THE SOCIOECONOMIC EFFECTS OF FORCED DISPLACEMENT: EVIDENCE FROM THE TENNESSEE VALLEY AUTHORITY*

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Abstract

We examine the socioeconomic effects of forced migration by focusing on individuals who were displaced by the Tennessee Valley Authority (TVA) dam projects in the 1930s. We use data from the relocation program associated with the TVA and link it to US Census data. We compare individuals who were impacted by the dam-induced flooding with individuals in the same counties that were not affected by the dam construction due to their proximity to the Tennessee River. We find evidence that individuals who were impacted by the dam projects are more likely to participate in the labor force, with an influx into unskilled occupations. They are also more likely to pay higher rent prices conditional on renting. We examine racial disparities in outcomes and find that, after the relocation, Black men are more likely to be employed in unskilled occupations compared to White men. *JEL codes*: B12, B31, D02, D63, H13, H54, I31, J21, J71, N32, N62, O14, O22

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1. Introduction

Forced displacement resulting from wars, natural disasters, and human rights violations has become increasingly common. The United Nations estimates the number of forced displaced individuals around the world to reach 120 million by the end of 2024. Understanding the consequences of forced displacement is therefore becoming increasingly important. Its severe impacts can likely persist long after the incident. Previous studies have shown evidence of negative impacts of relocation driven by natural disasters on labor market outcomes (Mueller and Quisumbing, 2009) and financial resources (Chen, 2020). Other studies have examined the impacts of the Great Migration on African Americans in the US (Tolnay, 2003). There is little evidence on short- and long-term impacts of forced displacement induced by government development projects, although this practice of eminent domain is very common in the United States.

This paper investigates the effects of forced migration by leveraging a natural experiment from the 1930s - the Tennessee Valley Authority (TVA) dam projects. The TVA created dams in seven states in the southeastern United States as part of the New Deal and displaced thousands of people. We use data on the displaced individuals, which we have matched to US Census records using a probabilistic matching algorithm, to examine the effects of forced displacement on a range of medium-run socioeconomic outcomes, including labor market participation and household status. Development of these reservoirs was an effort to combat the lack of economic opportunity in the region, especially after the downturn of the Great Depression. However, the success of this New Deal program on the people it displaced is not widely understood.

The Tennessee Valley Authority Act of 1933 marked the first time a government agency had power to govern the development of an entire region. Not only did the act improve infrastructure and rural life, it drastically improved the region's standard of living within a relatively brief period (Walker 1998). "The T.V.A. has relocated over 12,000 farm families, moved entire villages, helped whole communities plan a better future, and withal it has demonstrated that social planning can win the enthusiastic support of the people at the muzzle end of it. So the T.V.A. has set a pattern for social planning for a generation" (Carr 1948). However, historical research suggests the TVA perpetuated segregation and discrimination against Black individuals (Jones 2016, Alderman and Brown 2010). For instance, using TVA's relocation records and oral histories, Walker (1998) argues the Authority's benefits were not fairly distributed. The agency maintained a policy of institutionalized segregation and discrimination against Black people which also prevented them from deriving direct benefits from TVA's employment and educational programs. Walker (1998) also states that the beneficial programs provided by the TVA favored prosperous landowners over poorer landowners and tenants of both races. Though relocation workers attested to abiding by TVA's removal worker's code of ethics, many assumed African Americans did not have a sense of community, hence only using the word "community" in documentation towards White families, suggesting TVA workers were less sympathetic about removing Black families from their communities than for White families. A chief criticism of the dam construction project is the lack of a systematic follow up of the removed families to their new locations (Brown 1951). Brown states, "If this was done, a better basis would be available for judging the success and failures of family removal and relocation in the Tennessee Valley."

We use a difference-in-differences design comparing individuals who were relocated as part of the TVA dam construction with individuals who were not relocated. We use data from the TVA's case files on relocated individuals, which we combine with US Census records from 1900-1940 to examine effects on their socioeconomic well-being. Our comparison group includes individuals living in the same counties as those forced to relocate, but were not in the path of the dam construction. As a robustness check, we consider two more control groups, the first being Georgia residents who would be displaced 5-7 years after those in Alabama due to the rollout timing of the dam construction. This comparison group serves as a have-not-yet-been-treated group. For the second comparison group, we match control to treated Alabama counties based on 1930 characteristics. Therefore, the control group consists of people living in similar counties as those who were forced to relocate. We find largely similar results for all three control group specifications

Our findings indicate that displaced families were more likely to pay higher rent prices, and displaced men were more likely to be in the labor force, be employed, and work in unskilled labor. We also find suggestive evidence that displaced men were less likely to work skilled jobs. To examine the robustness of our main findings, we use a control group of counties that are similar in baseline characteristics to the counties where displaced individuals were living, and find largely similar results. These results suggest that while the forced relocation improved labor market outcomes, it came at the cost of living in places with higher rents and working in less skilled jobs.

