

The One Thing Needful: Free Land and
Black Mobility, 1880-1900

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November 2011

Unlike southern freedmen, former slaves in the Cherokee Nation had the opportunity to claim free land after they were emancipated. In previous work, I have found that their access to free land was associated with higher levels of average income and wealth than that of southern freedmen and lower levels of racial inequality than in the postbellum South. In this paper, I looked more closely at a linked sample of three cohorts of Cherokee freedmen families to examine the extent to which individuals and their descendants were able to maintain high levels of income and wealth. I also examine potential mechanisms by which the economic success of Cherokee freedmen in 1880 could be transmitted to their children and grandchildren. I find remarkable persistence in economic status of those who were adults in both 1880 and 1900. Additionally, I find that the next generation of Cherokee freedmen largely exhibited the ability to either maintain or improve their social status vis-a-vis their parents. Evidence suggests that one mechanism through which parental income and wealth was transmitted across generations was related to human capital acquisition. The children and grandchild of freedmen in the upper income quartile in 1800 were more likely to be literate or attend school than the children and grandchildren of freedmen in the lower income quartile.

They have everywhere manifested a great desire to become land-owners, a desire in the highest degree laudable and hopeful for their future civilization. Next to proper religious and intellectual training, the one thing needful to the freedmen is land and a home.
-*Report of the Commissioner, Bureau Refugees, Freedmen, & c.*, October 20, 1869

In 1867, Thaddeus Stevens, Radical Republican and chair of the House Ways and Means Committee, introduced a bill assigning each liberated male slave forty acres and \$100 to build a dwelling. Stevens argued that homesteads were critical, “not only [for] the happiness and respectability of the colored race, but their very existence.”¹ The freedmen themselves agreed, and calls for “forty acres and a mule” had been heard throughout the southern states since the beginning of the Civil War. But momentum for a Federal land distribution policy diminished sharply after Lincoln’s assassination, and most former slaves entered freedom with little to no assets and lagging far behind whites in income levels. Because property accounted for about one-third of national income in the decades following emancipation, closing the large racial income gap would prove difficult without the elusive forty acres (Alston 1990, 219). Higgs (1982; 1977) estimated that the black-white income ratio was just 1/4 in 1867 and 7/20 in 1900. Black property holdings remained small relative to whites. They were 1/36 those of whites in 1880, 1/26 in 1890, and 1/23 in 1900. These gaps remain today. In 2009, the median black household earned just 61 percent the income² and held less than 1/10 the wealth of the median white household (Kochhar, et al., 2011).

In previous work, I identified one group of former slaves who largely

¹ *Speech of the Hon. Thaddeus Stevens of Pennsylvania, Delivered to the House of Representatives, March 19, 1867, on the Bill (H.R. No. 20) Relative to Damages to Loyal Men, and for Other Purposes.* Reprinted in Palmer and Ochoa (1998).

² Table 696, 2012 Statistical Abstract of the United States.

escaped this Postbellum poverty (Miller, 2011). The former slaves in the Cherokee Nation possessed a key advantage over blacks in the southern United States: free land. During the Civil War, the Cherokee Nation joined the Confederacy (See Map 1). The Union's victory placed the Cherokee Nation on the losing side, and as a "domestic dependent nation" the Cherokees were forced to reach a separate peace with the North.³ During treaty negotiations, the United States insisted that the Cherokees offer their former slaves (who were of African descent) citizenship with, "all the rights of native Cherokees."⁴ According to the laws of the Nation, all citizens, including the freed slaves, were guaranteed the right to claim and improve any unused land in the Nation's public domain.⁵ Armed with farming supplies provided by the Department of Interior, many Cherokee freedmen abandoned sharecropping or wage labor to start their own farms.

By 1880, 67.8% of black male heads of households owned farms in the Cherokee Nation, compared to just 12.3% in the South. Furthermore, I found that racial inequality was much lower in the Cherokee Nation than in the South. The estimated difference between the races in wealth was a substantial 67% for farmers. For income measures, the difference was smaller, but still large in magnitude—somewhere between 27% and 43%. The Cherokee freedmen continued to prosper into the twentieth century. By 1900, 90.23% of adults in Cherokee freedmen farming households owned their homes; only 28.34% of farming southern blacks households did. Additionally, all black adults in the Cherokee Nation were much more likely to live in an owned rather than rented

3 John Marshall famously declared the Cherokee Nation a "denominated domestic dependent nation" in *Cherokee Nation v. Georgia*, 30 U.S. 1 (1831). The practical implication of the designation is that the Cherokee Nation had a government that could enact and enforce its own laws and policies.

