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# Was Freedom Road a Dead End?

## Socio-economic effects of Reconstruction in the American South

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## Abstract

We investigate how Reconstruction affected Black socio-economic advancement after the American Civil War. We use the location of federal troops and Freedmen's Bureau offices to indicate more intensive federal enforcement of civil rights. We find that Black people made greater socio-economic advances where Reconstruction was more rigorously enforced, and that these effects persisted at least until the early twentieth century, although these advances were weaker in cotton-plantation zones. We suggest a mechanism leading from greater Black political power to higher local property taxes, through to higher levels of Black schooling and greater Black socio-economic achievement.

Reconstruction in the American South was an extraordinary social revolution. Federal troops occupied the defeated Confederacy, accompanied by a civilian army of Northerners intent on remaking the South. Once Congress overcame the resistance of a more conservative president, constitutional amendments and federal legislation extended civil and political rights to former slaves. These four million freed people quickly capitalized on the new social and political reality. Soon a combination of freedmen, Southern loyalists, and Northern sympathizers ruled the South, with the planter elite largely in disarray. Reconstruction federal, state, and local governments oversaw massive investments in education and a range of public goods ignored or underfunded by the antebellum slaveocracy.<sup>1</sup>

Within a few decades, white supremacists reversed the political gains made by Black people and their white allies with a combination of extra-legal terror, legal manipulation, and fraud.<sup>2</sup> Nonetheless, Reconstruction lasted more than ten years, and it was not until the 1890s and early 1900s that white supremacists were able to fully retake control of the South. In this paper, we ask to what extent Black people in the South were able to take advantage of Reconstruction and its aftermath to improve their political, social, and economic positions. And we ask whether this impact persisted even after Reconstruction ended.

We assess these possibilities by considering the relationship between the presence of federal authorities—namely, federal troops and Freedmen’s Bureau offices – and social and economic outcomes.<sup>3</sup> We start from the common finding that a greater federal presence in a county was correlated with higher rates of Black voter registration, Republican voting, and a greater likelihood of the election of Black local officials.<sup>4</sup> We find that a stronger federal presence was correlated with higher levels of Black political, social, and economic progress, higher local tax rates and greater expenditure on local public goods, especially schools, which, in turn, contributed to greater economic advances. The strength of these relationships is dampened in counties dominated by cotton, suggesting the enduring political influence of an entrenched planter elite that opposed Black political and socio-economic advancement.<sup>5</sup>

Southern Black voting and political power declined dramatically as white supremacists succeeded in disenfranchising almost all Blacks in the years following Reconstruction, but Black socio-economic achievements persisted. Counties that experienced more intensive federal presence and greater Black political empowerment before disenfranchisement continued to exhibit greater socio-economic accomplishments: greater farm and home ownership; lower incidence of sharecropping; greater representation in high-earning occupations. The mechanism we explore – relating Black political power to substantially more funding for public education – provides a plausible explanation for the persistence of these effects.

Our results suggest that changes in political institutions – even if imposed from outside – can have a powerful effect on broader categories of social and economic development. In this instance the institutions imposed were strongly favored by a large portion of the local population – a fact which may itself be relevant to broader comparisons. Crucially, cotton plantation agriculture moderated both political empowerment and socio-economic development, which suggests that political-institutional change may be limited by the nature of the underlying economic structure. Similarly, it is important to note that the institutional change itself – equality under the law – was not enough; it required the force, often military, of state power to have effect.

Section 1 describes Reconstruction and its aftermath. Section 2 presents our research in the context of the literature. Section 3 describes the data. Section 4 discusses the social and economic impact of Reconstruction. Section 5 explores the persistence of Reconstruction effects. Section 6 suggests a mechanism which explains how increased political representation may have led to greater socio-economic achievement. Section 7 concludes.

## **1. Reconstruction**

The Civil War led to the emancipation of over four million Black Americans after more than 200 years of chattel slavery. As the war ended, Tennessean Andrew Johnson, who succeeded to the presidency after Lincoln’s assassination, moved to conciliate with Southern elites, who had resisted emancipation. Johnson was opposed by “Radical

Republicans” who insisted on full political and civil rights for Black Americans. When the Republicans swept Congressional elections in 1866, they enacted more forceful Reconstruction measures.<sup>6</sup>

Radical Republicans in Congress and President Ulysses Grant (1869-1877) committed the federal government to a comprehensive attempt to install democratic rule in the former Confederacy. The ten states being “reconstructed” were occupied by an initial force of about 20,000 troops. Congress created a Bureau of Refugees, Freedmen, and Abandoned Lands (“the Freedmen’s Bureau”), with offices throughout the region, to assist former slaves with their transition to freedom; the Bureau operated until 1872. Charitable, religious, and other aid groups sent thousands of volunteers south, especially as teachers for the new schools established to educate Black people. After Congress passed the First Reconstruction Act over Johnson’s veto in March 1867, Black men throughout the South rushed to register to vote.

The federal government mandated that states craft new constitutions guaranteeing civil and political rights before being readmitted to the Union and reestablishing civilian self-government. For most of Reconstruction Republicans dominated much of the former Confederacy, although Democrats gradually regained political power by both legal and extra-legal means. Substantial segments of southern white society – especially poorer farmers outside the Black Belt plantation area – had opposed secession and supported (even fought for) the Union. Although some of these

people may have had little inherent sympathy for the cause of Black civil rights, they recognized that Republican political success depended upon Black votes. As W.E.B. Du Bois (2018) observed, “the granting of the ballot to the black man was...the only method of compelling the South to accept the results of the war.” Whether for principled or partisan reasons, the Republican Party was a strong supporter of measures to empower freed people and ensure their voting rights.<sup>7</sup>

As a wave of political organization and activity swept through the Black population of the South, Black men voted in extremely high numbers. Black voters helped Grant win the presidential election of 1868. The full electoral impact of freedmen was not felt until 1870 and 1872, the first elections held after the passage of the Fifteenth Amendment, which guaranteed universal male suffrage. Hundreds of thousands of new voters allowed the Republicans to dominate presidential and congressional voting in the South. This Republican tide receded in 1874 and 1876, due in part to voter suppression and in part to voters who blamed the party for the Panic of 1873. Nonetheless, Black voters remained essential to the national and southern Republican Party. This was reflected in the successes of southern Republicans in federal, state, and local elections and in the election of well over a thousand Black officials in the former Confederacy (Foner 1993).

Black senators and congressmen may have been prominent at the national level, but for most freed people it was probably more important to have Black local officials to

help secure their rights and represent their interests when raising taxes and allocating money for local public goods and enforcing the law. White Republican officials, too, could hardly ignore the concerns of a community necessary to their electoral success.

White supremacists fought the democratic revolution. The Ku Klux Klan's campaign of terror had some early success, but it was countered by a combination of Black resistance and federal reaction. The Republicans in Washington created the Department of Justice in 1870, and passed the 1870 and 1871 Enforcement Acts, largely to suppress the Klan, which were successful by 1872. However, especially after disenfranchised Confederates were amnestied in 1872, the Democratic Party rebuilt itself in the South and redoubled its attack on Black political power and Republican rule.

The contested presidential election of 1876 led to the "Hayes-Tilden Agreement" that limited the role of federal troops. Over the next 25 years, Black political influence and Republican electoral success were eroded by a combination of terror, intimidation, and legal manipulation (Perman 2001). Especially in the Black Belt cotton plantation areas, landowners exercised such social and economic control over sharecroppers and farm laborers that they could count on massive local Democratic majorities – by legal or illegal means. The Fifteenth Amendment made it impossible for states legally to restrict the franchise on racial grounds, and substantial numbers of Black men were still voting in the 1890s. To cement white supremacy, Democrats called conventions in the 1890s

and early 1900s to rewrite their state constitutions, instituting voting requirements that in effect disenfranchised most Black men – along with many poor white men.<sup>8</sup>

The promise of Reconstruction was extraordinary, but the justice it promised was ultimately denied, especially after the Supreme Court overturned the 1875 Civil Rights Act in 1883. Nonetheless, during Reconstruction and its aftermath, hundreds of thousands of former slaves actively participated in politics; they constituted a crucial constituency for thousands of elected officials both Black and white. The fact that it took over twenty years for white supremacists to almost completely disenfranchise Black voters suggests that the episode was more than fleeting and may have had a lasting impact.

## **2. Military power, electoral politics, and economic advance**

The political reforms of Reconstruction amounted to an expansion of the franchise to Black men. Black voting affected electoral outcomes since roughly a third of the South's population was Black, and Black voters constituted a majority in several states and many counties. This was reflected in increased voting for the Republican Party, which supported Reconstruction and Black civil rights. Black enfranchisement resulted in the election of politicians sympathetic to this cause, and to the election of Black politicians.<sup>9</sup>

We expect that these political changes led to policies that aligned with the interests of newly empowered Black constituencies, which would enhance Black

economic opportunity. Reconstruction-era officials committed to enforcing rights provided a more favorable environment for Black people to access education through greater taxation and spending on schools; to buy and hold farmland and other real estate; and to establish businesses. We expect these changes to be reflected in Black economic advancement.

We assess the impact of Reconstruction across the South, using the location and number of federal troops and Freedmen's Bureau offices as an indicator of the intensity of Reconstruction policy ((Chacón and Jensen (2020), Chacón et al (2021), and Stewart and Kitchens (2021)). Our presumption is that in areas where there were Bureau offices and larger garrisons of federal troops, Reconstruction-era policies were more rigorously enforced.<sup>10</sup> We find substantial evidence of this in eyewitness accounts and the secondary literature.<sup>11</sup> As a Freedmen's Bureau commissioner put it "The wrongs increase just in proportion to the distance from the United States authorities."<sup>12</sup> We expect, then, that Black voter registration, voting, political influence, and economic advancement rose in counties with Freedmen's Bureau offices and greater access to federal troops.

There are two closely related channels by which Reconstruction might have facilitated Black economic advance. One is direct: the use of federal military and judicial power to protect and enforce the rights of freedmen. Another, less direct, runs through Black political empowerment: the Black community used its political power, facilitated

by federal force, to defend Black economic interests and fund local public goods that enhanced Black economic opportunities. As we have some data on one important policy under local control – local taxation for local public goods, especially schooling – we can evaluate this channel in some detail.