In addition, we examine whether there are differential impacts of forced relocation by race, to determine whether discrimination played a role in the effects of forced relocation. Our evidence suggests that discrimination against Black people was likely part of the relocation process, as Black men were also significantly more likely to participate in the labor force than White men, but were not more likely than white men to be employed. We find that Black men were more likely than White men to work in unskilled jobs, but were not less likely than White men to work skilled jobs. We also find suggestive evidence that Black families experienced larger increases in rent prices than White families. These findings suggest that Black individuals faced some discrimination as a result of the TVA's relocation program.

This study contributes to different strands of the literature. First, it adds to the body of work that examines the effects of displacement through the lens of the Great Migration in the United States. Although the identification strategy in these studies is affected by the fact that African Americans made a decision to migrate north for better opportunities, it has been argued that harsh living conditions left many with little choice but to relocate. The existing evidence shows that relocation had positive impacts: it increased earnings of Black migrants (Collins and Wanamaker, 2014) and schooling for migrant children, which decreased the White-Black education gap (Baran et. al, 2024). However, Derenoncourt (2019) finds that destination cities responded to an influx of Black migrants by changing city characteristics - such as increasing policing - thus reducing the benefits of migration. This response to an influx of Black migrants also led to an increase in incarceration rates for Black individuals (Eriksson, 2019). We add to these studies by examining how Black and White people respond similarly and differently to a more short-distanced forced relocation.

We also contribute to the literature on the impact of displacement after natural disasters. For instance, previous studies have shown that Hurricane Katrina had small impacts to victims' wage earnings and income, with labor supply and earnings returning to pre-disaster levels for those who relocated back after the hurricane (Deryugina et al., 2018, Vigdor, 2007). However, these natural disasters can cause financial hardships, especially for poorer countries and counties with greater income disparity (Johar, 2022, Cavallo, 2022, Lim et al., 2017). The National Research Council (2006) states, "...more recent research suggests that such [positive rebounding from natural disasters] findings paint an overly simplified and perhaps overly optimistic picture of post-disaster recovery."

Finally, we contribute to the literature on the impact of displacement caused by government development programs. For instance, Chyn (2018) and Chetty et al (2016) examine the impact of the Moving to Opportunity program which led to the demolition of public housing and provided housing vouchers to move people from high-to low-poverty neighborhoods in the 1990s. They show this form of displacement improves economic outcomes for children who moved. These studies raise the question of whether providing an opportunity to move, rather than forcing relocation, is better for citizens in that area. Chyn (2018)'s results suggest that forcing relocation leads to beneficial longer-run outcomes for children, perhaps because short-term constraints prevented such moves when they weren't forced. On the other hand, development projects from the 1996 Atlanta and 2008 Beijing Olympic games pushed migrants further out into poorer areas, resulting in negative long-term impacts (Richardson, 2022, Shin and Li, 2013). Literature on the interstate highway system has documented its negative impacts especially on

the African American community, by destroying communities and creating inner-city ghettos (Karas, 2015). However, in India, creation and expansion to highways improved the socioeconomic wellbeing of people living in its proximity (though, they were not displaced) (Sengupta, 2007).

We add to the 'New Deal' literature by examining the effects of its establishment. Many New Deal programs were shown to offset the repercussions of the Great Depression (Fishback et al, 2007). Fishback et al saw that an increase in relief spending from these New Deal programs led to a decline in infant mortality, suicide rates, and deaths from infectious diseases. Majority of the grants and loan programs were geared towards the poor and unemployed and raised income, increased property values near new public housing projects, while also reducing property crime rates (Fishback and Kachanovskaya, 2016; Fishback and Kollmann, 2015; Fishback et all, 2010). However, certain programs also led to a reduction in employment and labor force participation, especially for women (Taylor, 2011; Sundstrom, 2001).

The Tennessee Valley Authority has not been examined in great depth within economics. The TVA reservoirs led to a temporary increase in malaria rates, later reduced by TVA's anti-malaria programs (Kitchens, 2013). Its electrification had no significant effects on the productivity of farming or manufacturing (Kitchens, 2014). However, Kline and Moretti (2014) find that the growth rate of manufacturing employment was significantly larger in TVA counties than non-TVA counties; hence, TVA sped the industrialization of the Tennessee Valley. The authors focus on the economy of TVA counties compared to non-TVA counties, while our paper will focus on the people who were impacted by the TVA's development.