4 Article 9 of the Treaty between the United States and the Cherokee Nation, July 19, 1866.

5 Once a Cherokee citizen claimed land, the citizen had ownership rights similar to those of typical fee simple ownership. As long as the land was not abandoned, the citizen held heritable usufructuary rights, and the land could be sold, used as collateral for loans, bequeathed in wills, or improved upon. However, only Cherokee citizens were able to hold these rights. See Bloom (2002).

house (84% vs. 24%).

Though the continued aggregate economic success of the Cherokee freedmen in 1900 provides compelling evidence that postbellum land distribution could have been a powerful policy, little is known about the dynamics of individual ownership in the Cherokee Nation and the mechanisms by which the economic success of parents may have influenced their children. Some scholars have argued that land distribution would have been of limited value in ameliorating racial inequality, because former slaves lacked the skills to successfully manage a farm and would have lost their land. I take advantage of a unique census sample that links three generations of Cherokee freedmen families from 1880 to 1900 to look further into the dynamics of the group's economic success. The economic trajectory of these individuals confirms that their 1880 success was not a transient phenomenon. The children of this cohort had better later life outcomes. Their parents' higher average levels of income and wealth may have influenced their later life outcomes.

2. Theory and Relevant Literature

An extensive empirical literature suggests that the Cherokee freedmen's initial income and wealth advantages over southern freedmen could have been partially transmitted to the next generation. Solon (1999) reviews several studies that find a significant and positive correlation between the earnings and wealth of parents and those of their children. With twentieth century data, the estimated elasticity of a son's long run labor earnings with respect to his father's long run earnings is typically between 0.3 and 0.5. In other words, family background and environment explained about 40 percent of the variation in individuals' earnings.

Studies that focus on the nineteenth century corroborate the influence of parents' economic status on their children. Kearl and Pope (1981) calculated an

intergenerational income correlation of 0.09 to 0.21. The wealth correlation was between 0.18 and 0.35. Guest, et al. (1989) found that quarter of laborers in 1900 had laborers as fathers and 59.9 percent of farmers had farmers as fathers. Ferrie (2005) linked fathers in 1880 to their sons in 1900. 29.5 percent of unskilled laborers and 46.6 percent of farmers had sons of the same occupation. Thernstrom's (1973) study of Boston between 1840 and 1890 found that around 40 percent of sons were in the same occupational category as their fathers. Sacerdote (2005) examines the intergenerational transmission of socioeconomic status in the late nineteenth and early twentieth century for both free blacks and former slaves. He finds convergence between the outcomes of the two groups, suggesting a high degree of social mobility. His findings suggest that by 1920 the lower economic status of blacks was influenced by their concentration in the South, which was largely an economically poor region with racist institutions.

The studies are consistent with my findings that Cherokee freedmen continued to have higher levels of wealth and income than southern freedmen. Becker and Tomes (1979; 1986) formalized the relationship between parents' and children's income levels. Parents influence the income of their children through three channels—investment in human capital, the transmission of cultural and genetic endowments, and bequests. With perfect capital markets, the parents can borrow funds to pay for human capital investments, and a child's level of human capital will be unrelated to the income of his parents. But southern credit markets in the decades after the Civil War were very imperfect, and freedmen had very restricted access to credit. Parents would be required to self-finance human capital investments, and the constraints of poorer parents could damage their children's human capital. Sufficiently large public educational expenditures could have offset the limited budgets of parents. But the Cherokee Nation system of financing shifted a large share of costs to the local level. Each community was required to fund the building and maintenance of its own

schoolhouse. Because schools were segregated, the implication was that a given local freedmen community was responsible for its own schools. Funding for teachers was contingent on minimum enrollment requirements, and some children therefore lacked access to public. The ability to self-finance education was critically important and a important mechanism for their future income growth.

The high level of farm ownership of Cherokee freedmen also helped their children through the establishment of cultural and physical endowments. Farming can provide on-the-job training in management, animal husbandry, and other agricultural skills, which then could have been taught to children as a form of human capital developed outside of formal schooling. During slavery, many blacks had not been exposed to the formal schooling, standard farming management practices, business contacts and other aspects of the southern economy that would encourage agricultural success. If land ownership provided the Cherokee freedmen with a crash course in life as a southern farm owner, then their children may have inherited this beneficial cultural change. Farmland and equipment could have been bequeathed to one or all of a family's children. Such substantial transfers could have greatly increased the wealth and income generating ability of the next generation.

The Cherokee freedmen may have benefitted from a factor missing from the traditional models of intergenerational transmission of status. Black landownership was not a rarity in the Cherokee Nation. Instead, it was the norm. This concentrated network of landowners may have been able to better ensure that transmission of their higher status to their children than a lone black landowner. In times of financial hardship, fellow landowners may have been able to provide temporary loans. Wealthier parents could band together to fund schools for both their and poorer children in the absence of national support. When children married, their pool of available suitors of similar socioeconomic status would be larger. For women in particular this might have offered additional opportunities to maintain or improve status upon marriage.