Political institutions exist within a socio-economic context, and this context varied widely throughout the South. Where the cotton planter elite was particularly well entrenched and maintained economic and social power after the Civil War, we expect it was much more difficult for freed people to achieve economic autonomy. In most such areas, planters continued to own the land and parcel it out to sharecroppers or tenants. Sharecroppers were in a particularly subordinate relationship, typically without control of the land or the means of production and obligated to provide much of the output to the landowner.

Cotton was a plantation crop, characterized by generally dependent labor relations. We expect that where “cotton was King,” federal occupation had less of an impact. Rice plantations generally operated on a “task system” that gave workers more autonomy and more free time to cultivate their own crops.<sup>13</sup> Sugar was distinguished by the extraordinary sensitivity of the harvest and processing to timing, which gave sugar workers bargaining power inasmuch as withholding labor threatened the value of the entire crop.<sup>14</sup> Tobacco,<sup>15</sup> wheat, corn, and other crops were not generally associated with the extreme socio-economic power disparities that characterized cotton. We

therefore expect the federal presence to have been less effective at overcoming white-supremacist opposition in the cotton regions of the South.

Although white supremacists were eventually able to disenfranchise most freedmen and eviscerate Black political power in the South, we believe that other effects of Reconstruction were harder to reverse. It took nearly three decades to revoke the voting rights of enfranchised citizens. We surmise that it would have been more difficult to reverse some of the other advances freed people achieved during and after Reconstruction. Those who gained an education could hardly have it taken away from them. This also applied to those who received a higher and professional education from the new Black colleges and universities, including those established by the Freedmen's Bureau. By 1888, there were 15,000 Black schoolteachers in the South, more than half of them trained at Freedmen's Bureau-founded "normal schools."<sup>16</sup>

We expect that in areas where Black residents were better able to achieve socio-economic advancement under Reconstruction, they found it easier to maintain, and perhaps expand it, over time. Where freed people were better educated, more likely to own land and other property, and more likely to have higher-earning and higher-status occupations in the 1870s, we expect those advantages to have continued and been passed along to their descendants. In other words, we expect the socio-economic achievements of Black southerners to have persisted for decades even after Reconstruction was reversed.

This study builds on a long line of analyses of Reconstruction and its impact.<sup>17</sup> Recent research primarily explores the political impact of Reconstruction, using the presence of federal troops and Freedmen's Bureau offices as indicators for the intensity of Reconstruction. Military occupation has been shown to be associated with increased Black political representation and higher taxation (Chacón and Jensen 2020, Chacón et al. 2021, Stewart and Kitchens 2021) and Freedmen's Bureau offices with greater literacy (Rogowski 2018).<sup>18</sup> The election of Black politicians was associated with higher tax revenues and higher Black literacy rates and land tenancy (Logan 2020, Suryanarayan and White 2021).<sup>19</sup> Our analysis of the correlation of a federal presence on Black political participation confirms the existing literature (see Appendix Table B1).

We make several contributions to this line of research. First, we look at both federal troops and the Freedmen's Bureau; and, in the case of troops, we construct a composite measure that considers the number of troops, the length of time in the area, and the ease of their access to surrounding areas (accounting for railroad networks and cavalry units). Second, we focus on the socio-economic impact of Reconstruction, looking at outcomes such as school attendance, professionalization, position on the agricultural ladder, and land and home ownership. Third, we identify a mechanism by which political engagement could affect socio-economic development: greater Black and Republican political success was associated with higher local (property) taxation, primarily for schools, and thence with higher rates of school attendance, and thence

economic advancement. Fourth, we emphasize that these positive effects were mitigated in areas dominated by cotton plantations, we surmise due to the enduring power of the planter elite. Finally, we establish that the socio-economic outcomes we explore during and immediately after Reconstruction persisted for decades thereafter.

Analyzing Reconstruction also allows us to explore the relationship between the region's endowments and the economic activities and structures associated with them. We explore how these socio-economic realities affected the impact of the federal presence during Reconstruction, focusing on the region's main crop: cotton. Inasmuch as prevailing technologies dictated production- and subsequent social- relations, we consider differences in agrarian structure and their potential effects on both political and socio-economic outcomes. In this context we note the relevance of our analysis to a massive literature linking endowments, production structures, interests, and institutions to long-term economic growth.<sup>20</sup>

### **3. Data**

Our principal indicators for the intensity of Reconstruction are the presence of federal troops and of an office of the Freedmen's Bureau.<sup>21</sup> The Freedmen's Bureau was established in 1865 and was active in assisting the transition to freedom of formerly enslaved people until Congress ceased to fund it in 1872. At the height of the Bureau's activities there were about 900 Freedmen's Bureau agents in the former Confederacy

(see Figure 1). The impact of the Bureau's branches, in the form of registered Black voters and schools, is likely to have extended well beyond the Bureau's closing in 1872.

Our preferred measure of military occupation is a cumulative monthly average of the total number of troops with ready access to a county. We follow Downs (2015) in computing "occupation zones" based on the spatial coverage of a garrison that considers troop type (infantry vs. cavalry) and railroad networks.<sup>22</sup> We consider average monthly garrison size from May 1865 until December of the relevant year of analysis to take account of cumulative exposure to military occupation.<sup>23</sup> (See Figure 2).

It is impossible to completely disentangle the roles of Freedmen's Bureau field offices and federal troops.<sup>24</sup> The Freedmen's Bureau's mandate was to help the formerly enslaved make the transition to freedom. The Bureau did this in a variety of ways, including providing rations and medical care, helping the formerly enslaved secure their rights as laborers and voters, and, crucial to our analysis, establishing schools for the formerly enslaved. The Bureau was originally placed in the War Department, and many Bureau agents were demobilized troops. Federal troops were frequently co-located with Freedmen's Bureau offices and were often in a position to give assistance to those offices.<sup>25</sup> The influence of both institutions waned after the war: the number of federal troops fell from about 40,000 at the war's end to 11,000 by the end of 1869 (Lieberman 1994, p. 429); the Freedman's Bureau ceased to exist in 1872.

We cannot confidently argue that either troop deployments or Freedmen's Bureau offices were exogenous: the assignment of troops, to which forts and how many, may have been established for reasons correlated with our outcome variables (see Chacón et. al 2021, 334); the literature suggests that Freedmen's Bureau offices were typically located in accessible administrative centers with substantial Black populations (Bean 2016, p. 33, Rogowski 2018, p. 10, Chyn et al. 2024, p. 9) and may have been co-located with military outposts. We provide some preliminary analysis in Appendix Table C1, which suggests that larger garrisons were stationed in counties with larger Black populations. There may also have been other unobservable factors driving troop deployments that are correlated with our outcome variables. Likewise, Freedmen's Bureaus were more likely to be established in areas with larger Black populations and greater cotton suitability (see Appendix Table C2).

We consider the relationship between Reconstruction and Black socio-economic achievements using two sets of potential explanatory variables: (1) Black and Republican political power; and (2) federal troops and Freedmen's Bureau presence. We expect that where Blacks and their Republican allies were more powerful, they acted to enforce and protect Black access to economic opportunity. We also expect that troops and Bureau agents helped enforce and protect Black political, economic, and legal rights. In the first instance we use as potential explanations our indicators of the

political engagement and success of Black voters; in the second we use the same federal presence variables as above.

We use several measures to gauge the ability of Blacks to take advantage of economic opportunities. These include indicators of socio-economic advancement, such as school attendance, occupation, and property ownership. They also include data on position on the agricultural ladder, with laborer on the bottom rung, followed by sharecropper, tenant, and owner.<sup>26</sup> We used a composite measure of occupational status to identify high-pay/high-status occupations, which includes individuals categorized as professionals, managers, skilled craftsmen, etc.<sup>27</sup>

#### **4. Federal presence and Black socio-economic achievement**

Other scholars have established that federal presence increased Black political engagement and achievement. We take these outcomes as given, and they are central to our analysis, as our argument that a more intensive federal presence had an impact on socio-economic outcomes relies upon the expectation that this presence affected Black political power, which translated into favorable local policies and conditions.

Did Reconstruction affect the ability of freed people--and southern Black people more generally -- to take advantage of newly available economic opportunities? We assess two channels by which Reconstruction might have had an impact. First, did Black political participation – along with the participation of white Republican supporters – allow Black southerners to take advantage of economic opportunities?

Second, what was the direct impact of a federal presence on the ability of Black southerners to avail themselves of economic opportunities?

The secondary literature suggests that the presence of Freedmen's Bureau offices and federal troops provided support and protection for Black citizens as they attempted to buy land, start businesses, enforce contracts, and otherwise advance socio-economically.<sup>28</sup> We typically look at both channels separately, and then together. We understand that the latter approach – including *both* federal presence and Black political engagement – raises questions of endogeneity, since the latter is strongly affected by the former. However, we include both in the interest of suggesting that *both* channels operated – the federal presence affected outcomes both through its impact on Black political success *and* through its more direct impact on Black socio-economic opportunities. The presence of troops and the Freedmen's Bureau might, for example, both increase Black voting – hence local government support for schooling – and help with the provision and protection of schools and schoolteachers.

One of the first orders of business for freed people was to redress the forced illiteracy of the slavery era. Local governments, residents, the Freedmen's Bureau, and northern charities built thousands of schools. It took substantial effort to raise sufficient local taxes, establish, and staff schools – especially when local white citizens, and perhaps some layers of government, were not sympathetic. Where Republicans had greater political power, we expect higher levels of school attendance; we also expect

that the proximity of federal troops and the Freedmen's Bureau assisted in expanding access to schooling.<sup>29</sup>

Columns (1) and (4) of Table 1 shows that Black political participation – as reflected in Republican voting in the 1876 presidential election – was positively correlated with school attendance by Black children between the ages of 6 and 16 in 1880.<sup>30</sup> The election of Black officeholders in the county had a similar effect (see Appendix Table B1). We include pre-treatment controls for the Black share of the county population in 1860, the share of free Blacks in the county in 1860, and latitude and longitude.<sup>31</sup> In models that include the troops variable, we condition on the total population of the county in 1860 to address the likelihood that more populous counties will also have more troops stationed in them. We expect more heavily Black counties to show less progress, perhaps due to their greater poverty, while we expect counties with a larger share of free Blacks before the war to show more progress, given their generally higher socio-economic status.

Federal presence was strongly correlated with Black schooling: the coefficient on federal troops is positive and significant in column (2) and that on the presence of a Freedmen's Bureau office is positive and significant in column (3). When both measures of federal presence are included in column (4), both remain positive and significant, along with Black political participation.