This project contributes to the literature on forced relocation as well as the New Deal literature while examining outcomes of one of its largest programs closely (Kelly, 2024). We provide the first causal evidence of the effects of the TVA dam project on individual outcomes. Overall, our findings show that forced relocation from Tennessee Valley Authority's dam construction project improved labor market outcomes, yet increased rent prices as well. The defining aspect of this project is that these events, like extreme weather events, are forced and citizens do not have a choice of whether to stay or leave their homes.

The paper is organized as follows. Section 2 provides background information on the creation of the Tennessee Valley Authority and its relocation program. Section 3 describes the data sources used to identify forced relocation effects. It also contains an explanation of our linking process to historical census. Our empirical approach is walked through in Section 4, followed by our conceptual framework in Section 5. Results are presented in Section 6 along with a robustness check and mechanisms in Sections 7 and 8. We conclude in Section 9.

2. Background

2.1 Historical Background: Tennessee Valley Authority and the Great Depression

The 1930s Great Depression was one of the worst economic depressions in history. During the time, many Americans placed blame on President Herbert Hoover for steep unemployment and massive bank failures. His successor, President Franklin D. Roosevelt, began the 'New Deal' recovery program to stimulate economic recovery. The Tennessee Valley Authority (TVA) was established through the Tennessee Valley Authority Act of 1933 as part of

the New Deal. The duties of the organization included improving the navigability of the Tennessee River; providing flood control through reforestation of marginal lands in the Tennessee Valley watershed; developing agriculture, commerce and industry in the valley; and operating the hydroelectric dams[3]. The Act also gave TVA the power of eminent domain, allowing them to acquire land along the Tennessee River for developmental reasons. These hydroelectric dams, shown in Figure I, were constructed to expand the Tennessee River, which runs through the seven states TVA oversees: Alabama, Georgia, Kentucky, Mississippi, North Carolina, Tennessee, and Virginia. Construction of these dams caused numerous towns to be submerged underwater, forcing residents to relocate. The dams, built along the Tennessee River, roughly move east to west as seen in Figure I. On average, construction of each dam took about 3 years to complete between 1933 and 1953.

2.2 Tennessee Valley Authority's Relocation Program

The TVA provided a relocation program to assist families displaced by the dams to move to a new location. TVA sent interviewers to each household that would be affected. These interviewers filled out a relocation application with the family that contained detailed information about their house, land, and demographics for all individuals living there. This information was then used by the TVA to determine suitable dwellings for families to relocate to. Though the TVA did not provide compensation for relocation, it provided its resources to find new homes for sale, appraised them, and relocated families to farms that best suited their needs (Satterfield, 1937, p 258). To our knowledge, a rubric that details how and in which order new dwellings were chosen does not exist. However, it has been documented that families were relocated to a new home and land that was similar to their previous home and land (McCarthy,

[3] Transcript of the Tennessee Valley Authority Act (1933)

1949, p 49; Satterfield, 1937, p 258). Though most families were tenant farmers, families and landlords who owned their homes and land were offered fair market prices (McCarthy, 1949, p 55-56). Relocation was provided for both the living and deceased,[4] and an estimated 15,000 families and 30,000 graves were relocated across all seven states.

To our knowledge, there were not clear documented rules determining the TVA's decision to flood particular areas. However, Howard (1936) explains the steps towards dam construction the TVA took in order to implement the program as efficiently as possible. In the twelve step plan towards the project completion, fully interpreted into a list in the Appendix Figure AI, the majority of the steps were focused on the employees hired to construct the dams. These included understanding the labor supply of the region as well as providing resources for those employees such as a camp to house them and resources to educate them on-and off-duty. Other steps focused on cooperation between local governments and the TVA as the region developed and the project progressed. One of the last steps pertained to the relocation of families. As mentioned, detailed facts about families who were in the path of the dam construction were obtained; these details were used by social scientists to analyze those who were being displaced and to determine relocation strategy. As mentioned by Howard, an analysis determining the extent to which [relocated] families have successfully integrated themselves into a new life, without either cultural or economic loss, will be important to document the success of the program. To our knowledge, a full analysis as such has yet to happen.

[4] The Tennessee Valley Authority would oblige by the family's wishes to relocate their loved one's grave.