III. Construction of the Linked Sample of Cherokee Freedmen

The linked sample consists of three unique data sources: the 1880 Cherokee Census, the 1900 U.S. Census, and the Dawes Enrollment Cards, which facilitated linking individuals between the two censuses. When combined, detailed economic and demographic information is available for three cohorts of Cherokee freedmen: adults in 1880 who survived until 1900; children in 1880 who lived to become adults in 1900; and the children of the adults of 1900. I refer to the groups respectively as Cohorts One, Two, and Three.

The 1880 Cherokee Census was collected by the Cherokee Nation and enumerated all citizens living in the Nation. Because only people in the census were granted the rights of Cherokee citizenship (including the right to both live in and claim land in the Cherokee Nation), every citizen had an incentive to ensure that he or she was listed in the census. The census made “full and complete returns of all persons residing or sojourning in their district,” including their “chief productions of agriculture, including number of horses, cattle, hogs, sheep, etc., during the year ending in May 1st 1880.”⁶ Basic demographic information, such as age, race, sex, marital status, literacy, and occupation, was also recorded. I collected and digitized 100 percent of the census data on blacks in the Cherokee Nation.

During the last decades of the nineteenth century, demand for land began to focus on Indian Territory as a potential source. With the passage of the Curtis Act in 1898, the U.S. Congress established a plan to abolish the Cherokee government, allot land to each Cherokee citizen, and open all remaining land to settlement.⁷ Because the 1880 Cherokee Census listed all citizens of the Nation,

⁶ *Cherokee Advocate*, January 28, 1880.

⁷ The Curtis Act, as it is commonly referred, was officially called the “Act for the Protection of the People of Indian Territory.” Besides the Cherokee Nation, four other Indian nations (Choctaw, Chickasaw, Creek, and Seminole) were affected by the Act. An earlier act, the 1887 Dawes Severalty Act, applied to the remaining tribes in Indian Territory and legislated the extinguishment of their

the United States government referenced it when compiling a complete list of all Cherokee citizens in preparation for allotment.

Between 1899 and 1907 Cherokee citizens applied to the Dawes Commission to be classified as official citizens of the Cherokee Nation. These people were then sorted into different lists (now commonly referred to as Dawes Rolls) according to race and eligibility for citizenship. Besides listening to applicants' claims, the Dawes Commission was also charged with locating every single person eligible for Cherokee citizenship and accounting for all people included on the 1880 Cherokee Census. Their task was facilitated by the incentive structure in place—only people on these lists would receive an allotment of land when Indian Territory became the state of Oklahoma. Those who already owned land had to enroll to *keep* their land.

When a person was placed on a list, information about his or her family was recorded on a separate card. For freedmen, the information included name, age, sex, familial relationship to others on the card, year of tribal enrollment, current location, person's former slave owner, mother's former slave owner, and father's former slave owner. The card's unique identification number was then recorded next to the entry in the original 1880 Cherokee Census. People who were proven to have died in the intervening years were denoted "DEAD" on the census rolls. Of the 1,788 freedmen in my sample of the 1880 Census, the Dawes Commission failed to locate just 12. 579 were confirmed to have died. 27 people had card numbers that were illegible on the 1880 census, and an additional 157 were classified as "doubtful." For the remaining 1,014 Cherokee freedmen, the detailed demographic and family member information provides an invaluable asset in locating that person in the 1900 United States Census.

The linking procedure had three basic steps. First, the 1880 Census

governments and the allotment of their lands.

provided the card number for each Cherokee freedmen. Second, microfilm versions of the cards were located and copied. These cards provided the name and family members of the person in 1900. Third, this information was used to find the individual in the database index of the 1900 Census available at www.ancestry.com. When the person was located in the 1900 Census, all census and Dawes card information for the person and each household member in the 1900 Census was recorded. The 1900 Census collected a variety of economic and demographic information, including occupation, literacy, school attendance, and home ownership. Unfortunately, information on farm production was included on a separate schedule that has been either lost or destroyed. Because both first and last names were known in both 1880 and 1900, women were linked across both censuses. This contrasts with most linked census samples, which omit women because of probable name changes at marriage. The dataset currently includes 789 people from the 1880 Cherokee Census, 2,664 total individuals, and 470 households.

Table 1 provides summary statistics of 1880 characteristics of individuals who died, were searched for and found, and those who searched for but not found. Approximately half of each category is male, which suggests that the sample is not biased with respect to gender. Age does differ somewhat between most of the categories. Reassuringly, the mean 1880 age of people who died is significantly older than that of living population. Although mean age differences exist between the found, not found, and problem categories, the large standard deviations make these difference significantly insignificant.