We expect both political reform and federal presence to have less effect in areas where the cotton planter elite retained its influence. We explore this in all four regressions in Table 1, adding an indicator of the suitability of the land in the county for cotton cultivation. Being in a cotton region reduced the impact of both Black political participation and federal presence on Black educational advancement, significantly so in columns (2) and (3). We see similar results when using alternative measures of cotton (e.g., cotton production or Mandle's (1978) "plantation counties"), which we include in the Appendix (Tables D7 and D8). Drawing from the full model in column 4 of Table 1, a one standard deviation increase in Republican voting in a county (from a mean of 34 to 54 percent) was associated with a 2.2 percentage point increase in the percent of Black children in school (from 20.7 to 22.9 percent). The presence of the Freedmen's Bureau was associated with a 2.4 percentage point increase in school attendance, while a 100-troop increase in average presence (a bit more than a standard deviation) is associated with a 1.2 percentage point increase in school attendance. Cotton suitability is consistently negative, although only significantly so in columns 2 and 3. Depending on which specification is used, a one standard deviation increase in cotton suitability was associated with at 1.0 to 1.3 percentage point decline in school attendance.<sup>32</sup> These numbers strike us as meaningful in the context of an educational system built almost from nothing, and given the difficulties faced by freed people in gaining access to

educational opportunities in the face of widespread hostility from local white supremacists. We return in more detail to the schooling issue in section 6.

Basic education was one step on the socio-economic ladder. Other important steps include professionalization, whether through higher education or technical training, and the acquisition of property. Given the strongly agricultural nature of the region, it was particularly important for Black farmers to move up the agricultural ladder, away from the highly dependent status of laborers and sharecroppers and toward the more independent ranks of tenants and owner-operators. We evaluate the impact of Black political engagement, and federal presence, on these indicators of socio-economic advance with a series of interrelated measures.

We assess Black progress in occupational attainment and status by looking at both high-status/high-pay occupations, such as professional (e.g., clergymen, doctors, dentists, and lawyers) and technical jobs (e.g., engineers, teachers, scientists). At the other end of the employment ladder, we look at the share of Black workers who worked as farm laborers, typically the lowest status and earning job in the region.

Tables 2A and 2B show the effects of the same set of explanatory variables used for education in Table 1 on these employment and earnings measures for Black males in the South; column 4 in both tables include the full range of explanatory variables on the share of Black workers in higher pay/status jobs and as farm laborers. The tables suggest a similar relationship to that of education and literacy. Both Black political

engagement and federal presence are correlated with substantially higher occupational achievements by Black men. As expected, the impact of our explanatory variables is reversed in relation to the proportion of the Black population working as farm laborers. The effects on agricultural employment are significantly mitigated in the South's cotton plantation regions (see Table 2B, columns (2) and (3)).

The presence of a Freedmen's Bureau office was associated with an increase in the share of Black men in higher-level occupations of about 2.8 percent (Table 2A, column (4)), from a mean of 6.3 percent, while a one standard deviation increase the presence of troops and Republican voting are associated with about 0.8 and 0.6 percentage point increases, respectively. Together these three were associated with nearly a two-third increase in the share of the Black population in higher-status occupations. Cotton suitability has a negative coefficient, but it is small and not significantly different from zero.<sup>33</sup> On the other hand, as seen in Table 2B, a one standard deviation increase in Republican voting was associated with a 2.6 percentage point *reduction* in the share of Black males who were farm laborers (from a mean of 34.5 percent of Black workers), the presence of the Freedmen's Bureau with a 4.2 percentage point reduction, and a one standard deviation increase in troop presence with a 1.2 percentage point reduction. Although these are not enormous numbers, they are substantial, given that they are measured barely three years after Reconstruction ended.

We believe the evidence supports the view that both Black enfranchisement and political activity, and the presence of federal troops and the Freedmen's Bureau, had a positive impact on the schooling of Black children, and on Black occupational and professional advancement.

## **5. Persistence**

Did Black socio-economic advances in the Reconstruction era persist in subsequent decades as white supremacists disenfranchised Black men? We can take advantage of richer data included in the census starting in 1900 to address this question, especially as reflected in Black achievements in the farm sector, which dominated the Southern economy.<sup>34</sup>

Columns 1 and 2 of Table 3 look at factors affecting Black farm ownership in 1900—more than 20 years after the end of Reconstruction; column 3 looks at factors affecting the presence of Black men in higher paying occupations in 1900; and column 4 looks at the percentage of Blacks who were homeowners in 1900. Most Black farmers were laborers, sharecroppers, or tenants; many were able to obtain land in the decades after Emancipation. There is reason to believe that Black political power and federal presence were important to this process. To purchase and hold land typically required legal support to establish title and may have required official support in the event of challenges to title. Several thousand Black farmers took advantage of homesteading possibilities, which could be legally and politically complex. In areas where white

farmers resisted Black land ownership, political power and federal support were particularly important. For example, an Army lieutenant in Florida who had enforced the right of a group of freed people to homestead there reported that local planters “will do all in their power to keep [land] out of the hands of the Freedmen. Although they will probably commit no overt act as long as there is a show of Military force in the state.”<sup>35</sup> There is little doubt that the cotton planter elite strongly favored sharecropping and tenancy and resisted anything that would have broken up large estates.

Table 3 demonstrates that substantial Black progress up the agricultural ladder is associated with more intense enforcement of Reconstruction. Both Reconstruction-era Black political participation, as measured by Republican voting, and the presence of federal troops are typically highly correlated with greater levels of Black farm and home ownership, lower levels of sharecropping, and higher occupational status. The Reconstruction-era presence of a Freedmen’s Bureau office is also so associated, although less strongly and without statistical significance in three of the four specifications; interestingly, the Freedman’s Bureau dummy is associated with higher occupation status, which may reflect greater training and educational opportunities for those near Bureau offices.

The strong and across-the-board results when the dependent variable is higher occupation may be due to the fact that this outcome is especially susceptible to educational activities, while the others (largely home and land ownership) are less

directly related. We address this directly in the next section. Troop presence is the most consistently influential factor: a one standard-deviation increase in troops is associated with a 2.3 percentage point increase in the percentage of Black farmers who own their farms in 1900, a 3.0 percent *decrease* in Blacks who are share tenants in 1900 and smaller, but not insubstantial, increases in Blacks in higher occupational status (0.8 percent) and Black home ownership (1.2 percent). Cotton suitability, logically, was associated with a 4.8 percentage point lower level of farm ownership, a 3.5 percent higher incidence of sharecropping, and 0.7 lower presence in higher occupations.<sup>36</sup>

Table 3 does not fully address the *persistence* of Reconstruction effects over time, since the measure used here of Black farm ownership is first available in 1900. However, it does indicate that the greater presence of Reconstruction-era institutions was reflected in greater Black economic advance in agriculture 25 years after Reconstruction ended. Since the vast majority of freed people started from the same (very low) asset base, it is reasonable to assume that differences that arose during and after Reconstruction were not due to underlying differences at the start of the period. In the next section we evaluate the evolution of schooling and its impact over a similarly long period of time, with specifications that address more directly a plausible mechanism by which the Reconstruction experience might have had long-lasting effects.

## 6. Taxation and public goods

In this section we evaluate a plausible mechanism by which Black political activity and federal presence could have affected socio-economic conditions. One of the most important goals of Black and Republican voters and politicians was to expand schooling, which had been non-existent or illegal for slaves. State and local taxation, which funded schooling, were hotly contested: taxes, almost exclusively on property, were primarily paid by the wealthy white elite while Reconstruction-era local government spending was targeted at poorer Black and white citizens. Much of the white mobilization against Reconstruction presented itself as an anti-tax movement (Thornton 1982; Chacón and Jensen 2020; Jensen et al. 2023; see also Logan 2023 on the connection between higher taxes and greater anti-Black violence). In these circumstances, state and local governments under Republican control typically raised tax rates to finance a wider array of public goods, while the restoration of white supremacy under the Democrats led either to a decline in taxes or a diversion of the revenue to purposes in line with the white elite's needs, such as public universities (Jensen et al. 2023).

We expect county governments controlled by Republicans to raise local property taxes to expand local public goods, especially schooling. We anticipate that the expansion of schooling had both contemporaneous and lasting effects, allowing newly literate or better educated freed people access to previously unavailable economic

opportunities. We have data on local taxes from the decennial census.<sup>37</sup> We focus on data from 1870, which reflect a period of substantial Republican political success. Ideally, we would have data from mid-decade, as 1880 data come after the restoration of Democratic predominance, however these data were only gathered for the decennial censuses. Therefore, we use voting behavior from the 1870 House of Representatives election, with the 1868 presidential election being too early and the 1872 election too late.

We first confirm the association between federal presence and Republican voting (Table 4, column 1) and then establish the impact of these voting data on the local tax rate. Substantively, a one standard deviation (about an 80-person) increase in troop presence is associated with a 1.3 percentage point increase in Republican voting; the presence of a Freedmen's Bureau office, with a 4.3 percentage point increase (the average 1870 House Republican vote share was 39 percent); cotton, with a 2.2 percentage point decrease. In columns 2 and 3 we see that Republican voting is associated with a substantially higher local tax rate. Inasmuch as the outcome variable was a county policy (local taxes were almost exclusively set at the county level),<sup>38</sup> we also show the impact of Republicans winning the vote in the county in the 1870 House election.<sup>39</sup> Counties with substantial – ten percent – Republican margins of victory yield even stronger results. Although we do not have local voting data, we think it is safe to presume that counties which voted for Republican House members also elected

Republican county governments. To assess the actual importance of the relationship, the average local property tax rate was 0.77 mills (dollars per thousand dollars of assessed property). Table 4, column 3 indicates that having a Republican plurality in the county was associated with a hefty 0.27 mill increase, equivalent to about a one-third increase in the average local tax rate.

Our next step is to explore the effect of higher local taxes on the provision of local public goods, especially schooling. We do not have data on other local public goods, but public education was an overriding concern of freed people and Reconstruction governments more generally. It should also be noted that the Freedmen's Bureau was explicitly tasked with assisting in the creation of public schools, and that federal troops were often enlisted in the task of establishing and staffing elementary schools. In Table 5, column 1, we see that – not surprisingly – higher local taxes are associated with more Black children attending school. Substantively, a one standard deviation increase in the local tax rate is associated with a 1.2 percentage point increase in school attendance – from 7.3 to 8.5 percent. Given the central role of the Freedmen's Bureau in public education in this period, it is not surprising that the presence of a Bureau field office is associated with a 2.8 percentage point (i.e., more than one-third) increase in the attendance rate.

