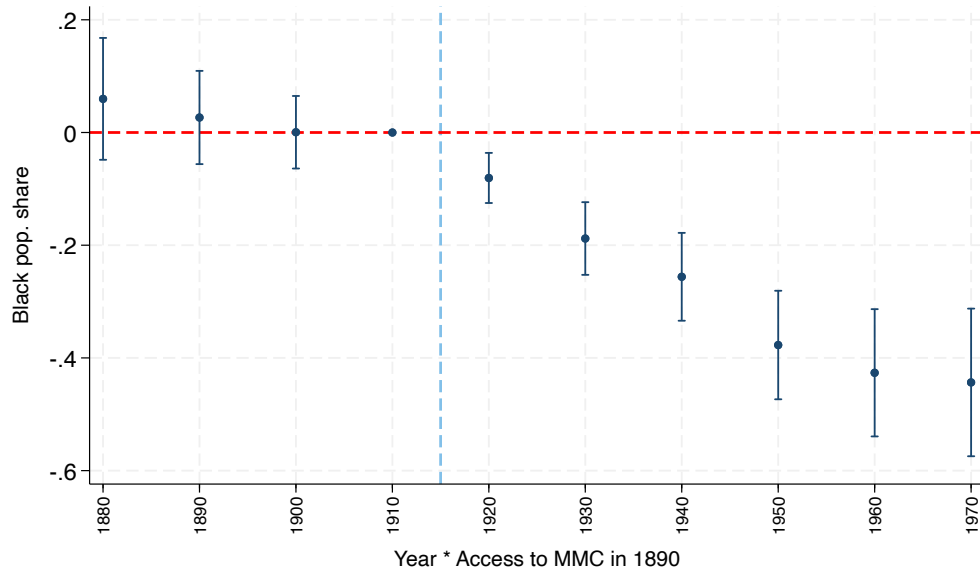
Note. Coefficients of the regression of the interaction between connection to MMC and decade dummies on Black share of the population. Same controls as in Table 1.

Figure A22: Cumulative share of newspaper pages on *McNeel Marble & confedera** over total pages on *confedera**
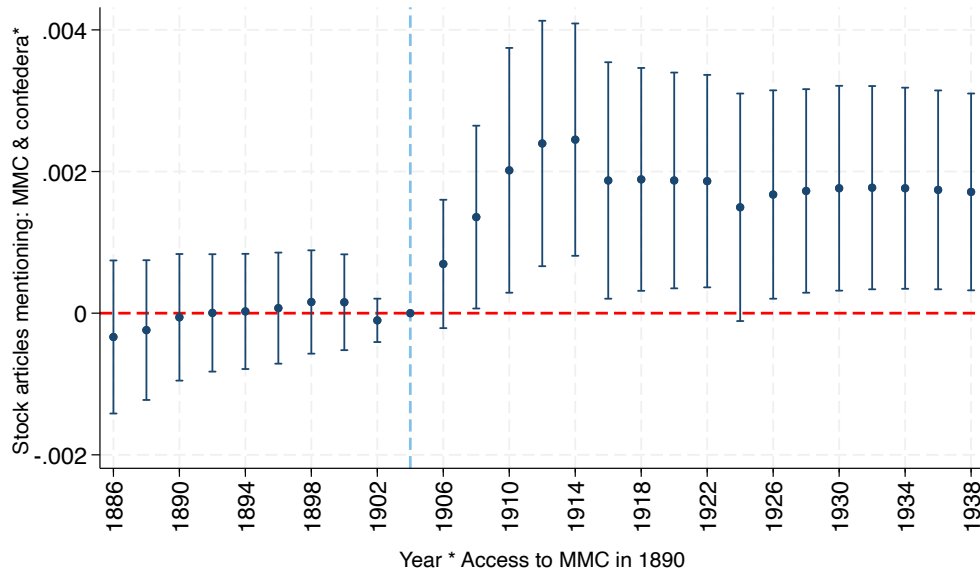
Note. Stock of mentions to the McNeel Marble Co. (and Confederacy) on newspapers regressed on *year * connection to MMC in 1890*. Controls: interpolated lagged population, *1890 connection to Richmond * post 1905*, connection to NYC, "stock" of lynchings, county and state-by-year FE.

B Appendix Tables

Table B1: Summary statistics, demographics

| | | C: Counties without Confederate monuments by 1950 | | | | | | | |
| | | 1890 | | | | 1950 | | | |
	Obs	Mean	Std. dev.	Min	Max	Mean	Std. dev.	Min	Max
Total population	602	11112.37	8562.44	3	77038	21987.86	31747.78	227	495084
Black population	602	3751.87	5447.82	0	47739	4393.37	6485.90	0	64947
Black share	602	.257	.248	0	.940	.197	.203	0	.830
		T: Counties with Confederate monuments before 1950							
		1890				1950			
	Obs	Mean	Std. dev.	Min	Max	Mean	Std. dev.	Min	Max
Total population	417	21566.75	17864.61	21	242039	49651.78	82024.25	1672	806701
Black population	417	9245.16	8674.85	0	64491	13693.98	22064.71	1	208459
Black Share	417	.413	.222	0	.934	.313	.195	.000	.843
		T2: Counties with first monuments built in 1910-1915							
		1890				1950			
	Obs	Mean	Std. dev.	Min	Max	Mean	Std. dev.	Min	Max
Total population	119	17232.15	9613.64	3835	59557	38873.29	42784.86	3452	249894
Black population	119	7189.41	5853.54	52	29908	10659	9876.86	2	49923
Black share	119	.403	.217	.008	.878	.316	.194	.000	.709

Table B2: Summary statistics, others

Variable	Obs	Mean	Std. dev.	Min	Max
Stock of statues, 1950	1019	0.540	0.880	0	9
Stock of other dedications, 1950	1019	0.190	0.789	0	14
Stock of lynchings, 1950	1019	2.649	4.002	0	33
Connection to MMC, 1890	1019	0.172	0.074	0.032	0.520
Connection to Richmond, 1890	1019	0.113	0.049	0.028	0.360
Connection to NYC, 1950	1019	0.128	0.050	0.041	0.376
Value of farmland, 1950	1003	65.351	42.633	4	381

Table B3: Number of first county's dedications by decade

First Construction Year	Freq.	Percent	Cum.
1870- 1880	19	4.56	4.56
1881- 1890	17	4.08	8.63
1891- 1900	38	9.11	17.75
1901- 1910	169	40.53	58.27
1911- 1920	112	26.86	85.13
1921- 1930	36	8.63	93.76
1931- 1940	25	6.00	99.76
1941-1950	1	0.24	100.00
Total	417	100.00	

Table B4: Ideological placebos for connection to MMC

	Placebo Outcomes, FS			
	(1)	(2)	(3)	(4)
	Other Dedications	Other Dedications	Numb. past lynchings	Numb. past lynchings
Connection to Marietta 1890*post1905	0.533**	-1.221	1.870	-0.314
	(0.268)	(0.900)	(1.545)	(1.575)
Stock statues				
Connection to Richmond 1890*post1905		4.847		2.761*
		(3.332)		(1.566)
Connection to NYC, yearly		0.181		-3.043
		(0.995)		(3.186)
Numb. past lynchings		-0.003		
		(0.005)		
Lagged population		0.000***		0.000***
		(0.000)		(0.000)
Observations	7989	7989	7989	7989
R^2	0.678	0.712	0.826	0.829
County FE	Yes	Yes	Yes	Yes
State-by-Year FE	Yes	Yes	Yes	Yes
County Cluster	Yes	Yes	Yes	Yes
Fstat				

Dependent variable: existing stock Confederate-named places (schools, parks, buildings, etc.) at time t (col 1,2); cumulative number of lynchings in the county until year t (col 3,4). *Connection to Marietta 1890*post1905* measures the county to county 1890 minimum transportation cost when it became relevant for monuments. *Connection to Richmond 1890*post1905* measures the county to county 1890 minimum transportation cost to Richmond when it became relevant for monuments. *Connection to (NYC)* is a yearly estimate of the connection to NYC. Standard errors clustered at the county level in parentheses. * p<0.10, ** p<0.05, *** p<0.01.