IV. Empirical Analysis

The linked sample provides detailed census information for three unique cohorts of Cherokee freedmen during the postbellum era. Table 2 provides summary statistics for each cohort. Cohort One's members were at least 18 in

1880. They had been born into slavery before or during the Civil War, entered adulthood by 1880, and then survived until 1900. In both 1880 and 1900, most members of this cohort were either heads of their own households or the wife of a household head. As they had the opportunity to claim free land, their economic progress by 1880 would have been the foundation on which the later cohorts' successes were built. Cohort One's children in 1880 are members of Cohort Two. They were less than 18 years of age in 1880, still lived with families, and survived until at least 1900. As children, they were reared by parents with levels of average wealth and income much higher than those their ancestors experienced during slavery. By 1900, members of this cohort primarily headed their own households or were married to household heads. The children of Cohort Two are members of Cohort Three. At 8.8 years of age on average, they were still quite young in 1900. A vast majority are the children, stepchildren, or adopted children of Cohort Two.

A. Cohort One: Adults in 1880 and 1900

Cohort One's members were born during slavery, had achieved their majority by 1880, and survived until at least 1900. There were 383 members of Cohort One with 161 men. 197 members of this cohort were household heads in 1880, and 108 were spouses of the head. The remaining people were adult children, siblings, parents, and of unknown relationship to the head.

Table 3 presents summary statistics of the cohort. Column 1 includes only heads of households in 1880, while Column 2 to include all cohort members. Members of Cohort One exhibited an ability to either maintain or improve its aggregate economic status. While 65.14 percent of this cohort lived in a household that owned land and a house in 1880, 95.00 percent did in 1900. The large increase in homeownership is indicative of continuing economic progress. Additionally, literacy rates improved dramatically, from 18.86 to 42.03 percent, suggesting an investment in human capital acquisition through adulthood. The table also reports mean values of occscore. This IPUMS constructed measure of

occupational standing is the median income (as measured in hundreds of dollars) for an occupation in 1950. Because income data is lacking in the 1900 census, occscore allows for the comparison of income earned between 1880 and 1900. Occscore has a significant limitation for this analysis. All farmers have the same occscore, suggesting equivalent earnings. The 1880 Cherokee Census data allows for the direct calculation of farm earnings and indicates a substantial degree of variation between farms. While occscore will not reflect this, it does provide a general ranking of the perceived prestige of occupations. The increase in occscore over time indicate a general improvement of occupational standing for Cohort One, equivalent to 12.98 percentage point increase in earnings.

Though the data suggests that the members of Cohort One were able to maintain their statuses, similar aggregate statistics could instead reflect a significant degree of churn in status, with people frequently losing and gains houses, jobs, and occupations. To examine the occupational persistence among Cohort One's members, Table 4 presents occupational mobility for the 129 members of Cohort One who reported occupations in both 1880 and 1900. Each column represents an 1880 occupation category. The occscore decreases from left to right on the table. 1900 occupational categories are represented in the rows, and occscore falls from the top to bottom rows. A cell in the x th column and y th row in the table represents the number of people employed in occupation x in 1880 who were employed in occupation y in 1900. The diagonal corresponds to occupational immobility, upward mobility is found above the diagonal, and downward mobility is found below the diagonal. Two trends emerge from this table. First, there is a great deal of occupational persistence. For example, of the 104 people who were farmers in 1880, 94 remained in that occupation in 1900. Second, upward mobility dwarfed downward. Of 104 farmers in 1880, only 10 fell in status. Of 23 laborers in 1880, 18 became farmers. Overall, twice as many individuals moved upward than downward.

To confirm this general finding that members of Cohort One were largely

able to maintain or improve their economic status, I estimate

$$(1) \quad Y_{i,1900} = \beta_0 + \beta_1 Y_{i,1880} + \gamma X_i + \varepsilon_i$$

where $Y_{i,1900}$ is a occscore in 1900, and $Y_{i,1880}$ is that same measure in 1880. X_i is a vector of controls, including age, age², a male dummy variable, and district fixed effects. Standard errors are clustered on 1880 households. An estimated value of β_1 greater than zero is consistent with individual status being maintained for two decades. To be clear, β_1 does not reflect a causal effect of status in 1880 on 1900. Instead, it merely suggests persistence in occupation across time. Table 5 reports the results. Columns (1) to (3) include only people who were heads of households in 1880. Columns (4) to (6) include all members of Cohort One. For people who do not report an occupation, the occscore for the person's head of household is utilized. In both baseline specifications, the estimated coefficient on β_1 is .15 and statically significant. In the fully controlled specifications, the estimated magnitude of the coefficient increases to .33 and .23 and remains significant. For Table 6, I estimated the above equation with homeownership as the outcome of interest. Again, the coefficient point estimates are positive and significant at traditional levels. For household heads, ownership in 1880 is associated with a 9 percentage point increase in likelihood of owning a home in 1900. When the sample is expanded to include all cohort members, the estimate is slightly smaller at 7 percent.