3. Data

3.1 Information on Relocated Families

We obtained information on relocated families in Alabama from the "U.S., Tennessee Valley, Family Removal and Population Readjustment Case Files, 1934-1953" dataset via ancestry.com. This dataset contains pdf files of original relocation applications which provides rich information about each relocated family in order for the TVA to decide where to move them (Figures II.I and II.II). Housing details such as ownership of property, dwelling characteristics, and farming style of crops were described at the household level. Employment information such as occupation, income, and highest level of education were provided for all members of the family living in the house at the time. For each family member, demographics such as gender, race, birth year, relation to the head of the household, along with their full name[5] were provided as well. To our knowledge, we are the first to transcribe and digitize pdf files of TVA's relocation applications for the state of Alabama, which constitutes over 6000 relocated families.

3.2 Census Data

After obtaining information on which families were relocated, we linked those families to the 1930s census by matching on name and other defining characteristics such as birth year, gender, and residing county, to gather our outcome variables. The census also allowed us to gather outcome variables for non-relocated families who were not in the path of the dam construction which constitutes our control group(s). These include a farming indicator, an ownership indicator, monthly rent payments, labor force participation, employment, and

[5] Full names are encrypted as histids for analysis. We only use full names in the IPUMS census lab to link relocated families to the census to obtain outcomes and to identify them as part of the treated group.

occupation score.[6] We obtain data prior to dam construction from the 1900, 1910, 1920, and 1930 censuses, with post-construction data coming from the 1940 census.

3.3 Linking Relocated Families Data to Census Data

We use record linking methods to link the data on relocated families to the 1930 census data using a probabilistic matching algorithm that matches individuals on name, birth year, location, and gender. We require an exact match on county and gender, and allow for flexible matching on both name and age. However, we require that individuals be born in the same decade and they have the same first and last initial. We are able to link about 62% of the relocated families data to the 1930 census. Of the 62% linked relocatees, about 40% were linked to the 1940 census. Lastly, about 15% of all relocatees were linked across previous censuses. The population of linked relocated families contains more males, White individuals, farmers, have higher income and literacy rate on average, and less likely to rent their property compared to those who did not link across earlier censuses, as shown in Table AVII. Our final sample consists of families and of men in the state of Alabama who have both 1930s and 1940s census information and linked information for at least one of the 1900s, 1910s, or 1920s census[7].

4. Empirical Approach

To understand impacts of a forced relocation, we compute simple difference-in-difference models that observe outcomes of those who were forced to relocate, the treated group, compared to those who were similar but not forced to relocate, the control group. We look at the household

[6] The census provides an Occupation Score which ranges from 1 to 80 and represents the median total income for each occupation. Higher values align with high end jobs compared to the lower values which align with lower end jobs. Appendix Table AV, shows our results for occupation score outcomes, however we exclude them from our analysis due to incorrect measure of prestige.

[7] We exclude women for individual outcomes due to (i) most women not working nor (ii) asked about their employment status in census interviews during this time period.

level for family outcomes such as farming status, renting status, and rent price[8]. For individual labor outcomes such as employment status, labor force status, and switching into unskilled or skilled occupations (Ferrie, 1997), we look solely at men because married women were not consistently asked about employment when censuses were conducted. Therefore women and children are excluded from individual employment outcomes.

In order to measure effects on a forced relocation, we structured our comparison group to consist of people living within the same counties as those treated, but were not forced to relocate due to their proximity to the Tennessee River. Figures III.I and III.II highlight Alabama areas near Wheeler and Guntersville dams that displaced families and men. Those who were living in the same counties as the displaced people, but not forced to relocate due to proximity to the Tennessee River, comprise our main comparison group The figures also show our robustness check comparison groups: (i) soon-to-be relocated residents in the state of Georgia (have-not-yet been treated), and (iv) people living in similar counties as those displaced based on matching county characteristics. Our identification strategy suggests that in the absence of the TVA's dam construction project, those forced to relocate would have progressed in property and labor market outcomes similar to those who comprise our control groups and were not forced to relocate. We test this "parallel trends" assumption using Figures IV, V.I, and V.II, which shows support for the assumption for all variables in our control groups except Farm and Skilled Occupation. In this setting, we refer to our likelihood of farming and switching into skilled occupation results as a suggestive effect, but not casual.

[8] Rent prices are only reported for non-farm, renter-occupied units as described in the IPUMS database.