Table B5: IV strategy, reorganizing controls

	FS	IV	FS	IV
	(1)	(2)	(3)	(4)
	Stock statues	Black share	Stock statues	Black share
Connection to Marietta 1890*post1905	1.822***		1.919***	
	(0.536)		(0.442)	
Stock statues		-0.148***		-0.149***
		(0.052)		(0.041)
Connection to Richmond 1890*post1905	-0.286	-0.177		
	(1.380)	(0.213)		
Connection to NYC 1890*post1905	1.104	-0.046		
	(1.445)	(0.289)		
Numb. past lynchings	0.020***	-0.001	0.020***	-0.001
	(0.006)	(0.002)	(0.006)	(0.001)
Lagged population	0.000***	0.000**	0.000***	0.000***
	(0.000)	(0.000)	(0.000)	(0.000)
Connection to Richmond, yearly			-6.295	-0.996
			(6.092)	(1.184)
Connection to NYC, yearly			4.977	1.428
			(5.659)	(1.088)
Observations	7989	7989	7989	7989
R^2	0.713	-1.312	0.713	-1.337
County FE	Yes	Yes	Yes	Yes
State-by-Year FE	Yes	Yes	Yes	Yes
County Cluster	Yes	Yes	Yes	Yes
Fstat	13.015		12.677	

Dependent variable: existing stock of statues in time t (col 1,2); share of county population classified as Black in census (col 3,4). *Connection to Marietta 1890*post1905* measures the county to county 1890 minimum transportation cost when it became relevant for monuments. *Connection to Richmond 1890*post1905* measures the county to county 1890 minimum transportation cost to Richmond when it became relevant for monuments. *Connection to (NYC, Richmond)* is a yearly estimate of the connection to NYC or Richmond. Standard errors clustered at the county level in parentheses. * $p<0.10$, ** $p<0.05$, *** $p<0.01$.

Table B6: First stage robustness (connection to other cities and state capitals) and placebo

	FS	FS	FS	FS
	(1)	(2)	(3)	(4)
	Stock statues	Stock statues	Stock statues	Stock statues
Connection to Marietta 1890*post1905	1.831***	1.580***	1.623**	1.437**
	(0.518)	(0.496)	(0.672)	(0.675)
Connection to Richmond 1890*post1905	0.326	0.190	0.069	0.655
	(0.863)	(0.891)	(0.919)	(0.985)
Connection to NYC, yearly	1.307	0.679	1.174	3.300*
	(1.423)	(1.406)	(1.430)	(1.823)
Connection to Chicago, yearly	-2.222*	-1.459	-1.963	0.524
	(1.219)	(1.128)	(1.215)	(1.635)
Numb. past lynchings	0.020***	0.020***	0.019***	0.020***
	(0.006)	(0.005)	(0.006)	(0.006)
Lagged population	0.000***	0.000***	0.000***	0.000***
	(0.000)	(0.000)	(0.000)	(0.000)
Mkt access 1890*post1905			0.000	0.000
			(0.000)	(0.000)
Connection to New Orleans, yearly				0.755
				(1.123)
Connection to state capital				-2.266*
				(1.233)
Observations	7988	7900	7988	7988
R^2	0.713	0.713	0.713	0.715
County FE	Yes	Yes	Yes	Yes
State-by-Year FE	Yes	Yes	Yes	Yes
County Cluster	Yes	Yes	Yes	Yes
Fstat	11.487	12.005	11.891	

Dependent variable: existing stock of statues at time t. State capitals are dropped in columns 2. *Connection to Marietta 1890*post1905* measures the (inverse of) county-to-county 1890 minimum transportation cost to MMC when it became relevant for monuments. *Connection to Richmond/Mkt Access*post1905* measures the (inverse of) county-to-county 1890 minimum transportation cost to Richmond - or the 1890 market access from Hornbeck et al. (2021) - when it became relevant for monuments. *Connection to state capital* measures the (inverse of) county-to-county minimum transportation cost to the own state capital. *Connection to NYC/Chicago/New Orleans* is a decennial estimate of the connection to each of these destinations. Stock of lynching measures the total number of lynchings in the county up to time t. Lagged population measures population in the previous census. *Connection to Mt. Airy 1890*post1905* measures the (inverse of) county-to-county 1890 minimum transportation cost to Mt. Airy when it became relevant for monuments.Standard errors clustered at the county level in parentheses. * p<0.10, ** p<0.05, *** p<0.01.

Table B7: IV, connection to other cities and state capitals

	IV	IV	IV	IV
	(1)	(2)	(3)	(4)
	Black share	Black share	Black share	Black share
Stock statues	-0.134***	-0.145***	-0.141**	-0.153*
	(0.045)	(0.054)	(0.067)	(0.081)
Connection to Richmond 1890*post1905	-0.135	-0.179	-0.148	-0.071
	(0.148)	(0.156)	(0.156)	(0.188)
Connection to NYC, yearly	0.635**	0.571**	0.636**	0.949**
	(0.260)	(0.267)	(0.268)	(0.410)
Connection to Chicago, yearly	-0.193	-0.128	-0.192	0.024
	(0.235)	(0.228)	(0.241)	(0.306)
Numb. past lynchings	-0.001	-0.001	-0.001	-0.000
	(0.001)	(0.002)	(0.002)	(0.002)
Lagged population	0.000**	0.000**	0.000*	0.000*
	(0.000)	(0.000)	(0.000)	(0.000)
Mkt access 1890*post1905			0.000	0.000
			(0.000)	(0.000)
Connection to New Orleans, yearly				0.182
				(0.225)
Connection to state capital				-0.313
				(0.273)
Observations	7988	7900	7988	7988
R^2	-1.055	-1.011	-1.170	-1.399
County FE	Yes	Yes	Yes	Yes
State-by-Year FE	Yes	Yes	Yes	Yes
County Cluster	Yes	Yes	Yes	Yes
Fstat	10.336	9.816	8.561	

Dependent variable: share of county population classified as Black in census, 2SLS results. The first stage is reported in columns 1 to 4 of B6. State capitals are dropped in columns 2. *Connection to Marietta 1890*post1905* measures the (inverse of) county-to-county 1890 minimum transportation cost to MMC when it became relevant for monuments. *Connection to Richmond/Mkt Access 1890*post1905* measures the (inverse of) county-to-county 1890 minimum transportation cost to Richmond - or the 1890 market access from Hornbeck et al. (2021) - when it became relevant for monuments. *Connection to state capital* measures the (inverse of) county-to-county minimum transportation cost to the own state capital. *Connection to NYC/Chicago/ New Orleans* is a yearly estimate of the connection to each destination city. Stock of lynching measures the total number of lynchings in the county up to time t. Lagged population measures population in the previous census. Standard errors clustered at the county level in parentheses. * p<0.10, ** p<0.05, *** p<0.01.