B. Cohort Two: Children in 1880 and Adults in 1900

Cohort Two members were born after slavery had ended, were less than 17 years of age in 1880, and survived until at least 1900. There were 406 members of Cohort One, 195 of which were men. Over 95 percent of the cohort were the children of household heads in 1880. Summary statistics for this cohort are in Table 7. The first column on this table includes only household heads in 1900,

while all members of the cohort are included in the second column. In 1880, two-thirds of these children lived in households that owned land and had an average value of farm products on \$866.47. By 1900, 92.36 percent of this cohort lived in households that owned their own homes and a little over half were married. At 12.24, the average occscore of this cohort is statistically identical to that of their 1880 households (12.25). Furthermore, their literacy rate (79.31) is almost twice that of the previous cohort (42.01).

Table 8 is an intergenerational mobility table for members of Cohort Two who were household heads in 1900. Each row represents an occupation category for Cohort One heads of households in 1880. The occupations of the Cohort Two children who became households heads by 1900 appear in each column. Occupational persistence across these two cohorts is lower than that for found for Cohort One members only. 74 Cohort Two members lived in farming households in 1880, and 46 of these people became farmers themselves. As mentioned above, there may be a great income variance within the farming category, but the 1900 data do not allow for an analysis of any such movements. 16 of those who transitioned out of the farming category transitioned to the lower occupational status of laborer.⁸ This seeming downward trajectory may be an artifact of the censuses' observing fathers and sons at different points in the life cycle. 14 of these 16 are below age 30, and their ultimate occupation may indeed have been farmer. There were 16 Cohort Two members who lived in households with laborer heads in 1880. Only 2 became laborers themselves, with 9 transitioning to the farming class and one becoming a janitor. Overall, 80.2 percent of these Cohort Two heads of households either maintained or improved upon the occupational status of the household in which they were reared. 19.7 percent fell to a lower status, although this may be at least partially due to life cycle dynamics.

⁸ Nine people had 1900 occupations that were illegible or missing. Three of these were recorded as living on a farm in census data, so they may have been farmers.

Table 9 presents intergenerational mobility for members of Cohort Two who were wives in 1900. While each row still represents an occupation category for Cohort One heads of households in 1880, the columns now contain the occupation of each woman's husband. As none of these married women reported any labor market activity, their husbands' occupations likely serve as good proxy for their own economic success. 24 women were reared in laborer households, and 16 of these married farmers. 75 of these women lived in farming households in 1880. 55 remained in one in 1900. 12 married men in the unambiguously lower status of laborer. However, this might again be a reflection of life cycle considerations, as 11 of these men were in their twenties and may later transition to a higher occupation status. Additionally, that none have children living with them suggests that these couples may be newly married. Even without this caveat, the downward mobility that some of these women experienced was rare. 83 percent either maintained or improved their status at marriage, while only 12 percent married below their childhood status.

The intergenerational occupational transitions of the Cherokee freedmen suggest that they experienced a degree of potential social mobility that was truly exceptional. They was very little downward mobility experienced and a high degree of upward or lateral occupational changes. This pattern suggests that the economic environment allowed even the children of those on the bottom of the agricultural ladder to have a fair chance at upward mobility. To confirm that children's occupational outcomes were not confined by their parents' status, I again estimate equation 1, where $Y_{i,1900}$ is now the occscore of the head of household, and $Y_{i,1880}$ is the occscore of person's childhood household in 1880. I exclude from the analysis Cohort Two members who were still living in their parents' households; they are largely single children in their early twenties. Results are in Table 10. Column 2 restricts the sample to household heads only, while column 3 includes only wives. In all three specifications, coefficients are near 0 and not at all statically significant.

Although broad occupational choices seem largely unhindered by parental background, Cherokee freedmen families did have influence over their children's economic status, particularly with respect to literacy. Between Cohorts One and Two literacy rates almost doubled, and the children who experienced the increase in literacy were not random. I estimated

$$(2) \quad \text{Prob}(\text{Literate}_{i,1900} = 1) = \Phi(\beta_0 + \beta_1 * \text{Parent Literate}_{i,1880} + \beta_2 \text{Q2} + \beta_3 \text{Q3} + \beta_4 \text{Q4} + \gamma \text{X}_i + \varepsilon_i),$$

where the dependent variable is an indicator equaling 1 if a member of Cohort Two is literate in 1900. Parent Literate is an indicator equaling 1 if either parent was literate. Q2 to Q4 are indicator variables for 1880 household income quartiles (as calculated from the sum of farm products). The omitted quartile, Q1, corresponds to the lowest income level. Results are in Table 11. Marginal effects, not coefficient estimates, are reported.