We next turn to analyze the extent to which this increased investment in Black children's education is associated with the socio-economic achievements of future

generations of Black citizens. Reconstruction-era tax and schooling policy's effect on school enrollment is correlated with long-term employment and agricultural advancement. This is indicated in Table 5, columns 2, 3, and 4. These show that higher levels of Black children attending school in 1870 are associated with more Black people in higher-status jobs, more Black farmers who are owners, and fewer Black farmers who are tenants four decades later.<sup>40</sup> Cotton mitigates the positive impact and exacerbates the negative one. Substantively, a one standard deviation increase in school attendance in 1870 is associated with a 1.9 percentage point increase in 1910 occupational status, from its mean of 8.3 percent. It is associated with a 3.5 percentage point increase in 1910 farm ownership (from a mean of 40.5 percent) and a similar decrease in tenancy (3.6 percent). We obtain similar results for other measures of socio-economic advancement, such as particular occupations and homeownership. These effects are substantially reduced in cotton plantation regions, typically by amounts roughly equal to or greater than the positive impact of 1870 school attendance. The results are robust to the inclusion of all relevant controls.

In Table 6 we focus on the effect of federal presence on Black occupational status in each decade between 1870 and 1920. This outcome is most directly linked to educational opportunities first made available during Reconstruction. In line with our expectations, we find a positive and significant impact of Black children's school attendance in 1870 on occupational advancement from our first measurement in 1880 all

the way through to 1940. Cotton suitability is negative throughout, although it only becomes significant starting in 1900. We believe that these findings are strongly suggestive that those areas under Republican control during Reconstruction made enhanced investments in schooling; and that this increased educational spending had an enduring impact on the occupational advancement of Black men.<sup>41</sup>

In this section, we have suggested a mechanism by which Black political engagement and federal presence improved the position of freed people during Reconstruction and had an enduring impact. Black political power was greater where there was a federal presence, of troops or the Freedmen's Bureau or both; that greater political power was commonly employed to raise taxes on local (largely wealthy white) property owners to fund local public goods; higher taxes allowed for more extensive educational facilities, more Black children in school. The greater local educational advantages obtained by people in these areas were reflected in greater occupational, social, and economic achievements over subsequent decades. These effects persisted at least until 1910 and in some cases at least until 1940.

## **7. Conclusion**

The evidence presented here suggests that the major institutional changes put in place during Reconstruction had many of the positive effects intended by their architects. A strong federal presence facilitated, for a time at least, Black political empowerment, which had important and lasting socio-economic effects. Black people

and their allies in the former Confederacy were able to expand massively the access of Black children to education, and to facilitate access to occupational and professional opportunities from which they had previously been excluded. Although white supremacists eventually reversed the enfranchisement of most Black men, the socio-economic impact of the advances achieved during and after Reconstruction endured for decades.

Although the achievements of the Reconstruction period and its aftermath are impressive and encouraging, the fact that they persisted may have ambiguous implications. On the one hand, it is significant that areas and people that had done better during and after Reconstruction were able to maintain their accomplishments. On the other hand, it is disheartening to acknowledge that this implies that areas that had fallen behind earlier did not close the gap in the late nineteenth and early twentieth centuries despite substantial general national and regional socio-economic progress. This is consistent with findings, such as those in Althoff and Reichardt 2024 and Collins et al. 2022, that the white supremacist restrictions imposed in the Jim Crow era beginning in the 1890s dramatically limited Black socio-economic advancement and perpetuated existing inequalities.

It is nonetheless clear that Reconstruction had an important impact on Black political engagement and socio-economic achievement, and that the impact on socio-economic achievement persisted long after the civil rights advances were largely

reversed. Counties with a greater presence of federal troops and the Freedmen's Bureau had higher levels of Black political participation and Republican voting and were more likely to elect Black politicians to office. Greater Black political engagement and greater federal presence were also associated with greater school attendance by Black children, greater literacy among Black adults, and a larger share of Black workers in higher-status and higher-earnings occupations.

This analysis sheds light on a crucially important period in the troubled history of American race relations. It demonstrates that freedmen were often able to take advantage of opportunities for political participation and for social and economic achievement. It also demonstrates that the support of the federal military and bureaucracy was crucial in ensuring access to these opportunities. This makes the withdrawal of federal support for Black citizens and the rise of the Jim Crow regime in the 1890s and early 1900s all the more tragic, as it suggests that the loss of government support and the onset of systematic legalized racial oppression dramatically retarded further advances.

There are potential lessons beyond this specific case. Reconstruction policies -- extension of the franchise to Black men, extension of full rights of citizenship to freed people, and the presence of federal troops and officials as enforcers -- represented a major political-institutional change in the South. The post-Civil War experience appears akin to the imposition of new political institutions after military defeat -- a topic on

which most analysts agree that success is unlikely (see Bueno de Mesquita and Downs 2007, and Downes 2021, for example). In Reconstruction, of course, the new institutions were strongly favored by a large segment of the population; indeed, Reconstruction could be seen as an example of an (imposed) expansion of the franchise. A wide range of analyses typically find that these reforms lead to improvements in the socio-economic position of those to whom the franchise is extended.<sup>42</sup>

The evidence presented here is very strongly in line with the proposition that political-institutional reforms to expand the franchise, especially to disadvantaged segments of the population, lead to improvements for many of those newly empowered. We have suggested at least one mechanism by which Reconstruction-era reforms may have led to increases in socio-economic advances, and more generally it seems fair to conclude that the Black educational and occupational achievements of the period were in large part the result of purposive efforts by Republican local and state governments.

An important implication of the Reconstruction experience, however, is that formal institutional change on its own is not sufficient. At one level this is obvious, since the franchise was eventually stolen back by white supremacists. More to the point, the fact that the presence of federal troops and the Freedmen's Bureau had a powerful impact on political and socio-economic outcomes indicates the importance of organized state enforcement of the rights expanded by formal legal changes. This suggests an

important amendment, even corrective, to a simple – perhaps naïve – focus on institutions and institutional change as in and of themselves catalysts of political and socio-economic change. In the Reconstruction context, institutional reform required the support of military might and dedicated government officials.

Another important corrective to the purely institutional view is that the underlying economic structure of the region affected the impact of the institutional changes. Counties in the cotton plantation zone lagged well behind the rest of the South; in fact, being in a cotton region often negated the impact of Black political engagement and federal presence. This is consistent with much of the secondary literature, which typically characterizes cotton plantations as enclaves within which the planter elite could exercise major pressure on Black workers and could often manipulate local institutions to produce desired political results almost at will.

Reconstruction brought revolutionary institutional change to the American South. Political enfranchisement was enacted legally, enforced militarily, and promoted administratively via troops and the Freedmen's Bureau. Enfranchisement allowed Black men to contribute to Republican victories at the federal level and to elect state and local officeholders sympathetic to their needs, including Black officeholders. Reconstruction and the federal presence had direct, important, and long-lasting positive effects on a whole range of Black socio-economic outcomes, including schooling, literacy, occupational status, and property ownership. In short, the Freedom Road promised

during Reconstruction was not a dead end, although its positive effects declined over time.

The evidence here demonstrates the profound and lasting impact that changes in political institutions can have on both political and socio-economic outcomes. However, it also suggests some cautionary notes. First, it makes clear that changing institutions – laws and rules – is not sufficient to overcome historical disadvantages and entrenched opposition. In the case of Reconstruction, it took the organized power of the state – including military power, in ways that mattered at the very local level -- to make meaningful and lasting change possible. Second, it makes clear that the underlying economic structure of an area can have a powerful impact on its susceptibility to reform. More specifically, the effects of political-institutional change can be stymied or blocked by entrenched interests, such as the cotton planter elite represented in the South. We believe that all these lessons remain relevant, and are of profound interest and value, today.