Table B8: Black population change, IV approach

	FS	OLS	IV
	(1)	(2)	(3)
	Stock statues	Black pop. change	Black pop. change
Connection to Marietta 1890*post1905	1.850***		
	(0.519)		
Stock statues		-162.484	-1431.304*
		(112.205)	(805.617)
Connection to Richmond 1890*post1905	0.435	1380.855	4015.452
	(0.865)	(2064.764)	(2457.297)
Connection to NYC, yearly	-0.790	11172.989***	8938.277***
	(0.820)	(2568.990)	(3139.326)
Numb. past lynchings	0.020***	-128.638***	-103.671***
	(0.006)	(30.099)	(30.328)
Lagged population	0.000***	0.034***	0.045***
	(0.000)	(0.009)	(0.012)
Observations	7989	7989	7989
R^2	0.713	0.557	0.009
County FE	Yes	Yes	Yes
State-by-Year FE	Yes	Yes	Yes
County Cluster	Yes	Yes	Yes
Fstat	12.893		

Dependent variable: existing stock of statues in time t (col 1); change in Black population in census (col 2, 3). *Connection to Marietta 1890*post1905* and *Connection to Richmond 1890*post1905* measure average minimum transportation cost to MMC or Richmond in 1890 when it became relevant for monuments. *Connection to NYC* is a yearly estimate of the connection to NYC. Standard errors clustered at subregion level in parentheses. * p<0.10, ** p<0.05, *** p<0.01.

Table B9: IV strategy, spatial correlation: collapsing at larger unit than county

	FS	OLS	IV
	(1)	(2)	(3)
	Stock statues	Black Share	Black Share
Connection to Marietta 1890*post1905	4.773***		
	(1.037)		
Stock statues		-0.005***	-0.041***
		(0.002)	(0.015)
Connection to Richmond 1890*post1905	-2.173	-0.068	-0.001
	(2.242)	(0.091)	(0.113)
Connection to NYC, yearly	-0.967	0.355***	0.278*
	(1.262)	(0.135)	(0.149)
Experienced lynchings	0.024**	-0.002	-0.001
	(0.010)	(0.001)	(0.001)
Lagged population	0.000***	0.000	0.000**
	(0.000)	(0.000)	(0.000)
Observations	2722	2722	2722
R^2	0.978	0.989	-0.224
Unit FE	Subregion	Subregion	Subregion
State-by-Year FE	Yes	Yes	Yes
Cluster	Subregion	Subregion	Subregion
Fstat	13.147		

The unit of observation is a subregion constructed by defining for each state 8 equal groups by county centroid's longitudinal value and 8 equal groups by latitudinal value, generating up to 64 spatial cells per state. Collapse units within a cell: obtain "subregions". Standard errors in parentheses. * $p<0.10$, ** $p<0.05$, *** $p<0.01$.

C   Discussion of Mechanisms

In Figures C23 to C26, I compare the local rhetoric regarding the Confederacy by comparing counties which never erected a monument to the ones who erected their first one between 1905 to 1915.[49] In particular I look at the share of local news mentioning the Confederacy with

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[49]The reason for changing the reference period with respect to the usual 1910-1915 is because my outcomes are now yearly and unrelated to the decennial census measurement, which allows me to use years before 1910 without the threat of reverse causality. Moreover, only a small number of counties was issuing local newspapers, making the original number of treated units very small with the usual time period.

positive adjectives and the share mentioning Confederate celebrations. All figures consistently show a higher share of articles mentioning the confederacy and positively speaking about it around the construction period. However, the rhetoric tends to converge soon after the peak construction years. At the same time, the two groups behave very similarly in terms of Confederate ceremonies and celebrations. These results suggest that while monuments made the Confederate rhetoric salient around their construction date and the years shortly after, they did not modify the long-run trajectory of the local narrative.

Similarly, I conducted an analysis to examine whether newspapers' treatment of the Black population changed over time. To do this, I replicated Ottinger et al. (2022)'s analysis, which finds that anti-Black rhetoric, particularly accusations of Black people committing rape, tended to increase during election periods. I use their same search to investigate if counties that constructed Confederate monuments would exhibit increases in anti-Black sentiment. Figures C27 and C28 show that this was generally not the case. Treated counties tended to maintain a slightly more pronounced anti-Black bias throughout the entire period, both normalizing over total article pages or total pages mentioning Black people. Only a small and generally insignificant divergence is visible towards the end of the considered period.

A second possible channel concerns the role played by organized white groups, directly or indirectly linked to white supremacy. I first compare counties with monuments constructed between 1905 and 1915to never treated counties in terms of the number of newspaper articles mentioning the KKK, which I take as a proxy for the KKK activity. As depicted in Figure C29, there was limited and similar mention of the KKK in both treated and control counties prior to the construction of Confederate monuments. This trend remains virtually unchanged until the 1920s, when the so-called second wave of the KKK dramatically increased the number of newspaper articles mentioning the Klan. However, even in this period we do not see a significant divergence between treated and control counties. Another critical organization, extensively discussed throughout this paper, is the United Daughters of the Confederacy (UDC). This group played a significant role in sponsoring the construction of most Confederate monuments and actively promoted the Lost Cause ideals. Figure C30 illustrates the frequency of newspaper mentions of the terms UDC or "United Daughters". As expected, the treated

and control counties behave very differently in this dimension. After a period or similar increase, many more newspaper articles mentioned the UDC in the treated counties compared to counties without monuments. The divergence begins before the monuments' inauguration, consistent with the anecdotal evidence that the UDC would actively campaign on local newspapers for several years before raising enough funds to erect the monuments. For instance, Figure C31 provides anecdotal evidence of this in the form of newspaper articles advertising funding requests by the UDC to erect a Confederate monument in the city of Kosciusko. While the monument in Kosciusko was inaugurated in 1911, fundraising efforts began as early as 1905. Importantly, even after the inauguration, the UDC remained significantly more active in counties with monuments, hinting at a potential role they may have played in shaping a less favorable local environment to Black Americans. The trend illustrated in the left panel of Figure C30 is corroborated by the right panel, where I run an event study studying how the number of pages mentioning the UDC changes relative to the time of inauguration. The relatively stable pre-trend ends eight to six years prior to the inauguration, likely corresponding to the begin of the fundraising campaign. The event study confirms that the increased activity of the UDC remains significant for ten to twelve years after the inauguration.[50]

I also look at how the voting pattern changed over time. Given the segregationist views of the southern Democratic Party, and its consistent participation in national elections, votes to that party is the natural outcome to study. The evidence here is mixed. Figure C23 plots the raw number of votes, with county and state-by-year fixed effects showing evidence of an increase in the total votes for the democrats right after the monuments are placed, however this evidence fades when looking at the vote share which seem to simply continue a pre-existing trend. It is not easy to interpret the results on voting, especially the total number of votes, because the composition of the enfranchised people changed dramatically over time with women voting for the first time in 1920 and most Black Americans losing their vote towards the end of the 19th century. All in all, the evidence on vote offers at best mild evidence of an increase in votes for the segregationist parties.