In column 1, the only included covariate is parental literacy. Children with literate parents are 15 percent more likely to be literate as adults. In column 2, I add the income quartile dummies. All three dummies are significant at the 10 percent level or better. Compared to the lowest income quartile, children of the three higher quartiles are significantly more likely to be literate. The result is most striking for the highest quartile, whose children are 21 percent more likely to be literate than those of the lowest quartile. Column 3 includes a variety of controls, such as age, gender, and the number of colored schools in the person's childhood district in 1880. The results are robust to the added covariates. These wealthier children likely had two advantages over the poorer children. First, in the absence of public schools, wealthier parents could afford to send their children to private schools. Additionally, wealthier parents may not have needed their children's labor at home, which could have lowered the opportunity cost of schooling.

C. Cohort Three: Children in 1900

Cohort Three consists of children who live with members of Cohorts One or Two. With 1,232 members, this is by far the largest cohort. Their average age is 8.8 years. 84.5 percent consists of children, stepchildren, or adopted children of the head of household. The rest are primarily other blood relatives of the household head, such as grandchildren, nieces, and nephews. 86% children live in homes that are owned. 82% live in a household with a married head. Their parents are, on average, of higher occupational status than the average member of Cohort Two and have an occscore of 13.1.

Although the children in the cohort are generally too young to have independent occupations or incomes, the 1900 Census provides information on school attendance and literacy, both of which may be correlated with future economic success and additionally provide a measure of parental investment in children. In columns 1 through 3 of Table 12, I estimate a version of equation 2 for all members of Cohort Three aged 10 years and above.⁹ Standard errors are clustered on the 1900 household. The dependent variable is 1 if the child can read or write. $\text{Parent Literate}_{is}$ is 1 if the child's head of household can read in 1900. Because direct income measures are not available in the 1900 census, I use the 1880 income quartiles of the child's 1900 head of household—in most cases, the grandparents' 1880 income. Head of household literacy is the only regressor in column 1. The estimated coefficient is significant and suggests that children in literate households are 11 percent more likely to be literate themselves. I include the 1880 income quartiles in column 2. All quartile coefficients are positive in sign, suggesting that children born into families with higher income two decades previously still have some advantages over poorer children. For the wealthiest quartile, children are 14 percent more likely to be literate. In the final column, I include controls for age, gender, and the 1900 household head's occscore. None of

⁹ I restrict the sample to ages 10 and above, because children younger than that are unlikely to be literate regardless of their parents' economic status.

the controls significantly alter the results. While the coefficient on occscore is marginally significant at the 10.7% level, its estimated effect is quite small and not very economically significant at 0.007.

I next examine the school attendance of children aged 5 to 16 by repeating by estimation of equation 2 where the dependent variable now is 1 if the child reported attending any school in the previous year. Results are available in Table 12, columns 4 through 6. The same general patterns found in the literacy regression are still present with one exception. School attendance does not seem to be influenced by parental literacy. The estimated coefficient is small in absolute value, has an inconsistent sign, and is only marginally significant. Occscore's coefficient is again small in value, but much more precisely estimated in these regressions. Its sign is positive, suggesting that parents with higher paying occupations are more likely to send their child to school. The income quartile variables continue to suggest that 1880 income influences 1900 human capital development, with each quartile's estimated coefficient remaining positive. While significance levels decline as more covariates are included, the consistency of the estimated values are suggestive. A child from an upper quartile family, for example, is around 9 to 10 percent more likely to attend school than a child from the lowest quartile.

V. Conclusion

Unlike southern freedmen, former slaves in the Cherokee Nation had the opportunity to claim free land after they were emancipated. In previous work, I have found that their access to free land was associated with higher levels of average income and wealth than that of southern freedmen, and lower levels of racial inequality than in the postbellum South. I looked more closely at a linked sample of three cohorts of Cherokee freedmen families to verify that individuals were successfully able to maintain their higher statuses. I also examined potential mechanisms by which the economic success of Cherokee freedmen in 1880 could be transmitted to their children and grandchildren. I find remarkable

persistence in economic status for those who were adults in both 1880 and 1900. Additionally, I find that the next generation of Cherokee freedmen largely exhibited the ability to either maintain or improve their social status vis-a-vis their parents. Furthermore, I find evidence that one mechanism through which parental income and wealth was transmitted across generations was related to human capital acquisition. The children and grandchild of freedmen in the upper income quartile in 1800 were more likely to be literate or attend school than the children and grandchildren of freedmen in the lower income quartile.