Figure 1

Cotton Suitability and Freedmen's Bureau Locations

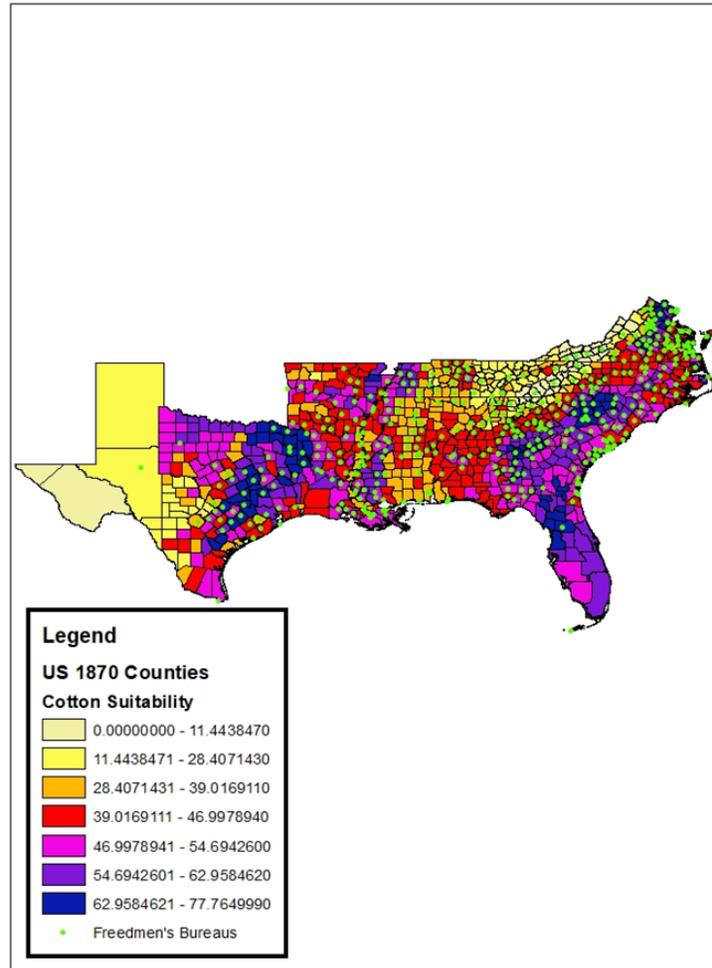


Figure 2

Average Monthly Garrison from May 1865 until December 1876

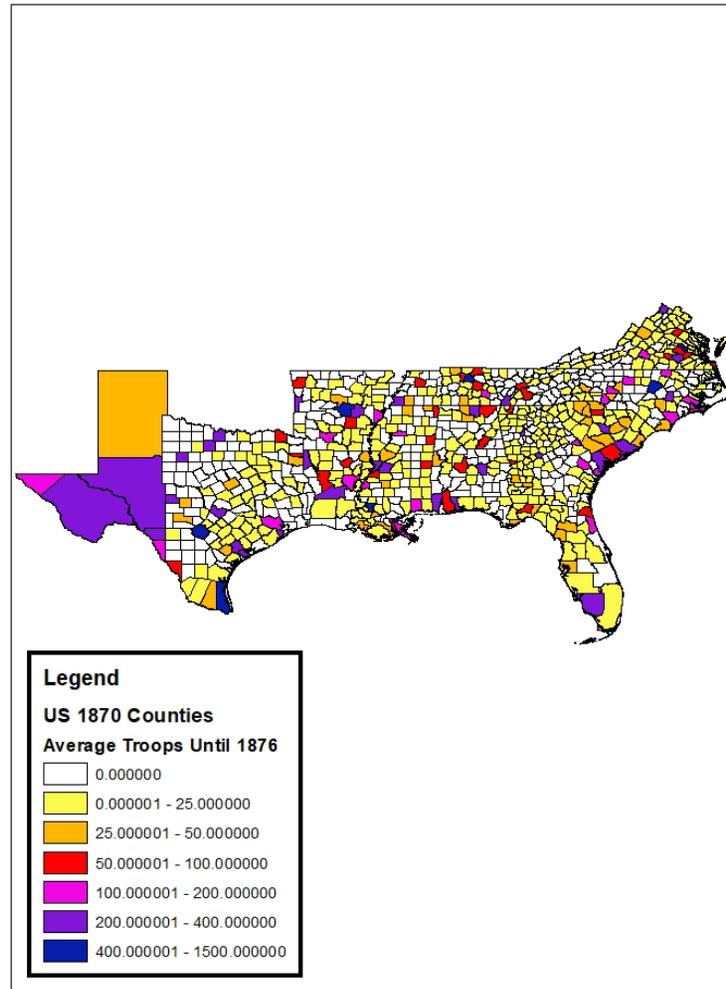


Table 1  
Federal presence and Black children's school attendance, 1880

VARIABLES	(1) Share of Black children (6-16) attending school 1880	(2) Share of Black children (6-16) attending school 1880	(3) Share of Black children (6-16) attending school 1880	(4) Share of Black children (6-16) attending school 1880
Republican Presidential votes 1876	0.125*** (0.040)			0.108*** (0.030)
Average occupying troops through 1876 (thousands)		0.187*** (0.036)		0.153*** (0.034)
Freedmen's Bureau office			0.040*** (0.007)	0.024*** (0.007)
Percent population free Black 1860	-0.123 (0.191)	-0.141 (0.175)	-0.094 (0.201)	-0.250* (0.151)
Percent population Black 1860	-0.056 (0.045)	-0.025 (0.032)	-0.035 (0.036)	-0.097** (0.042)
Total population 1860		0.000* (0.000)		0.000* (0.000)
Cotton suitability	-0.066 (0.049)	-0.083* (0.047)	-0.087* (0.049)	-0.069 (0.046)
Constant	0.053 (0.242)	0.104 (0.245)	0.140 (0.255)	0.125 (0.235)
Lat/Lon	Yes	Yes	Yes	Yes
Observations	845	853	853	845
R-squared	0.054	0.065	0.047	0.092

Conley-adjusted standard errors in parentheses  
\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Table 2A  
Federal presence and Black occupational advancement, 1880

VARIABLES	(1)	(2)	(3)	(4)
	Percent of Black men in higher occupations 1880			
Republican Presidential votes 1876	0.045*** (0.014)			0.032*** (0.013)
Average occupying troops through 1876 (thousands)		0.111*** (0.031)		0.094*** (0.027)
Freedmen's Bureau office			0.035*** (0.006)	0.028*** (0.006)
Percent population free Black 1860	0.360** (0.163)	0.378** (0.156)	0.384** (0.172)	0.264** (0.127)
Percent population Black 1860	-0.091*** (0.017)	-0.092*** (0.015)	-0.109*** (0.018)	-0.127*** (0.020)
Total population 1860		0.000 (0.000)		0.000 (0.000)
Cotton suitability	-0.014 (0.023)	-0.028 (0.024)	-0.031 (0.025)	-0.018 (0.023)
Constant	0.523*** (0.115)	0.583*** (0.117)	0.623*** (0.117)	0.591*** (0.120)
Lat/Lon	Yes	Yes	Yes	Yes
Observations	845	853	853	845
R-squared	0.103	0.135	0.137	0.172

Conley-adjusted standard errors in parentheses  
\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Table 2B  
Federal presence and Black occupational advancement in agriculture, 1880

VARIABLES	(1) Percent of Black men farm laborers 1880	(2) Percent of Black men farm laborers 1880	(3) Percent of Black men farm laborers 1880	(4) Percent of Black men farm laborers 1880
Republican Presidential votes 1876	-0.148*** (0.035)			-0.130*** (0.035)
Average occupying troops through 1876 (thousands)		-0.182** (0.089)		-0.147* (0.080)
Freedmen's Bureau office			-0.053*** (0.009)	-0.042*** (0.008)
Percent population free Black 1860	-0.944*** (0.337)	-1.015*** (0.338)	-1.034*** (0.352)	-0.790*** (0.301)
Percent population Black 1860	0.170*** (0.031)	0.123*** (0.028)	0.160*** (0.028)	0.212*** (0.031)
Total population 1860		-0.000 (0.000)		-0.000 (0.000)
Cotton suitability	0.069 (0.046)	0.103** (0.048)	0.105** (0.051)	0.076 (0.046)
Constant	-0.494* (0.271)	-0.600** (0.276)	-0.676** (0.285)	-0.577** (0.269)
Lat/Lon	Yes	Yes	Yes	Yes
Observations	845	853	853	845
R-squared	0.127	0.122	0.132	0.153

Conley-adjusted standard errors in parentheses  
\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Table 3

## Federal presence and Black farm ownership, share tenancy, occupational advancement, and homeownership, 1900

VARIABLES	(1) Percent of Black farmers who own 1900	(2) Percent of Black farmers who are share tenants 1900	(3) Percent of Black men in higher occupations 1900	(4) Percent of Blacks who are homeowners 1900
Republican Presidential votes 1876	0.095 (0.079)	-0.165** (0.078)	0.043** (0.020)	0.078 (0.053)
Average occupying troops through 1876 (thousands)	0.292** (0.133)	-0.375*** (0.102)	0.101*** (0.028)	0.147* (0.086)
Freedmen's Bureau office	0.005 (0.014)	-0.002 (0.016)	0.016*** (0.005)	0.011 (0.009)
Percent population free Black 1860	2.120*** (0.779)	-0.789 (0.503)	0.055 (0.101)	1.475*** (0.434)
Percent population Black 1860	-0.343*** (0.073)	-0.081 (0.067)	-0.172*** (0.019)	-0.190** (0.060)
Total population 1860	-0.000*** (0.000)	0.000 (0.000)	0.000 (0.000)	-0.000** (0.000)
Cotton suitability	-0.321** (0.130)	0.236* (0.132)	-0.048* (0.029)	-0.121 (0.076)
Constant	1.781*** (0.659)	-1.468** (0.575)	0.654*** (0.116)	-0.304 (0.387)
Lat/Lon	Yes	Yes	Yes	Yes
Observations	838	838	844	842
R-squared	0.247	0.188	0.170	0.230

Note: "Higher occupations" means higher pay/prestige occupations. See text for explanation.

Conley-adjusted standard errors in parentheses

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Table 4  
Federal presence and Republican House votes, 1870;  
Republican votes 1870 and Local tax rates, 1870

VARIABLES	(1) Republican House vote 1870	(2) Local tax rate 1870	(3) Local tax rate 1870
Average occupying troops through 1870 (thousands)	0.086** (0.036)		
Freedmen's Bureau office	0.043*** (0.016)		
Republican House vote 1870		0.005*** (0.002)	
Republican House plurality 1870			0.0027*** (0.001)
Percent population free Black 1860	0.226 (0.363)	-0.016* (0.009)	-0.019** (0.008)
Percent population Black 1860	0.487*** (0.046)	0.000 (0.002)	0.001 (0.002)
Total population 1860	0.000 (0.000)		
Cotton suitability	-0.147** (0.058)	-0.000 (0.002)	-0.001 (0.002)
Constant	0.253*** (0.029)	0.005*** (0.001)	0.006*** (0.001)
Lat/Lon	No	No	No
Observations	717	704	704
R-squared	0.252	0.024	0.027

Robust standard errors in parentheses  
\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Table 5  
Federal presence and Black children's school attendance 1870;  
Black occupational status, agricultural status, and homeownership 1910

VARIABLES	(1) Black children attending school 1870	(2) Black males Higher occupations 1910	(3) Black farmowners % of total 1910	(4) Black tenant farmers % of total 1910	(5) Black homeowners 1910
Local tax rate 1870	1.466** (0.683)				
Freedmen's Bureau office	0.028*** (0.007)				
Black children attending school 1870		0.192*** (0.063)	0.364*** (0.105)	-0.376*** (0.105)	0.128* (0.065)
Percent population free Black 1860	0.393* (0.215)	-0.046 (0.125)	2.613*** (0.832)	-2.688*** (0.847)	1.644*** (0.505)
Percent population Black 1860	-0.054** (0.023)	-0.118*** (0.022)	-0.362*** (0.092)	0.374*** (0.093)	-0.151** (0.064)
Cotton suitability	-0.026 (0.025)	-0.080** (0.039)	-0.377** (0.148)	0.379** (0.151)	-0.170* (0.090)
Constant	0.075*** (0.014)	0.303** (0.154)	1.544* (0.787)	-0.666 (0.808)	-0.352 (0.400)
Lat/Lon	No	Yes	Yes	Yes	Yes
Observations	825	841	836	836	841
R-squared	0.057	0.157	0.280	0.283	0.261

Conley-adjusted standard errors in parentheses

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Table 6  
Black male higher occupational status. 1880-1940