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[50]The UDC was founded in 1894, thus the event study is a more compelling evidence to show the flat pre-trend as it also relies on counties whose first monument was constructed in the 1930s.
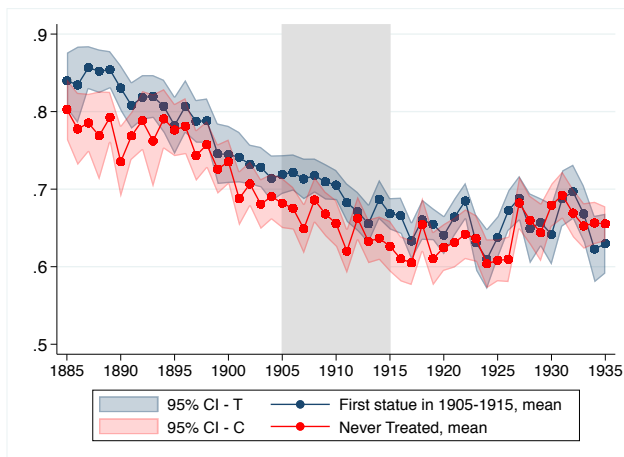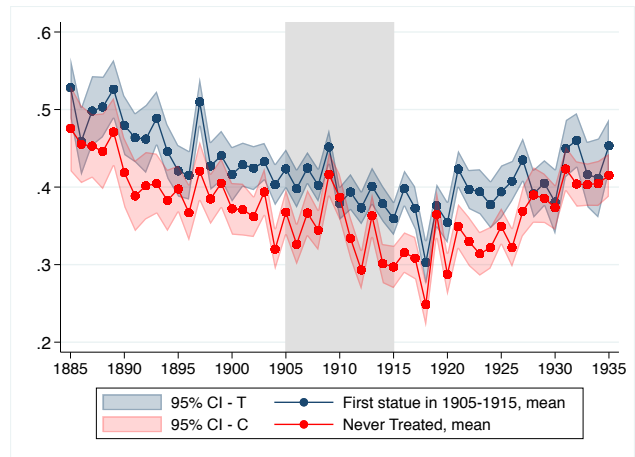
C.1 Newspaper rhetoric
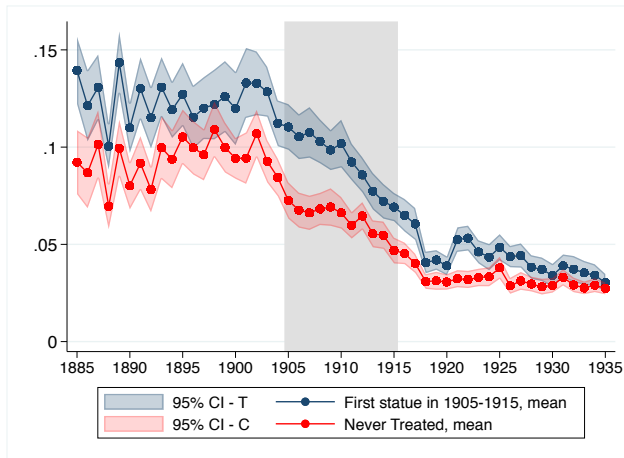
Figure C23: Share articles with: Confedera* and (honor* or respect*). Treated group: counties with first monument in 1905-1915; control counties: never treated. Sample: counties with at least 100 article pages per year. The sample includes a minimum of 96 counties in 1885 to a maximum of 220 in 1920.
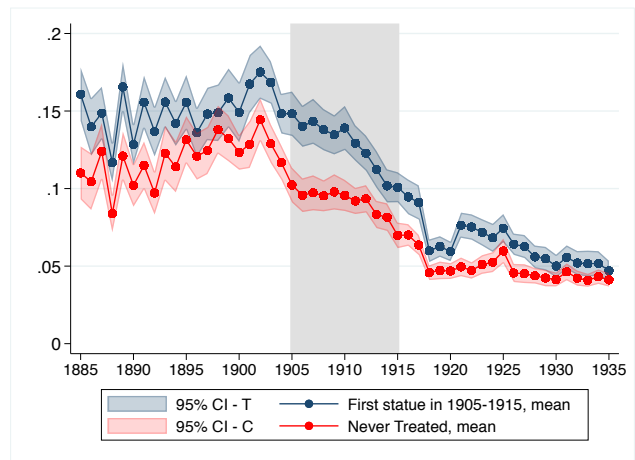
Figure C24: Share articles with: Confedera*. Treated group: counties with first monument in 1905-1915; control counties: never treated. Sample: counties with at least 100 article pages per year. The sample includes a minimum of 96 counties in 1885 to a maximum of 220 in 1920.
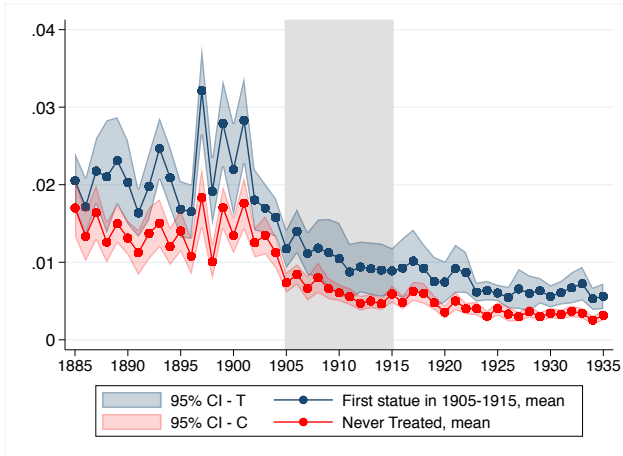

Figure C25: Share articles with: Confedera* and (honor* or respect*) over Confedera*. Treated group: counties with first monument in 1905-1915; control counties: never treated. Sample: counties with at least 100 article pages per year. The sample includes a minimum of 96 counties in 1885 to a maximum of 220 in 1920.

Figure C26: Share articles with: Confedera* and (parade* or ceremon* or celebrat*) over Confedera*. Treated group: counties with first monument in 1905-1915; control counties: never treated. Sample: counties with at least 100 article pages per year. The sample includes a minimum of 96 counties in 1885 to a maximum of 220 in 1920.
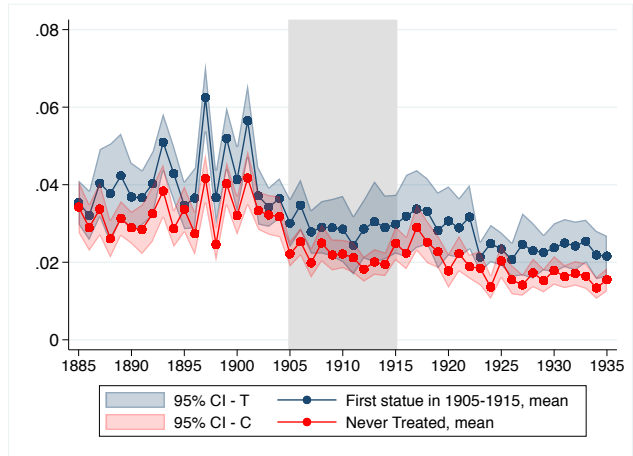
Figure C27: Share articles with: (colored or negro*) and (rape* or rapist*) over total number of articles (as in Ottinger et al. (2022)). Treated group: counties with first monument in 1905-1915; control counties: never treated. Sample: counties with at least 100 article pages per year.