We estimate a difference-in-difference model to determine the effects of a forced relocation:

$$Y_{it} = \beta_0 + \beta_1 Black_i + \beta_2 Treated_i + \beta_3 Post_t + \beta_4 Treated_i * Post_t + \tau_t + \varepsilon_{it} \quad (1)$$

Where Y_{it} in Equation 1 represents socioeconomic outcomes for household or individual male i in census year $t \in \{1900, 1910, 1920, 1930, 1940\}$. $Black_i$ is a binary variable[9] that equals 1 if the race of the family or male is Black and 0 if race is White. $Treated_i$ indicates whether the families or men, i, were displaced by the dam construction. $Post_t$ represents the decennial census period, 1940, after the relocation time period. The interaction between $Treated$ and $Post$ indicates a displaced family or man in the post period 1940. β_4 is our coefficient of interests, representing the socioeconomic effects of being displaced by TVA's dam construction projects. Our error term is represented by ε. All regressions use robust standard errors and are run separately for each control group.

Table I shows summary statistics for our variables for both individual and household outcomes in 1930, prior to the dam project. Comparing relocated versus non-relocated individuals and families, we show that on average, the treated group are less likely to participate in the labor force and be in skilled jobs, more likely to be in unskilled occupations, are more white, and pay less in rent compared to either control group. Relocated families are, however,

[9] We drop nonblack and nonwhite races due to a small amount of observations. There is also no evidence of multiple races per household in our sample during this time period.

more likely to farm, own their property, and have lower housing values and rent prices than non-relocated families.

5. Conceptual Framework

To inform our empirical work, we discuss the possible channels in which our outcomes may respond to a forced relocation. First consider the setting of our study; Alabama is primarily a rural state, hosting many farmers on its land. With the creation of the dam project, the TVA sought workers from the local region that would help with the construction. As shown in the Appendix, Table AI, the steps towards implementation of the dam construction primarily focused on the employees. With an emphasis on the employees and the job availability the dam project would bring, we expect to see an increase in employment in these construction jobs, hence a decrease in farming. Due to Alabama hosting primarily poor tenants in its rural areas, we expect to see differences in outcomes between urban and rural areas. It may be the case that a forced relocation improved outcomes for poor rural tenants, especially by creating more job opportunities. However, if TVA favored prosperous landowners over poorer ones (Walker 1998), then we may expect to see such outcomes improve more so for urban relocatees.[10]

As the availability for employment increases, a forced relocation might also provide the opportunity of occupation switching. For example, construction jobs for the dam project is seen as an unskilled occupation, hence we foresee an influx into unskilled occupations whereas we might see a decrease into skilled occupations. This assumption is also strengthened by the low

[10] We test this assumption in our analysis and find while there is no evidence of selection into treatment by the TVA, there are differences in outcomes between renters and owners, Appendix Tables AIX-AXI. This could indicate differential effects by socioeconomic status.

share of Alabama residents having a high school diploma or higher as seen in the Appendix, Table AVII.

Finally, we consider relocation effects on rent prices. From historical literature on the TVA, Satterfield (1937) states landlords either did not repurchase farms or purchased smaller farms which reduced their need for tenants. Scarcity in tenant vacancies could induce competition which can result in increases in rent prices from landlords. We also suspect an increase in rent prices due to an influx of people moving into specified areas, hence shifting the demand curve for housing.

With the TVA Act of 1933 occurring in the midst of the Segregation Era in the South, we expect to see differences in effects between Black and White relocatees. As stated above, we anticipate the dam construction project causing an increase in employment. However, this increase may have favored White men. As rent prices potentially increase due to scarcity in tenant vacancies, White families may experience a "first come, first served" approach in housing availability, leaving Black families last in consideration and hence, left with higher rent prices compared to White families.

6. Results

We first report our findings of the effect of TVA relocation on housing and labor market outcomes in Panel A of Table II, graphically represented in Figure VI. First, our household outcomes indicate that after a forced relocation, people were less likely to farm. While there was almost no change in renting status overall, rent prices increased for non-farm relocatees by

25.3%. Next, we look at our individual outcomes. There was about a 11% increase in labor force participation as well as a 7% increase in the likelihood of being employed. However, displaced men were 13.6% more likely to work in unskilled occupations and less likely to work in skilled occupations, although small and insignificant, compared to those who were not forced to relocate. Our main results point to the potential of a forced relocation improving labor market outcomes, although these improvements may come at a cost i.e. living in more expensive places and working less skilled jobs.