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Table 1: Summary Statistics of 1880 Characteristics by Link Status

	All		Women Only		Men Only		Sex Unknown in 1880	
	N	% of Total	N	% of Total	N	% of Total	N	% of Total
Found	789	0.44	394	0.43	360	0.42	35	0.83
Not Found	144	0.08	68	0.07	76	0.09	0	0.00
Dead	579	0.32	301	0.33	275	0.32	3	0.07
In Progress	133	0.07	66	0.07	66	0.08	1	0.02
Problem	167	0.09	83	0.09	81	0.09	3	0.07
Total	1813	1.00	912	1.00	859	1.00	42	1.00

Table 2: Summary Statistics by Cohort

	Cohort 1	Cohort 2	Cohort 3
N	383	406	1232
Mean Age 1900 (years)	49.3	26.2	8.8
% Male	42	48	48.13
Most Common Status 1880	Head	Child	
Percent	54.1	95.8	
Second Most Common Status 1880	Wife		
Percent	28.2		
Most Common Status 1900	Head	Head	Son/Daughter
Percent	54.6	43.5	78.86
Second Most Common Status 1900	Wife	Wife	Step or Adopter Son/Daughter
Percent	36.3	29.38	5.67
% Literate (1900)	42	79.3	37.3

Table 3: Cohort One

	Heads of Household	All
1880		
Own Land (%)	57.78	65.14
Married (%)	67.22	65.14
Male (%)	74.44	46.4
Literate (%)	19.44	18.86
Total Value of Farm Products (1880 \$)	676.67	822.23
Age	31.28 (9.9)	30.03 (9.77)
Occscore	10.48	11.09
1900		
Own House (%)	93.84	95
Married (%)	75.12	78.46
Literate (%)	38.97	42.03
Occscore	12.72	12.53

Table 4: Cohort One Occupational Mobility

1900	1880							Total
	Minister	Farmer	Cook	Laundress	Farm Laborer	Day Laborer		
Minister	0	0	0	0	0	1		1
Farmer	0	94	0	0	1	18		113
Laundress	0	0	0	1	0	0		1
Cook	0	0	0	0	0	1		1
Farm Laborer	1	8	0	0	0	2		11
Day Laborer	0	2	0	0	0	0		2
Total	1	104	0	1	1	22		129

Table 5: Cohort One Occupational Persistence

Dependent Variable = Occscore in 1900	1	2	3	4	5	6
	Household Heads Only	Household Heads Only	Household Heads Only	All Cohort Members	All Cohort Members	All Cohort Members
Occscore in 1880	0.15*	0.21*	0.33**	0.15**	0.19**	0.23
	[0.07]	[0.08]	[0.12]	[0.06]	[0.06]	[0.13]
Control for		-0.86	-2.05		0.33	-0.23
Age	No	Yes	Yes	No	Yes	Yes
Male	No	No	Yes	No	No	Yes
Marital Status	No	No	Yes	No	No	Yes
District	No	No	Yes	No	No	Yes
		[0.00]	[0.00]		[0.00]	[0.00]
Constant	11.09***	25.88	45.45	10.83***	6.34	15.21
	[0.82]	[14.27]	[30.01]	[0.69]	[8.69]	[16.78]
Observations	195	183	169	383	361	326
R-squared	0.02	0.04	0.14	0.02	0.04	0.12

Standards errors are in brackets and clustered at the 1880 household level.

*** 0.001

** 0.01

* 0.05

Table 6: Cohort One Ownership Persistence

Dependent Variable= Ownership in 1900	1	2	3	4
Own in 1880	0.09*	0.09	0.08**	0.07*
	[0.04]	[0.05]	[0.03]	[0.03]
Age		Yes		Yes
Male		Yes		Yes
District		Yes		Yes
Observations	195	169	383	326
R-squared	0.04	0.1	0.03	0.08

Standards errors are in brackets and clustered at the 1880 household level.

*** 0.001
 ** 0.01
 * 0.05

Table 7: Cohort Two

	Household Heads	All
1880		
Own Land (%)	66.75	
Married (%)	82.96	
Literate (%)	16.5	
Total Value of Farm Products (1880 \$)	866.47	
Age	6.5	
Occscore	12.25	
1900		
Own House (%)	73.08	92.36
Married (%)	73.08	55.65
Literate (%)	78.85	79.31
Occscore	11.65	12.24
Age	26.2	29.53
Male (%)	78.85	48.15

Table 8: Cohort Two Head Intergenerational Mobility

headocc195	headocc19501900								
1880	Unknown	Teacher	Farmer	Dressmaker	Cook	Janitor	Farm Laborer	Day Laborer	Total
Farmer	9	1	46	1	1	0	16	0	74
Merchant	0	0	1	0	0	0	0	0	1
Blacksmith	0	0	1	1	0	0	0	0	2
Laborers	4	0	9	0	0	1	1	1	16
Total	13	1	57	2	1	1	17	1	93

Table 9: Cohort Two Wives Intergenerational Mobility

1880	1900									Total
Unknown	Translator	Farmer	Farm Manager	Merchant	Butler	Barbers	Farm Laborer	Day Laborer		
Minister	0	0	1	0	0	0	0	0	0	1
Farmer	3	1	55	1	1	1	11	1		75
Merchant	1	0	1	0	0	0	0	0		2
Blacksmith	0	0	3	0	0	0	1	0		4
Laborer	0	0	16	0	0	0	8	0		24
Total	4	1	76	1	1	1	20	1		106

Table 10: Cohort Two Occupational Mobility

Dependent Variable = Occscore of 1900 Household Head	1	2	3
	All Cohort Members	Household Heads Only	Wives Only
Occscore 1880	0	0.03	0.03
	[0.07]	[0.07]	[0.07]
Age	Yes	2.41	2.23
Male	Yes	[3.31]	[3.12]
Literate	Yes	-0.06	-0.06
Observations	278	102	116
R-squared	0.03	0.25	0.05

Standards errors are in brackets and clustered at the 1880 household level.