Figure C28: Share articles with: (colored or negro*) and (rape* or rapist*) over total number of articles with (colored or negro*). Treated group: counties with first monument in 1905-1915; control counties: never treated. Sample: counties with at least 100 article pages per year.

C.2 Role of organizations: UDC and KKK

KKK

Figure C29: Share articles with: (KKK or "Ku Klux" or Klan) over total number of articles.

Note. Treated group: counties with first monument in 1905-1915; control counties: never treated. Sample: counties with at least 100 article pages per year.
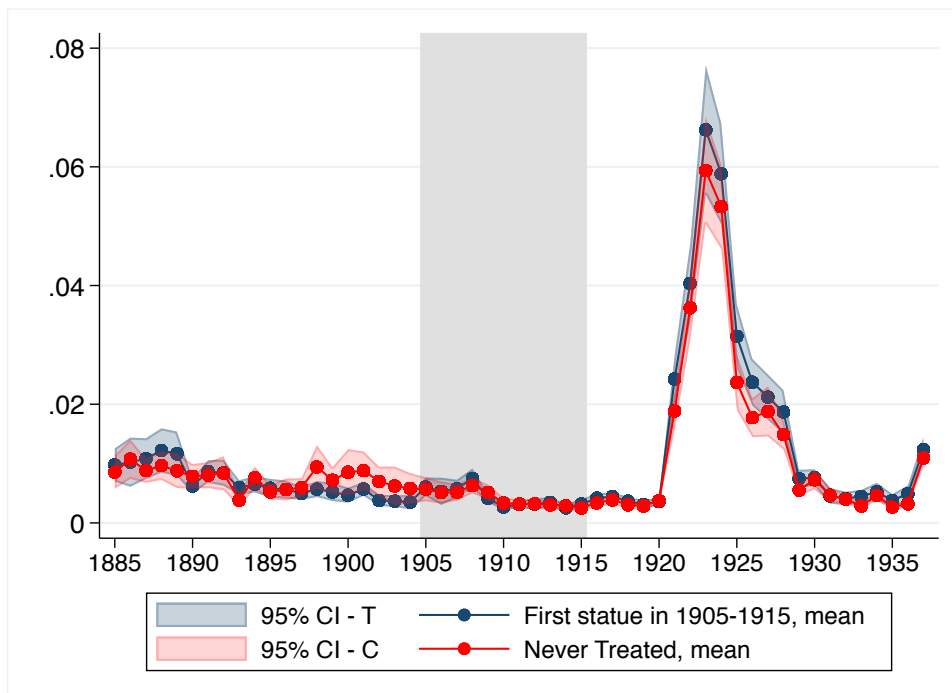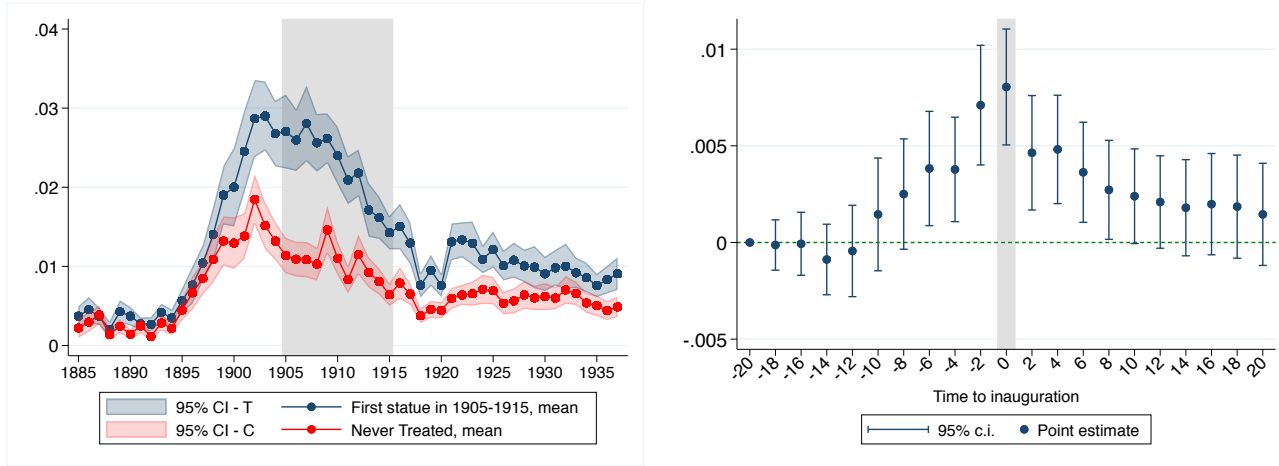
UDC

Figure C30: Share of local newspaper pages about: *UDC or "United Daughters"* over total number of articles

Note. The figure on the left measures yearly newspaper quotes separately for a treated group of counties with the first monument erected between 1905 and 1915, and for the control group consisting of counties that were never treated. The figure on the right measures newspaper quotes every two years relative to the inauguration of the county's first monument. Sample: counties with at least 100 article pages per year from locally headquartered newspapers.