We also examine whether there is a differential impact of forced relocation by race in Table III, graphically shown in Figure VII. Overall, both Black and White families and men see outcomes in the same direction as our main results, which indicates an improvement in labor market outcomes and property status, along with an increase in rent prices. We run a triple interaction analysis using race, which helps us identify any difference in outcomes by race. Relative to our within-counties comparison group, there appears to be no significant difference in the decline of the likelihood to farm, skilled occupations, or increase in rent prices for both Black and White families and men. This means both Black and White families and men experienced similar treatment in these areas after relocating. However, we do show a significant difference in renting status and labor force participation. Specifically, Black families were 7% less likely to rent their property and Black men were 17.7% more likely to be in the labor force, compared to a 0.3% decline and a 10% increase for White families and White men respectively. Though there is not a significant difference, we can imply that Black men experience a higher increase in employment status, but also a steeper incline into unskilled occupations. These results suggest

differences in the impact of a forced relocation by the TVA between Black and White families/men.

We further understand the effects on those forced to relocate, we examine their occupation. Specifically, we split our unskilled occupation outcome into three categories: unskilled occupations as tested in our main analysis (Ferrie, 1997), unskilled occupations that do not consist of any jobs relating to farming, and unskilled farming jobs such as farm laborers. This helps us understand if an influx into unskilled occupations is driven by people staying or leaving farming jobs. In the Appendix Table AXII, we test all three categories for our main comparison group along with our robustness comparison groups. Column 2 shows an increase into unskilled occupations that does not consist of farming jobs, whereas Column 3 shows a decline in unkilled farm jobs. This is also consistent across our other comparison groups which are described further in the next section. Overall, results suggest that relocatees are leaving farming jobs and moving into other unskilled labor occupations. When looking at these results by race, we find a significant difference between Black and White men into unskilled non-farming jobs, 12 and 5.3 p.p. respectively (Appendix Table AXIII). Results support our main findings, indicating Black men see a higher increase into unskilled occupations compared to White men, specifically in unskilled non-farming occupations.

A useful feature of the data for the TVA relocation program is that it includes a survey describing the attitude of each household towards the TVA. These responses can help further determine if socioeconomic outcomes can be impacted by a household's viewpoint on the TVA.[11]

[11] There are reasons to believe that attitude responses towards the TVA may not be truthful as there is not a way to determine the intention behind a household's response (i.e. a family could have selected a response in favor of the TVA in hopes to relocate to a 'nicer' dwelling). Therefore, we proceed with caution in our interpretation of results.

There are five possible responses, ranging from antagonistic to active booster (strongly supportive). We categorized these responses into three categories: Negative, Neutral, and Positive. Our Negative category contains both 'antagonistic' and 'critical' responses, our Neutral category contains the 'neutral' response, and our Positive category contains both 'interested' and 'active booster' responses. Figure X shows a graph of families' responses by race. The responses across race are similar: over 61% families were neutral or in favor of the TVA. We then report our estimates for labor market outcomes by each of these categories for both control groups in Table VI. We find that our positive effects on labor force participation and employment are strongest among those who were in favor of or indifferent to the TVA, while those who were against the TVA saw no effect. We see an increase in unskilled occupations for those who lean more in favor towards the TVA, and a decrease in skilled occupations across all attitudes with a larger effect for those strongly against the TVA.

7. Robustness Checks

We formulate a balance test of our sample by testing for selection into treatment by the TVA. In the Appendix, Table AVIII, we regress treatment status on baseline 1930 characteristics. These characteristics consist of both household level outcomes, such as housing value, renter status, rent price, and farming status, and individual level outcomes such as labor force participation, employment status, and unskilled or skilled occupation status. For our main control group, the likelihood of farming appears to increase one's chance of being in the treated group, along with not being in a skilled occupation. However, most of our sample contains poor farmers so we are not concerned with selection here. Therefore, since most of our results indicate that

allocation into treatment is not being driven by these baseline characteristics, we conclude that our sample is balanced.

To further test the robustness of our results, we employ an alternate strategy of determining our control groups. Our second control group consists of people living along the Tennessee River in Georgia that will later be displaced by dam construction projects beginning in 1942. We deem this as our have-not-yet been treated, control group. The location of this control group can be seen in Figure III.I. Using equation (1), we find similar results to our main analysis. In Panel B of Table II, we find labor market outcomes improved such as an increase in labor force participation and employment, which also led to an increase in unskilled occupations, suggesting a decline in skilled occupations. The likelihood of farming and renting property decreased, however there was a surge in rent prices after relocating. We also created a third control group where we calculate baseline county-level demographics in 1930 and use a nearest neighbor matching algorithm to select the most similar county in Alabama for each county in our treatment group. The counties that were selected in this algorithm can be seen in Figure III.II. We then estimate the same empirical strategy as before using our matched control group, as seen in Panel C of Table II and graphically in Figure IX.II. We find the forced relocation led to an increase in labor market outcomes. The increase in employment led to an increase in unskilled occupations and possibly a decline in farming status; rent prices also increased by 48.9%. Results are similar to our main findings.