*** 0.001
 ** 0.01
 * 0.05

Table 11: Income and Literacy

Dependent Variable = Literacy in 1900	1	2	3
Parents Literate in 1880	0.14***	0.15***	0.15***
	[0.04]	[0.04]	[0.04]
q2		0.13	0.13
		[0.07]	[0.07]
q3		0.16*	0.19**
		[0.07]	[0.07]
q4		0.21**	0.23**
		[0.07]	[0.07]
Age			Yes
Male			Yes
Colored Schools			Yes
Observations	406	406	398
Pseudo R-squared	0.03	0.04	0.09

*** 0.001
 ** 0.01
 * 0.05

Table 12: Cohort Three and Literacy

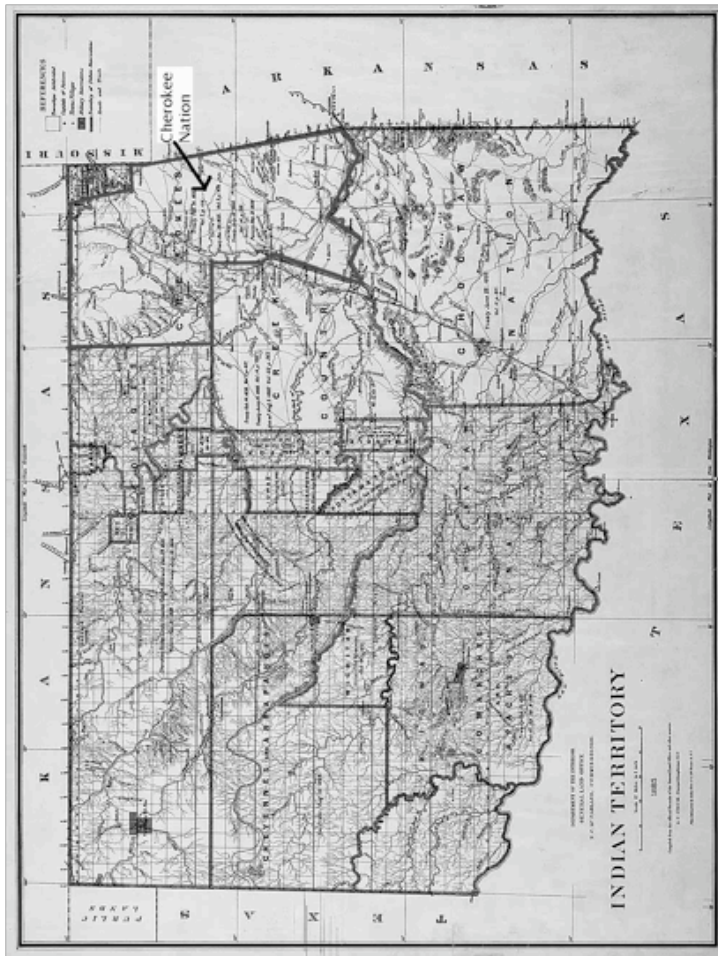
	Dependent Variable = Child Literate in 1900			Dependent Variable = Child Attended School in 1900		
	1	2	3	4	5	6
headlit1900	0.11*	0.14*	0.13*	-0.01	0	0.03
	[0.06]	[0.06]	[0.06]	[0.06]	[0.06]	[0.06]
q2		0.02	0.02		0.04	0.03
		[0.08]	[0.08]		[0.08]	[0.08]
q3		0.12*	0.12*		0.03	0.02
		[0.06]	[0.06]		[0.06]	[0.07]
q4		0.14**	0.13*		0.1	0.09
		[0.05]	[0.05]		[0.06]	[0.07]
headoccscore1900			0.01			0.01**
			[0.00]			[0.00]
Age			Yes			Yes
Male			Yes			Yes
Observations	560	560	560	791	791	791

*** 0.001

** 0.01

* 0.05

Map 1: Indian Territory, 1885 (present day Oklahoma)



Source: National Archives and Records Administration, Records of the General Land Office, Record Group 49. Available at: <http://www.archives.gov/education/lessons/fed-indian-policy/images/territory-map-01.jpg>