Figure C31: Example of newspapers' articles advertising UDC's fund-raising for monuments. The articles are respectively from the The Star Herald (Dec 1st, 1905); The Star Ledger (Feb 22nd, 1907) and The Star Ledger (Dec 15th, 1911) and they all concern the confederate monument eventually inaugurated in December 1911.
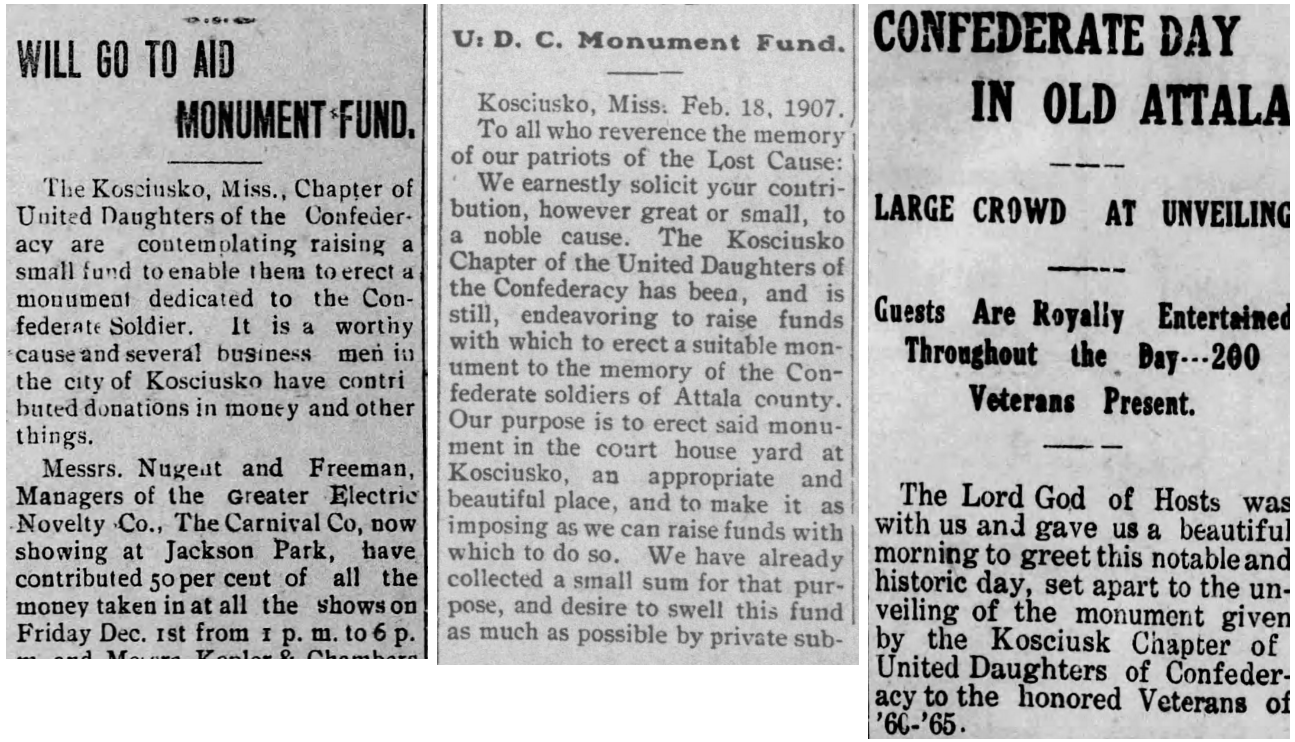
C.3   Democratic vote
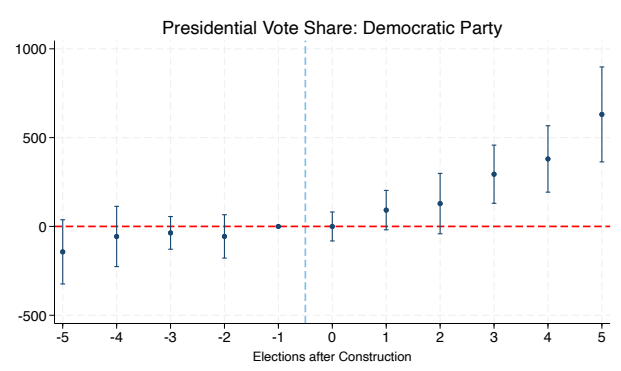
Figure C32: Democrats' total votes. County and state-by-year FE. Clustering level: county
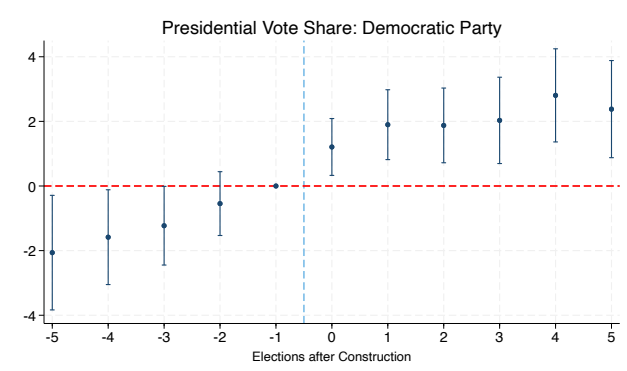
Figure C33: Democrats' vote share. County and state-by-year FE. Clustering level: county

D   Fixed effects defined at the stable county level

I what follows I replicate my main tables and figures after redefining fixed effects to account for changes in county borders, as provided by the Atlas of Historical County Boundaries.

Figure D34: Black share of population
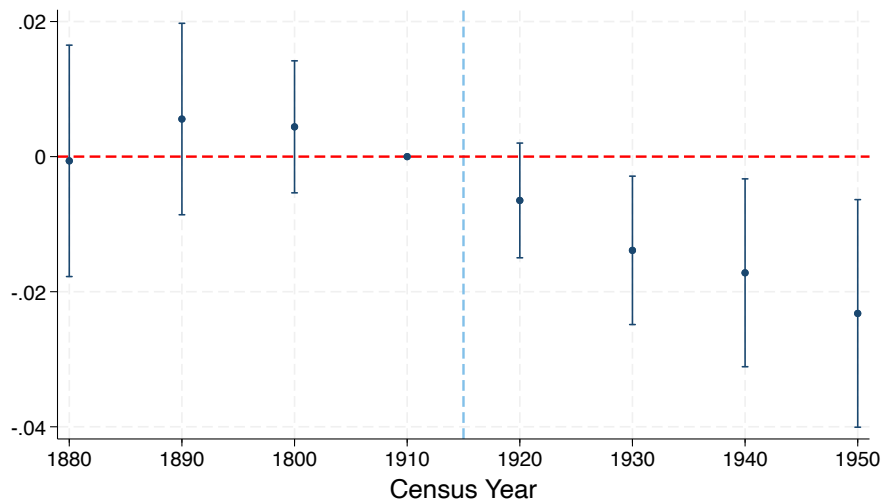
Note. Coefficients from Equation 1. Controls: lag of population, county FE, state-by-year FE

Figure D35: Black share of population
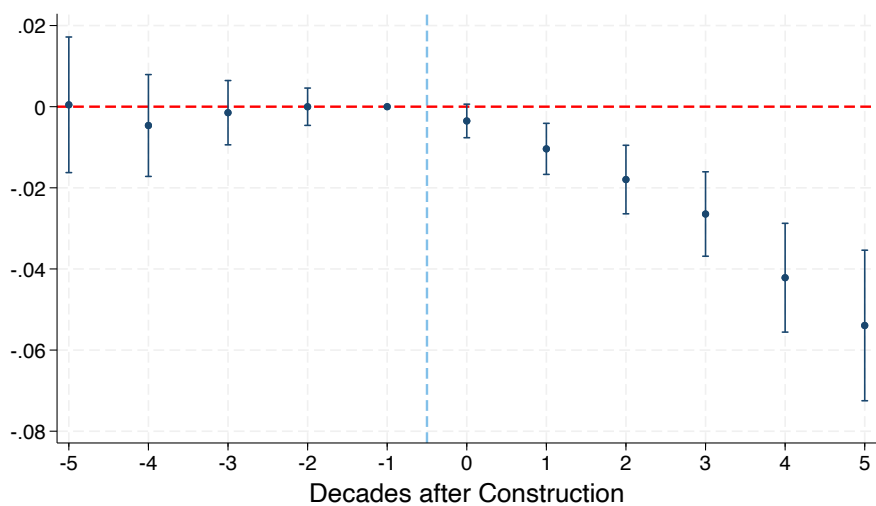
Note. Coefficients from Equation 2. Controls: lag of population, county FE, state-by-year FE