When looking at results by race, we see a significant difference between Black and White men's labor outcomes. Black men, while seeing a higher labor force participation, were

employed into unskilled occupations more so than White men, Table IV. Suggestively, Black men were also less likely to be in skilled occupations. Table V shows that Black families were less likely to rent their property compared to White families in our matched county comparison. These results indicate that our findings are robust and provide further evidence that the TVA relocation program may have facilitated discrimination against Black individuals.

8. Mechanisms

One potential mechanism driving the results is that individuals were relocated to places that were better at baseline before the TVA projects began. To examine whether this is the case, we calculate the average county level characteristics for each county in Alabama in the 1930 Census. We then assign the average county characteristics to each individual in our data based on their county of residence in 1930 and 1940, and estimate the difference-in-differences in Equation 1 for each of the control groups. The results of this analysis are in Tables AI and AII. From these analyses, we find that individuals displaced by the TVA projects are moved to places that were largely similar to where they were living prior to displacement. However, we do examine relocatees moved to places that were less rural and contained less farmers. This could explain our decline in the farming status findings. We also examine if there is heterogeneity by race in Tables AIII and AIV, finding that both Black and White individuals, Black families more so than White families, relocate to places that were less rural and contained less farmers.

Another potential mechanism driving the results is discrimination against Black individuals displaced by the TVA dam projects. Specifically, there is potential evidence of discrimination in rent prices towards Black families and a continuation in systematic segregation

with a higher occupancy of unskilled jobs for Black men considering an influx in labor force participation. This evidence can be seen in Tables III, IV, and V, where Black individuals suggestively see higher rents, are more likely to be in the labor force, yet are more likely to have unskilled jobs. To test whether this is the case, we use nearest neighbor matching to determine the most similar White individual for each Black individual in both our treatment and control groups to account for baseline differences between Black and White individuals. We match on baseline socioeconomic and demographic characteristics from the 1930 Census, and estimate our differences-in-differences specification for both black and white individuals in Table AVI. From this analysis, we see suggestive evidence supporting the existence of discrimination, as Black families experienced larger increases in rent prices compared to White families.. We formally test whether the differences between Black and White individuals in Table AVI are statistically significant, and find a significant difference in farming, suggesting Black families were less likely to move out of farming and into other jobs opportunities that the relocation created. These results provide suggestive evidence that Black individuals displaced by the TVA dam projects faced discrimination.

A third potential mechanism driving the results is that there is differential treatment between renters and homeowners. One potential concern related to this is that individuals were selected into treatment based on their household wealth or other baseline characteristics. We test this in Table AVIII by regressing treatment status on baseline characteristics in the 1930 Census, including housing value. We find no evidence that individuals were selected into treatment based on observable characteristics. In Tables AIX, AX, and AXI, we examine whether there are differential outcomes between renters and owners. We find that owners are less likely to be

farmers than renters. Owners are also much less likely to be employed and in the labor force, which leads them to being less likely to be in unskilled or skilled occupations compared to renters. Results indicate that the TVA did not favor homeowners over renters, and -in fact- renters are driving the increase in labor market outcomes.

9. Conclusion

Understanding how forced displacement can affect socioeconomic outcomes is an area of concern for researchers and policymakers. We utilize the natural experiment provided by the forced displacement induced by the TVA dam projects to estimate the causal effect of forced displacement on socioeconomic outcomes. We find evidence that forced displacement improved individuals labor market outcomes, increasing labor force participation and employment. However, we also find evidence that housing costs increased as well, indicating a trade-off between labor market prospects and cost of living.

Another issue of rising importance is racial disparities in socioeconomic outcomes, and whether government programs contribute to these disparities or ameliorate them. Building on a large body of research showing evidence that government programs can exacerbate racial inequality, we find evidence that the TVA had disparate outcomes for Black and White individuals. Specifically, we find that while Black men had larger increases in labor force participation than White men, they also faced a large increase in unskilled occupations and, suggestively, in rent prices as well. This indicates that the TVA may have not mitigated racial disparities between Black and White individuals.

Overall, we believe the TVA's dam construction projects had a positive impact on those forced to relocate. Using a back-of-the-envelope calculation, we estimated the relocatees' change in expected yearly income minus their change in rent prices. We found a net benefit of $928.67 in 1930 dollars (~$18,000 in 2024 dollars), which we interpret as a positive impact to the relocatees[12]. The actual net benefit may be higher as this calculation does not account for the one-time moving cost, which can be very expensive.