VARIABLES	(1) Black males Higher occupations 1880	(2) Black males Higher occupations 1900	(3) Black males Higher occupations 1910	(4) Black males Higher occupations 1920	(5) Black males Higher occupations 1930	(6) Black males Higher occupations 1940
Share of Black children (6-16) attending school 1870	0.170*** (0.033)	0.165*** (0.046)	0.192*** (0.063)	0.139** (0.055)	0.173*** (0.052)	0.168*** (0.043)
Percent population free Black 1860	0.369** (0.154)	0.072 (0.111)	-0.046 (0.125)	-0.049 (0.105)	-0.016 (0.089)	-0.083 (0.127)
Percent population Black 1860	-0.071*** (0.015)	-0.114*** (0.014)	-0.118*** (0.022)	-0.106*** (0.020)	-0.086*** (0.016)	-0.118*** (0.019)
Cotton Suitability	-0.021 (0.025)	-0.046* (0.027)	-0.080** (0.039)	-0.076* (0.040)	-0.074*** (0.026)	-0.095** (0.039)
Constant	0.506*** (0.116)	0.581*** (0.109)	0.303** (0.154)	0.269** (0.136)	0.357*** (0.090)	0.515*** (0.104)
Lat/Lon	Yes	Yes	Yes	Yes	Yes	Yes
Observations	845	843	841	840	839	840
R-squared	0.143	0.163	0.157	0.131	0.148	0.174

Conley-adjusted standard errors in parentheses

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

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## Notes

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<sup>1</sup> See Logan 2025 on the important consequences of education.

<sup>2</sup> See Jones, Troesken, and Walsh 2025.

<sup>3</sup> Chyn et al. (2024).

<sup>4</sup> See, for some more recent among many example, Logan 2020, Chacon and Jensen 2020, Jensen et al 2023, and Stewart and Kitchens 2021.

<sup>5</sup> On the persistence of planter elite, see for example Dupont and Rosenbloom (2018) and the many sources cited therein.

<sup>6</sup> Du Bois 1935, Foner 1988, and Hahn 2003.

<sup>7</sup> Heersink and Jenkins 2020.

<sup>8</sup> Kousser 1974, Perman 2001.

<sup>9</sup> Logan 2020, Chacon and Jensen 2020, Jensen et al 2023, and Stewart and Kitchens 2021.

<sup>10</sup> We acknowledge that some scholars take a more negative view of the role of the Freedmen's Bureau, such as Colby (1985) and Brooks (2025). The latter, from the standpoint of "critical theory," criticizes "the Freedmen's courts' adoption of the liberal theory of contract." Certainly Reconstruction was firmly in the hands of people who believed in private property and contract. Brooks' view is in any case consistent with our findings about the role of the Bureau in helping establish the contractual and property rights of freedmen.

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<sup>11</sup> See <https://www.archives.gov/research/african-americans/freedmens-bureau>,  
<https://freedmen.umd.edu/sampdocs.htm>.

<sup>12</sup> Quoted in White 2017, page 69.

<sup>13</sup> Foner 2007, Chapter 3 .

<sup>14</sup> Rodrigue 2001, Hahn 2003 p. 346ff and p. 349ff.

<sup>15</sup> Kerr-Ritchie 1999.

<sup>16</sup> Richardson 1986, page 119.

<sup>17</sup> Du Bois 1935; Foner 1988; Hahn 2003; Gates 2019.

<sup>18</sup> Jensen et al., 2023, analyzes the South during 1820-1910 more generally, focusing on the impact of Black enfranchisement on state fiscal policies.

<sup>19</sup> Logan (2020) focuses on whether electing Black politicians matters, over and above electing Republican politicians; in other words, focusing on the potential impact of *descriptive representation*. Although we have looked at the specific sources and effects of Black elected officials, controlling for Republican voting, we concentrate on the broader issue of Black/Republican voting and its impact.

<sup>20</sup> Sokoloff and Engerman 2000, Engerman and Sokoloff 2011, Acemoglu and Robinson 2012, Acemoglu et al. 2005.

<sup>21</sup> We exclude four entities in West Texas (El Paso, Presidio, "Bexar District", and "Unorganized Territory of Young") and South Florida (Monroe), where the army was not involved in Reconstruction.

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<sup>22</sup> See <https://www.mappingoccupation.org/> .

<sup>23</sup> Details on all measures are in the Appendix.

<sup>24</sup> See also Ramos-Toro (2025) on the role of refugee camps in this regard.

<sup>25</sup> The correlation coefficient between Freedmen’s Bureaus and forts is 0.27.

<sup>26</sup> Census categories do not easily track the position of sharecroppers, apparently due to confusion among enumerators and others. Often they are classified as “share tenants,” but they are also sometimes simply included among tenants. This makes data about sharecropping hard to compare across decadal censuses; the distinction between laborers, tenants, and owners is clearer.

<sup>27</sup> Many such indices provide a rough sense of occupational ranking. We use the Occupational Income Score developed by IPUMS, “a constructed income score based on the relative economic standing of occupations in 1950” (See <https://usa.ipums.org/usa/chapter4/chapter4.shtml> for details). As this uses 1950 standings, we built our own occupational index based on our understanding of late nineteenth-century conditions. The two indices are highly correlated (.72), and results using the IPUMS index are similar to those presented here, although many of the occupational categories were not relevant in the late nineteenth century.

<sup>28</sup> Cimbala and Miller, eds. (1999) is a good compendium of research on the Bureau.

<sup>29</sup> See Logan 2020 ; Chacón and Jensen 2020; and Jensen et al. 2023.

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<sup>30</sup> All regressions, with the exception of Table 5, are estimated using Conley standard errors, which correct inference by allowing residuals of geographically proximate counties to be correlated. This increases the standard error estimates for spatially smooth regressors, such as cotton suitability. Although this slightly reduces the statistical significance of some of our results, our main variables of interest remain significant and stable in magnitude.

<sup>31</sup> A number of variables that might have been of interest are not included because almost all observations are zeros. This includes the total and Black urban population, which observations are zero in 93 percent of cases.

<sup>32</sup> The substantive effect of cotton falls within this range and significantly different from zero in column (4) ( $t=-2.27$ ) when Conley standard errors are not used.

<sup>33</sup> When robust standard errors are used, instead of Conley standard errors, the coefficient on cotton is significant, but small (less than 0.05 percent).

<sup>34</sup> Collins, Holtkamp, Wanamaker (2024) find that Black landholders in the 1880 census were able to translate this wealth—and economic advantages—to children enumerated in the 1900 census.

<sup>35</sup> As quoted in Lanza 1999.

<sup>36</sup> This is actually “share tenants” and is as close as we can get to sharecropping, as the census enumerators were not clear on the concept.

<sup>37</sup> We thank Jeffrey Jensen and Giuliana Pardelli for giving us access to these data.

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<sup>38</sup> Some local taxes were set by municipalities, but there were very few such instances.

We include municipality taxes in local taxes. See Chacón and Jensen 2020 and Jensen et al. 2023 for more details.

<sup>39</sup> Because there were occasional third candidates, we use a Republican plurality as the indicator of Republican victory.

<sup>40</sup> This is consistent with the Jones and Schmick 2025 finding that education attainment reduced income inequality. The 1900 census distinguishes between “cash tenants” and “share tenants” but the 1910 census does not draw this distinction. Results are analogous, but both statistically and substantively stronger, for 1900 share tenants (sharecroppers).

<sup>41</sup> A range of robustness checks of tables 1-6 are included in the Appendix as tables D1-D6.

<sup>42</sup> For an economic-development context see Brown and Hunter 1999; for an early American example see Ansolabehere et al. 2022.

Was Freedom Road a Dead End?

Socio-economic effects of Reconstruction in the American South

Supplementary Appendix

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## A. Data: Variables and Sources

### 1. Troops and Freedmen's Bureau Offices

*Freedmen's Bureau Offices:* Our main variable for the Freedmen's Bureau is a dummy variable equal to 1 if the county had a Freedmen's Bureau Field Office within its (1870) borders.<sup>1</sup>

*Average Occupying Troops:* Our preferred measure of military occupation is a cumulative monthly average of the total number of troops with ready access to a county. This measure averages the combined garrisons of all forts within all "occupation zones" within the county's borders from May 1865 until December of a given year (e.g., until 1869). These variables are available from 1866 until 1880.<sup>2</sup>

Occupation zones represent the area surrounding a fort, which a garrison could march in a single day. We follow Downs 2015 in constructing spatial occupation zones which account for railroad networks and whether the garrison had infantry or cavalry units (which can march farther). This measure includes both forts which are physically within a county's borders, as well as nearby forts outside the county's borders that are close enough that their troops can deploy into the county within a day. This average is then divided by 1,000 to increase the readability and interpretation of coefficient effects sizes.

## 2. Political Variables

**Black Officeholders:** We digitized Foner (1993)'s comprehensive compendium of over 1500 Black officeholders to give us data on Black officeholders at the national, state, and local levels. Table 5 uses these data, total number of local Black officeholders elected in county  $i$  during the 1870s, as outcomes for columns (1) and (2).<sup>3</sup> Table B2 uses two variables for Black officeholders from Chacón and Jensen (2020), which are dummy indicators which equal 1 if a county had elected a local black officeholder sometime between (1) 1867 and 1870; and (2) 1867 and 1877.

**Republican Voting:** We use Republican vote share data from presidential and House of Representatives elections during the 1870s. These data have been used as is and to construct dummy variables which equal 1 if Republican votes constituted a plurality in county  $i$  in a given election.<sup>4</sup>

**Taxation:** We estimate local tax rates by dividing the combined county and local tax collections by county-level wealth assessments.<sup>5</sup>

## 3. Socioeconomic Variables

**Farm Laborers:** Percentage of Black males (over 16) who were coded as "farm laborers" in the census.

**Farm Ownership and Tenancy:** We have three main measures of farm ownership and tenancy: (1) percent of Black farmers who own their farm; (2) percent of Black farmers

who were tenants (cash and share); (3) percent of Black farmers who were share tenants.<sup>6</sup> Census enumerators were not consistent in distinguishing between share tenants (sharecroppers) and cash tenants, so we cannot use a consistent measure for share tenants.