Table D10: IV strategy, change in county borders

|	FS	FS	OLS	OLS	IV	IV
	(1)	(2)	(3)	(4)	(5)	(6)
	Stock statues	Stock statues	Black share	Black share	Black share	Black share
Connection to Marietta 1890*post1905	2.637***	1.955***				
	(0.511)	(0.530)				
Stock statues			-0.012***	-0.009***	-0.106***	-0.091***
			(0.004)	(0.003)	(0.027)	(0.034)
Connection to Richmond 1890*post1905		0.261		-0.241***		-0.102
		(0.828)		(0.068)		(0.094)
Connection to NYC, yearly		-0.053		0.497***		0.420***
		(0.771)		(0.100)		(0.112)
Numb. past lynchings		0.016***		-0.004***		-0.003***
		(0.006)		(0.001)		(0.001)
Lagged population		0.000***		0.000		0.000*
		(0.000)		(0.000)		(0.000)
Observations	7607	7607	7607	7607	7607	7607
R^2	0.789	0.808	0.978	0.979	-0.644	-0.394
County FE	Yes	Yes	Yes	Yes	Yes	Yes
State-by-Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Stable County Cluster	Yes	Yes	Yes	Yes	Yes	Yes
Fstat	26.608	13.050				

Dependent variable: existing stock of statues in time t (col 1,2); share of county population classified as Black in census (col 3-6). *Connection to Marietta 1890*post1905* measures the county to county 1890 minimum transportation cost when it became relevant for monuments. *Connection to Richmond 1890*post1905* measures the county to county 1890 minimum transportation cost to Richmond when it became relevant for monuments. *Connection to (NYC, Richmond)* is a yearly estimate of the connection to NYC or Richmond. Standard errors clustered at the county level in parentheses. Stable county FE assign a fixed effects to a county defined as a stable unit across time, if the boundary changes, the county is assigned a different fixed effect. Standard errors clustered at the stable county level in parentheses. * $p<0.10$, ** $p<0.05$, *** $p<0.01$.

Figure D36: Value of farmland
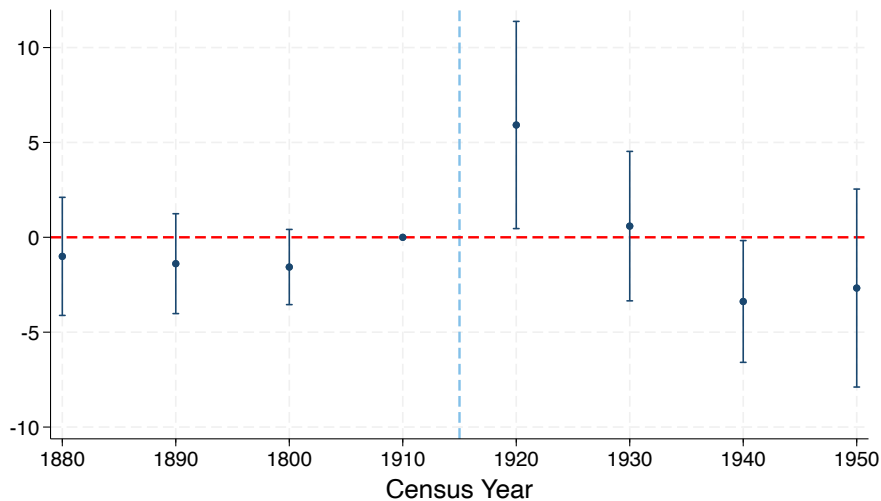
Note. Coefficients from Equation 1. Controls: lag of population, county FE, state-by-year FE

E Online Experiment

Recruitment material Figures E39 reports the post used to recruit participants for the experiment on Prolific

Figure E37: Recruitment message for Prolific participants
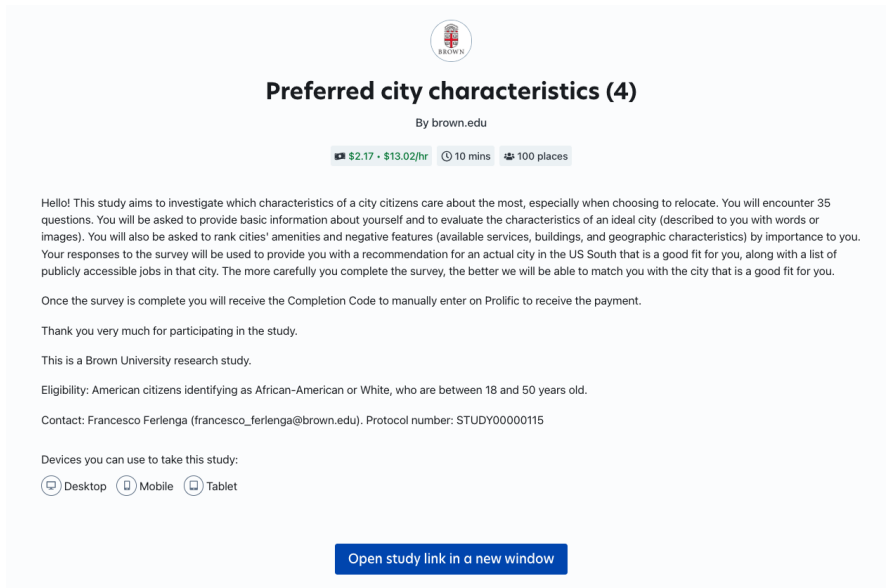
Typical neighborhood of a city Figures E39 and 12 show examples of the how the two possible version in which each city may be presented to the experiment participants.

Figure E38: Precise text respondents read above images

(a) Control Group   **(b)** Treatment Group

Figure E39: The two versions of city A. Column (a) shows the version of the city presented to control individuals while column (b) shows the version with the treatment.

Summary Statistics Table E11 reports basic information about the participants to the online experiment. Table E12 reports the the main outcome variables for non-treatment city-participants, separately for Black and white indivuduals in the South.

Table E11: Summary statistics: basic respondents' demographics

	Southern whites			Southern Blacks individuals			
	n	mean	sd	n	mean	sd	Diff
Female	198	0.55	0.50	112	0.64	0.48	0.097*
Age	198	33.96	8.70	112	34.15	9.52	0.192
Years of Education	194	14.34	2.14	112	14.38	2.18	0.035
Annual Income (wins. 2%)	195	35384.62	28037.36	110	36945.45	30374.98	1,560.84
Democrat	198	0.41	0.49	112	0.47	0.50	0.059
Republican	193	0.22	0.41	113	0.10	0.30	-0.120***
Bothered by monuments	198	0.52	0.50	112	0.69	0.47	0.172***
New monument motivates leaving	198	0.55	0.50	112	0.64	0.48	0.092

Observations are at the participant level. Annual income is winsorized by race. The last four questions were asked after the experiment. Standard errors in parentheses. * p<0.10, ** p<0.05, *** p<0.01.

Table E12: Summary statistics: main outcomes among participant-cities in the control group

	Southern whites: non-treated			Southern Blacks individuals: non-treated			
	n	mean	sd	n	mean	sd	Diff
Would move: No	509	0.29	0.45	284	0.27	0.44	-0.019
Tailored offer: No	509	0.47	0.50	284	0.41	0.49	-0.057
Reservation Wage (wins. 2%)	509	74851.32	75416.14	284	76787.57	87504.12	1,936.25

Observations are at the city-participant level. Reservation wage is winsorized by race. Standard errors in parentheses. * p<0.10, ** p<0.05, *** p<0.01.

Heterogeneity. Tables E13 to E16 show how results vary among different subset of respondents.

Table E13: Experiment result: heterogeneity by political views and approval of monuments

	All Southerners			All Southerners		
	(1)	(2)	(3)	(4)	(5)	(6)
	Move (s.d.)	Move, tailored (s.d.)	Res. wage, log	Move (s.d.)	Move, tailored (s.d.)	Res. wage, log
Monument	-0.453***	-0.293***	0.159***	-0.612***	-0.385***	0.218***
	(0.051)	(0.047)	(0.027)	(0.060)	(0.053)	(0.035)
Monument*Republican	0.329***	0.259***	-0.148***			
	(0.109)	(0.099)	(0.031)			
High Offer		0.499***			0.494***	
		(0.044)			(0.043)	
Monument*Approves Monument				0.536***	0.340***	-0.209***
				(0.086)	(0.082)	(0.038)
Observations	1650	1649	1650	1650	1649	1650
R^2	0.578	0.623	0.868	0.588	0.626	0.871
Respondent FE	Yes	Yes	Yes	Yes	Yes	Yes
City FE	Yes	Yes	Yes	Yes	Yes	Yes

The unit of observation is the city-per-respondent. The outcome captures whether the respondents want to move to the specific city for a job similar to their most recent one (column 1 and 4), for the tailored job offer (column 2 and 5), and what would be their reservation wage for relocation (column 3 and 6). Outcomes in columns 1, 2, 4, 5 correspond to a scale 1-3 (corresponding to *No, Maybe, Yes*) and are expressed in standard deviations. *Monument* is an indicator for whether the city is shown to the participant in the version with a monument. *Republican* and *Disapproves Monument* are respectively indicators for whether the respondents openly state at the end of the survey that they are Republicans or that they don't disapprove Confederate monuments. Standard errors clustered at the participant level in parentheses. * p<0.10, ** p<0.05, *** p<0.01.

Table E14: Experiment result: heterogeneity by age

	Black Southeners			White Southeners		
	(1)	(2)	(3)	(4)	(5)	(6)
	Move (s.d.)	Move, tailored (s.d.)	Res. wage, log	Move (s.d.)	Move, tailored (s.d.)	Res. wage, log
Monument	-0.902***	-0.383	0.377**	-0.598**	-0.305	0.300***
	(0.295)	(0.272)	(0.151)	(0.252)	(0.218)	(0.089)
Monument*Age	0.011	0.002	-0.005	0.009	0.003	-0.006***
	(0.009)	(0.008)	(0.004)	(0.007)	(0.006)	(0.002)
High Offer		0.562***			0.457***	
		(0.078)			(0.051)	
Observations	660	659	660	990	990	990
R^2	0.512	0.563	0.817	0.627	0.668	0.915
Respondent FE	Yes	Yes	Yes	Yes	Yes	Yes
City FE	Yes	Yes	Yes	Yes	Yes	Yes

The unit of observation is the city-per-respondent. The outcome captures whether the respondents want to move to the specific city for a job similar to their most recent one (column 1 and 4), for the tailored job offer (column 2 and 5), and what would be their reservation wage for relocation (column 3 and 6). Outcomes in columns 1, 2, 4, 5 correspond to a scale 1-3 (corresponding to *No, Maybe, Yes*) and are expressed in standard deviations. *Monument* is an indicator for whether the city is shown to the participant in the version with a monument. *Age* measure respondents' age and ranges between 18 and 50. Standard errors clustered at the participant level in parentheses. * p<0.10, ** p<0.05, *** p<0.01.

Table E15: Heterogeneity: Blacks individuals individuals in the South vs in the North

	Blacks: North and South		
	(1)	(2)	(3)
	Move (s.d.)	Move, tailored (s.d.)	Res. wage, log
Monument	-0.548***	-0.499***	0.203***
	(0.093)	(0.093)	(0.058)
Monument*South	0.014	0.168	0.006
	(0.122)	(0.116)	(0.076)
High Offer		0.524***	
		(0.059)	
Observations	1046	1045	1046
R^2	0.534	0.591	0.803
Respondent FE	Yes	Yes	Yes
City FE	Yes	Yes	Yes

The outcome captures whether the respondents want to move to the specific city for a job similar to their most recent one (col. 1), for the tailored job offer (col. 2), and what would be their reservation wage for relocation (col. 3). *South* is an indicator for respondents located in the South. The sample includes 210 respondents, 132 of which are from the South. Standard errors clustered at the participant level in parentheses. * p<0.10, ** p<0.05, *** p<0.01.

Table E16: Second randomization: high offer

	Blacks	Whites	Blacks	Whites
	(1)	(2)	(3)	(4)
	Move, tailored (s.d.)	Move, tailored (s.d.)	Move, tailored (s.d.)	Move, tailored (s.d.)
Monument	-0.326***	-0.189***	-0.297***	-0.085
	(0.070)	(0.052)	(0.091)	(0.073)
High Offer	0.562***	0.458***	0.591***	0.560***
	(0.078)	(0.051)	(0.102)	(0.073)
Monument*High Offer			-0.059	-0.206**
			(0.131)	(0.100)
Observations	659	990	659	990
R^2	0.563	0.668	0.563	0.670
Respondent FE	Yes	Yes	Yes	Yes
City FE	Yes	Yes	Yes	Yes

The unit of observation is the city-per-respondent. The outcome captures whether the respondents want to move to the specific city for the tailored job offer. *Monument* is an indicator for whether the city is shown to the participant in the version with a monument. *High Offer* is an indicator for when the tailored offer came in its high-wage version. Standard errors clustered at the participant level in parentheses. * $p<0.10$, ** $p<0.05$, *** $p<0.01$.

Robustness   Table E17 displays the result of the experiment restricting to the first city only.

Table E17: Effect of monument sight on relocation decision and reservation wage. Primed or not primed about racism (Blacks)

	All Controls (Blacks)			Primed Control (Blacks)		
	(1)	(2)	(3)	(4)	(5)	(6)
	Move (s.d.)	Move, tailored (s.d.)	log_wisor_min_wage	Move (s.d.)	Move, tailored (s.d.)	log_wisor_min_wage
Monument	-0.232*	-0.048	0.111	-0.276	-0.139	0.019
	(0.139)	(0.145)	(0.092)	(0.201)	(0.232)	(0.146)
High Offer		0.214			-0.089	
		(0.143)			(0.193)	
Observations	210	210	210	118	118	118
R^2	0.014	0.011	0.007	0.012	0.005	0.000

The unit of observation is the city-per-respondent. The outcome captures whether the respondents want to move to the specific city for a job similar to their most recent one (column 1 and 4), for the tailored job offer (column 2 and 5), and what would be their reservation wage for relocation (column 3 and 6). Outcomes in columns 1, 2, 4, 5 correspond to a scale 1-3 (corresponding to *No, Maybe, Yes*) and are expressed in standard deviations. The log of the reservation wage is taken after winsorizing the top 2% of reservation wages by race, in order to preserve the intensity of the preference without having outliers jeopardize estimates. *Monument* is an indicator for whether the city is shown to the participant in the version with a monument. This only includes the first presented city. In columns 4 to 6 the control group is primed on racism, by showing them an fake captcha containing the confederate flag and the symbol of BLM. Standard errors clustered at the participant level in parentheses. * p<0.10, ** p<0.05, *** p<0.01.