*High Occupational Status:* We construct a measure of Black males over the age of 16 with professions we consider having high occupational status. Our measure includes three main groupings of occupations: professionals, managers, and skilled craftsmen.<sup>7</sup>

*Home Ownership:* Our variables for homeownership measure the percentage of Black families that own a home.<sup>8</sup>

*School Attendance:* Our main measure of school attendance is the percentage of Black children (aged 6-16) who had attended school at some point during the census year. We also have measures disaggregated by gender.<sup>9</sup>

#### **4. Additional Controls**

*Black Population:* Our main controls for population are Black population share computed from the full census data. We have computed these variables for each available census wave from 1860-1910. We also use a measure of the free Black population share in 1860 using Haines and ICPSR (2010).

*Cotton Suitability:* We use the FAO cotton suitability index.<sup>10</sup>

*Cotton Output:* We use data from the 1880 Agricultural Census to measure the total cotton output (logged).

*Plantation County:* We follow Mandle (1978)'s classification of "plantation counties" to construct a dummy variable for each county in our sample.

*Slave population:* Haines and ICPSR (2010), we construct a variable measuring the share of the total population who were slaves in 1860.

*Railroads:* Using data from Haines and ICPSR (2010), we construct a dummy variable capturing whether or not a county had a railroad in 1860.

*Farm value:* Using data from Haines and ICPSR (2010), we construct a variable measuring the logged value of all farms for each county.

*Manufacturing output:* Using data from Haines and ICPSR (2010), we construct a variable measuring the logged value of total manufacturing output for each county.

## **B. Election of Black officeholders and local taxes**

**Table B1: Local Black officeholders and local taxes**

VARIABLES	(1) Local Black officeholders 1870	(2) Local Black officeholders 1870	(3) Local Black officeholders 1870	(4) Local Black officeholders 1870	(5) Local tax rate 1870
Average occupying troops through 1870 (thousands)		0.437 (0.345)		0.374 (0.351)	
Freedmen's Bureau office			0.188*** (0.046)	0.055 (0.035)	
Republican House vote 1870	0.362*** (0.096)			0.267*** (0.071)	
Local Black officeholders1870					0.032** * (0.010)
Percent population free Black 1860	1.588 (1.091)	0.511 (0.712)	0.948 (0.884)	0.357 (0.812)	0.381 (0.359)
Percent population Black 1860	0.149 (0.116)	0.050 (0.113)	0.188* (0.101)	-0.145 (0.126)	0.519** * (0.044)
Total population 1860		0.000*** (0.000)		0.000*** (0.000)	0.000 (0.000)
Cotton suitability	0.075 (0.092)	0.130 (0.085)	0.021 (0.082)	0.168* (0.095)	- (0.058) 0.140**
Constant	-0.127*** (0.045)	-0.223*** (0.053)	-0.054 (0.036)	-0.291*** (0.066)	0.259** * (0.028)
Lat/Lon	No	No	No	No	No
Observations	717	853	853	717	717
R-squared	0.033	0.139	0.040	0.147	0.248

Robust standard errors in parentheses

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

### C. Freedmen's Bureau and Troop Placement

In Table C1, we present a tentative test checking the relationship between federal garrisons and the main control variables used in the analysis. Model (1) regresses pre-treatment controls for population demographics, cotton suitability, and a dummy indicator for the presence of a railroad in 1860, on our main troop measure (which is a continuous variable) used throughout the analysis. Here we find that cotton suitability, railroads, and two out of the three demographic variables are correlated with the average garrison sizes (from May 1865 until December 1876).

**Table C1: Troop Placement and Covariates**

VARIABLES	(1) Avg. troops through 1876 (thousands)	(2) Avg. troops through 1876 (dummy if > 0)	(3) Avg. troops through 1876 (dummy if above mean)
Cotton Suitability	0.047* (0.024)	0.326*** (0.109)	0.151* (0.089)
Percent population free Black 1860	0.439*** (0.152)	0.295 (0.473)	2.584*** (0.674)
Percent population Black 1860	-0.016 (0.023)	0.402*** (0.066)	0.149* (0.079)
Total population 1860	0.000* (0.000)	0.000** (0.000)	0.000*** (0.000)
Railroad 1860	0.021*** (0.006)	0.141*** (0.024)	0.167*** (0.039)
Constant	-0.002 (0.005)	0.435*** (0.050)	-0.008 (0.037)
Lat/Lon	No	No	No
Observations	853	853	853
R-squared	0.055	0.145	0.119

Robust standard errors in parentheses

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Using an alternative measure of federal garrisons, Model (2) repeats this test but instead used a dummy variable of our main troop variable (essentially capturing whether a county had any federal troops within its borders or within a day’s march). And model (3) repeats this procedure but converts the primary troop measure into a dummy variable equal to 1 (over the mean value) and 0 (below mean value). Here we see that cotton suitability, railroads, and demographic variables are correlated with the binary status of military occupation versus no military occupation (2), as well as above average-sized garrisons versus below average-sized garrisons (3).

**Table C2: Balance Table for Freedmen’s Bureaus**

VARIABLES	(1) Freedmen’s Bureau	(2) No Freedmen’s Bureau	(3) Difference
Cotton	0.462	0.416	-0.046*** (0.100)
Percent population free Black 1860	0.017	0.007	-0.009*** (0.002)
Percent population Black 1860	0.464	0.270	-0.294*** (0.014)
Railroad 1860	0.434	0.35	-0.299*** (0.030)
N	375	503	878

Robust standard errors in parentheses  
 \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

C2 presents a balance table testing the differences in means of multiple covariates in counties with and without Freedmen’s Bureau Field Offices. Unsurprisingly, we find that

Freedmen's Bureaus were more likely to be located in counties with higher cotton suitability and larger Black populations. They were also more likely to be located in counties with a railroad in 1860 and higher overall population. The results from C1 and C2 showing correlations between our main treatment variables (troop garrison sizes and Freedmen's Bureaus) and the tested covariates helps justify our selection of control variables.

## **D. Robustness and Alternative Specifications**

### **1. Pre-treatment economic controls**

In this section, we demonstrate the robustness of our main results to the inclusion of pre-treatment controls reflecting local economic conditions. These controls seek to address potential confounding between the pre-existing economic conditions and federal presence. We see that in tables **D1-D6**, that our results are robust to inclusion of variables capturing the intensity of slavery, farm value, manufacturing value, and the presence of railroad networks.

**Table D1: Economic controls (replicating Table 1)**

VARIABLES	(1) Share of Black children (6-16) attending school 1880	(2) Share of Black children (6-16) attending school 1880	(3) Share of Black children (6-16) attending school 1880	(4) Share of Black children (6-16) attending school 1880
Republican Presidential votes 1876	0.098** (0.039)			0.087** (0.038)
Average occupying troops through 1876 (thousands)		0.162*** (0.039)		0.136*** (0.037)
Freedmen's Bureau office			0.023** (0.009)	0.015* (0.009)
Percent population slave 1860	-0.147*** (0.046)	-0.108** (0.045)	-0.133*** (0.045)	-0.143*** (0.046)
Total population 1860		0.000 (0.000)		0.000 (0.000)
Farm value 1860	0.010 (0.009)	0.007 (0.009)	0.010 (0.009)	0.005 (0.009)
Railroad 1860	0.025*** (0.010)	0.015 (0.010)	0.018* (0.011)	0.017* (0.009)
Manufacturing output 1860	0.010** (0.005)	0.009** (0.005)	0.011** (0.005)	0.007 (0.005)
Constant	0.025*** (0.278)	0.015 (0.282)	0.018* (0.297)	0.017* (0.271)
Lat/Lon	Yes	Yes	Yes	Yes
Observations	713	715	715	713
R-squared	0.092	0.088	0.080	0.108

Conley-adjusted standard errors in parentheses

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

## D2A: Economic controls (Replicating Table 2A)

VARIABLES	(1) Percent of Black men in higher occupations 1880	(2) Percent of Black men in higher occupations 1880	(3) Percent of Black men in higher occupations 1880	(4) Percent of Black men in higher occupations 1880
Republican Presidential votes 1876	0.050*** (0.017)			0.039** (0.017)
Average occupying troops through 1876 (thousands)		0.117*** (0.019)		0.096*** (0.018)
Freedmen's Bureau office			0.026*** (0.004)	0.021*** (0.003)
Percent population slave 1860	-0.094*** (0.020)	-0.069*** (0.019)	-0.095*** (0.019)	-0.094*** (0.021)
Total population 1860		0.000 (0.000)		0.000 (0.000)
Farm value 1860	-0.010*** (0.003)	-0.014*** (0.003)	-0.011*** (0.003)	-0.015*** (0.003)
Railroad 1860	0.011** (0.004)	0.004 (0.005)	0.006 (0.004)	0.003 (0.004)
Manufacturing output 1860	0.017*** (0.003)	0.016*** (0.002)	0.017*** (0.003)	0.014*** (0.002)
Constant	0.327** (0.135)	0.365*** (0.131)	0.388*** (0.136)	0.386*** (0.131)
Lat/Lon	Yes	Yes	Yes	Yes
Observations	713	715	715	713
R-squared	0.212	0.226	0.224	0.255

Conley-adjusted standard errors in parentheses

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

## D2A: Economic controls (Replicating Table 2A)

VARIABLES	(1) Percent of Black men farm laborers 1880	(2) Percent of Black men farm laborers 1880	(3) Percent of Black men farm laborers 1880	(4) Percent of Black men farm laborers 1880
Republican Presidential votes 1876	-0.133*** (0.044)			-0.116*** (0.042)
Average occupying troops through 1876 (thousands)		-0.178*** (0.063)		-0.137*** (0.048)
Freedmen's Bureau office			-0.043*** (0.010)	-0.033*** (0.010)
Percent population slave 1860	0.125*** (0.048)	0.078* (0.044)	0.115*** (0.044)	0.133*** (0.044)
Total population 1860		-0.000 (0.000)		-0.000 (0.000)
Farm value 1860	0.028*** (0.010)	0.029** (0.012)	0.028*** (0.011)	0.033*** (0.011)
Railroad 1860	-0.014 (0.013)	-0.004 (0.015)	-0.004 (0.014)	-0.003 (0.014)
Manufacturing output 1860	-0.021*** (0.005)	-0.021*** (0.005)	-0.021*** (0.005)	-0.018*** (0.005)
Constant	-0.253 (0.260)	-0.308 (0.261)	-0.373 (0.273)	-0.323 (0.249)
Lat/Lon	Yes	Yes	Yes	Yes
Observations	713	715	715	713
R-squared	0.135	0.121	0.127	0.155

Conley-adjusted standard errors in parentheses  
 \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

### D3: Economic controls (Replicating Table 3)

VARIABLES	(1) Percent of Black farmers who own 1900	(2) Percent of Black farmers who are share tenants 1900	(3) Percent of Black men in higher occupations 1900	(4) Percent of Blacks who are homeowners 1900
Republican Presidential votes 1876	0.167* (0.097)	-0.211** (0.088)	0.048* (0.025)	0.121** (0.058)
Average occupying troops through 1876 (thousands)	0.377*** (0.114)	-0.399*** (0.072)	0.081*** (0.026)	0.209*** (0.073)
Freedmen's Bureau office	0.016 (0.015)	-0.002 (0.017)	0.015*** (0.006)	0.019* (0.011)
Percent population slave 1860	-0.236** (0.112)	-0.204** (0.089)	-0.184*** (0.027)	-0.102 (0.088)
Total population 1860	-0.000 (0.000)	-0.000 (0.000)	0.000 (0.000)	-0.000 (0.000)
Farm value 1860	-0.072*** (0.023)	0.054*** (0.017)	-0.008 (0.006)	-0.039*** (0.013)
Railroad 1860	-0.057** (0.027)	-0.000 (0.027)	0.002 (0.006)	-0.044** (0.019)
Manufacturing output 1860	0.011 (0.009)	-0.005 (0.010)	0.005 (0.004)	0.014*** (0.005)
Constant	1.269* (0.696)	-0.964* (0.556)	0.614*** (0.149)	-0.498 (0.399)
Lat/Lon	Yes	Yes	Yes	Yes
Observations	712	712	713	713
R-squared	0.252	0.197	0.180	0.267

Conley-adjusted standard errors in parentheses

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

### D4: Economic controls (Replicating Table 4)

VARIABLES	(1) Republican House vote 1870	(2) Local tax rate 1870	(3) Local tax rate 1870
Average occupying troops through 1870 (thousands)	0.080** (0.038)		
Freedmen's Bureau office	0.047*** (0.017)		
Republican House vote 1870		0.004*** (0.002)	
Republican House plurality 1870			0.002*** (0.001)
Total population 1860	0.000** (0.000)		
Percent population slave 1860	0.432*** (0.051)	-0.001 (0.001)	-0.001 (0.002)
Farm value 1860	-0.014 (0.010)	-0.000 (0.000)	-0.000 (0.000)
Railroad 1860	-0.003 (0.018)	-0.001** (0.001)	-0.001** (0.001)
Manufacturing output 1860	-0.002 (0.007)	0.001** (0.000)	0.001** (0.000)
Constant	0.436*** (0.147)	0.002 (0.005)	0.003 (0.004)
Lat/Lon	No	No	No
Observations	614	609	609
R-squared	0.202	0.019	0.026

Robust standard errors in parentheses  
 \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

### D5: Economic controls (Replicating Table 5)

VARIABLES	(1) Black children attending school 1870	(2) Black males Higher occupations 1910	(3) Black farmowners % of total 1910	(4) Black tenant farmers % of total 1910	(5) Black homeowners 1910
Local tax rate 1870	1.452* (0.745)				
Freedmen's Bureau office	0.026*** (0.008)				
Black children attending school 1870		0.211*** (0.058)	0.519*** (0.097)	-0.544*** (0.097)	0.213*** (0.063)
Percent population slave 1860	-0.068*** (0.023)	-0.158*** (0.021)	-0.134** (0.059)	0.140** (0.059)	-0.005 (0.040)
Farm value 1860	-0.006 (0.005)	-0.000 (0.006)	-0.082*** (0.013)	0.083*** (0.013)	-0.049*** (0.009)
Railroad 1860	0.008 (0.008)	0.007 (0.006)	-0.070*** (0.021)	0.070*** (0.021)	-0.054*** (0.014)
Manufacturing output 1860	0.014***	0.000	0.012*	-0.012*	0.015***
Farm value 1860	(0.003) 0.010 (0.067)	(0.005) 0.250* (0.135)	(0.007) 0.802** (0.330)	(0.007) 0.144 (0.337)	(0.005) -0.795*** (0.189)
Lat/Lon	No	Yes	Yes	Yes	Yes
Observations	709	713	710	710	713
R-squared	0.088	0.150	0.314	0.316	0.326

Robust standard errors in parentheses

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

### D6: Economic controls (Replicating Table 6)

VARIABLES	(1) Black males Higher occupations 1880	(2) Black males Higher occupations 1900	(3) Black males Higher occupations 1910	(4) Black males Higher occupations 1920	(5) Black males Higher occupations 1930	(6) Black males Higher occupations 1940
Share of Black children (6-16) attending school 1870	0.143*** (0.039)	0.191*** (0.048)	0.211*** (0.078)	0.168*** (0.057)	0.214*** (0.059)	0.182*** (0.039)
Percent population slave 1860	-0.065*** (0.019)	-0.155*** (0.026)	-0.158*** (0.032)	-0.142*** (0.033)	-0.157*** (0.028)	-0.221*** (0.034)
Farm value 1860	-0.010*** (0.003)	-0.002 (0.005)	-0.000 (0.007)	0.001 (0.006)	0.009* (0.005)	0.014** (0.006)
Railroad 1860	0.008** (0.004)	0.004 (0.006)	0.007 (0.006)	0.005 (0.005)	0.012** (0.005)	0.017** (0.008)
Manufacturing output 1860	0.016*** (0.003)	0.006 (0.004)	0.000 (0.006)	0.001 (0.005)	0.001 (0.005)	0.002 (0.006)
Constant	0.303** (0.137)	0.547*** (0.142)	0.250 (0.188)	0.268* (0.152)	0.353*** (0.110)	0.520*** (0.131)
Lat/Lon	Yes	Yes	Yes	Yes	Yes	Yes
Observations	714	714	713	712	711	710
R-squared	0.232	0.189	0.150	0.135	0.176	0.218

Conley-adjusted standard errors in parentheses

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

## 2. Alternative measures of cotton

**Table D7: Cotton Output (replicating Table 2B)**

VARIABLES	(1) Percent of Black men in higher occupations 1880	(2) Percent of Black men in higher occupations 1880	(3) Percent of Black men in higher occupations 1880	(4) Percent of Black men in higher occupations 1880
Republican Presidential votes 1876	0.035*** (0.013)			0.019 (0.013)
Average occupying troops through 1876 (thousands)		0.094*** (0.027)		0.078*** (0.024)
Freedmen's Bureau office			0.036*** (0.006)	0.028*** (0.006)
Percent population free Black 1860	0.214 (0.148)	0.173 (0.133)	0.182 (0.143)	0.100 (0.117)
Percent population Black 1860	-0.063*** (0.017)	-0.066*** (0.015)	-0.084*** (0.017)	-0.098*** (0.018)
Total population 1860		0.000 (0.000)		0.000 (0.000)
Cotton output 1880	-0.004*** (0.001)	-0.006*** (0.001)	-0.005*** (0.001)	-0.005*** (0.001)
Constant	0.483*** (0.107)	0.521*** (0.109)	0.558*** (0.107)	0.549*** (0.115)
Lat/Lon	Yes	Yes	Yes	Yes
Observations	845	853	853	845
R-squared	0.131	0.179	0.176	0.209

Conley-adjusted standard errors in parentheses

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

**Table D7** and **Table D8** replicate **Table 2B** using cotton output from the 1880

Agricultural Census and Planation County status (as defined by Mandle 1978) instead of the cotton suitability FAO data that has been critiqued by existing scholarship (Rhode 2024). These results are similar to those in the main text of the paper with a few small differences.

**Table D8: Cotton Output (replicating Table 2B)**

VARIABLES	(1) Percent of Black men in higher occupations 1880	(2) Percent of Black men in higher occupations 1880	(3) Percent of Black men in higher occupations 1880	(4) Percent of Black men in higher occupations 1880
Republican Presidential votes 1876	0.045*** (0.013)			0.031** (0.013)
Average occupying troops through 1876 (thousands)		0.100*** (0.027)		0.082*** (0.023)
Freedmen's Bureau office			0.036*** (0.006)	0.028*** (0.006)
Percent population free Black 1860	0.288* (0.159)	0.295* (0.156)	0.304* (0.170)	0.182 (0.126)
Percent population Black 1860	-0.075*** (0.018)	-0.077*** (0.016)	-0.095*** (0.019)	-0.109*** (0.019)
Total population 1860		0.000 (0.000)		0.000 (0.000)
Plantation county	-0.018*** (0.004)	-0.022*** (0.005)	-0.020*** (0.005)	-0.022*** (0.005)
Constant	0.488*** (0.109)	0.535*** (0.109)	0.573*** (0.109)	0.551*** (0.114)
Lat/Lon	Yes	Yes	Yes	Yes
Observations	845	853	853	845
R-squared	0.112	0.146	0.145	0.185

Conley-adjusted standard errors in parentheses

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

## Notes

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<sup>1</sup> The raw locational data for the Freedmen's Bureau Offices comes from (<https://mappingthefreedmensbureau.com/>) and was combined with a map of U.S. counties in 1870 to create our dummy indicators.

<sup>2</sup> The raw troop data comes from Downs (2015), who has digitized final monthly reports to the Adjunct General's Office.

<sup>3</sup> Raw data comes from a digitization of Foner (1993) that we have geocoded and aggregated into county-level measurements.

<sup>4</sup> Supplied by James Snyder, see Hirano and Snyder (2019).

<sup>5</sup> Data comes from Haines and ICPSR (2010).

<sup>6</sup> Data comes from Haines and ICPSR (2010).

<sup>7</sup> These are based on the IPUMS OCC1950 occupational variables. For our first category of occupations (professionals), we use occ1950 values between 0 and 99; for the second category (managers) we use occ1950 values: 123-290 ,523 and 810; and for the third category (skilled craftsmen) we use occ1950 values: 300-334, 341-690 (excluding 430, 360, 523, 595, and 673), and 730-731.

<sup>8</sup> Data comes from Haines and ICPSR (2010).

<sup>9</sup> Data comes from Haines and ICPSR (2010).

<sup>10</sup> IIASA/FAO, 2012. Global Agro-ecological Zones (GAEZ v3.0). IIASA, Laxenburg, Austria and FAO, Rome, Italy.

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