Our research points to the vital importance of understanding the impacts that relocation programs have on individuals and how those impacts vary by race. Further research is needed to understand how forced migration can affect where individuals move and whether individuals' specific location drives the disparities we find in our research.

[12] This is a rough estimate as we have limited data to estimate a more precise welfare calculation. We use the average income for a person in unskilled labor in 1930 using census documents and the change in rent prices from our sample to calculate our net benefit estimate which also accounts for inflation.

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Tables and Figures

Figure I. Map of Tennessee Valley Authority's dam construction projects

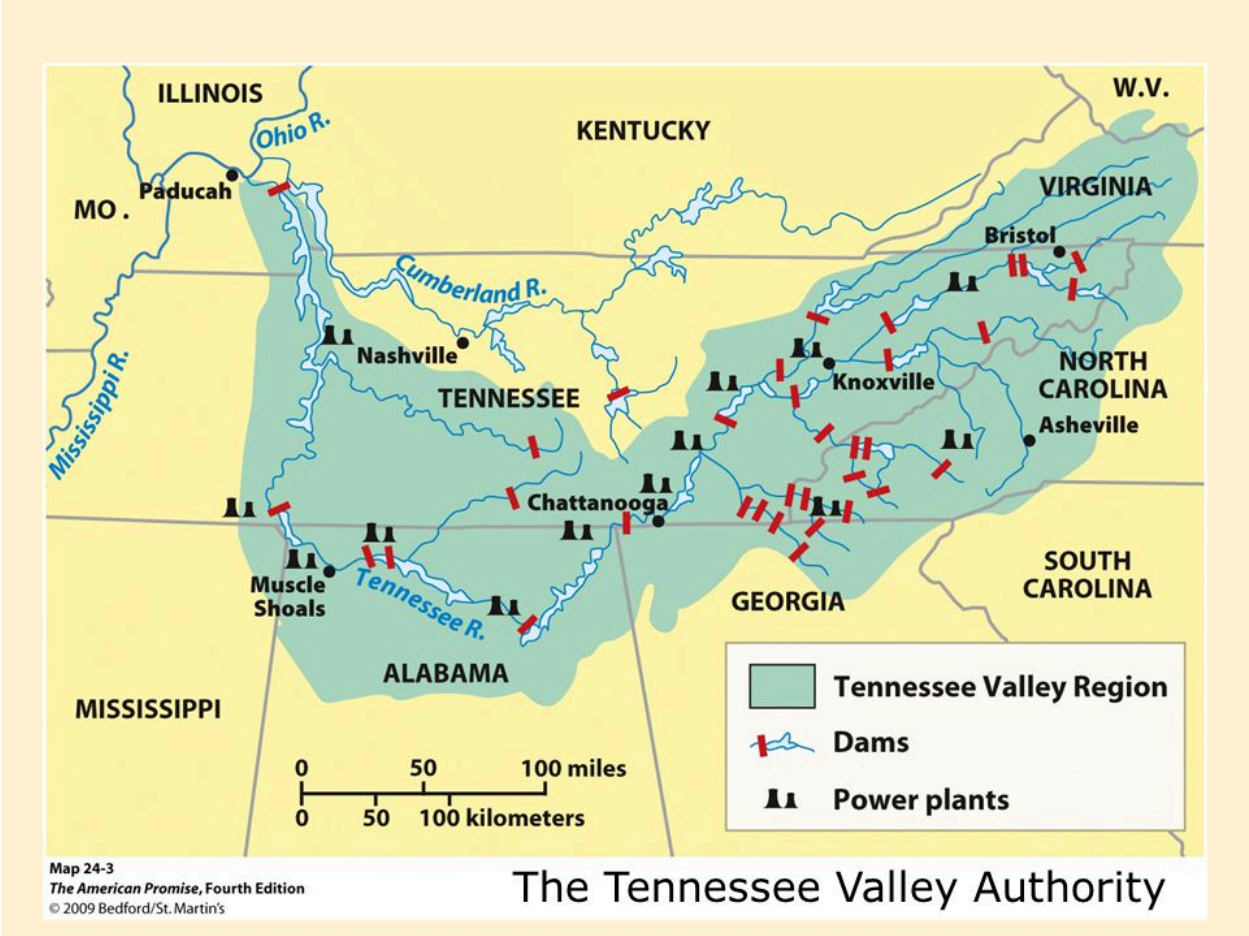
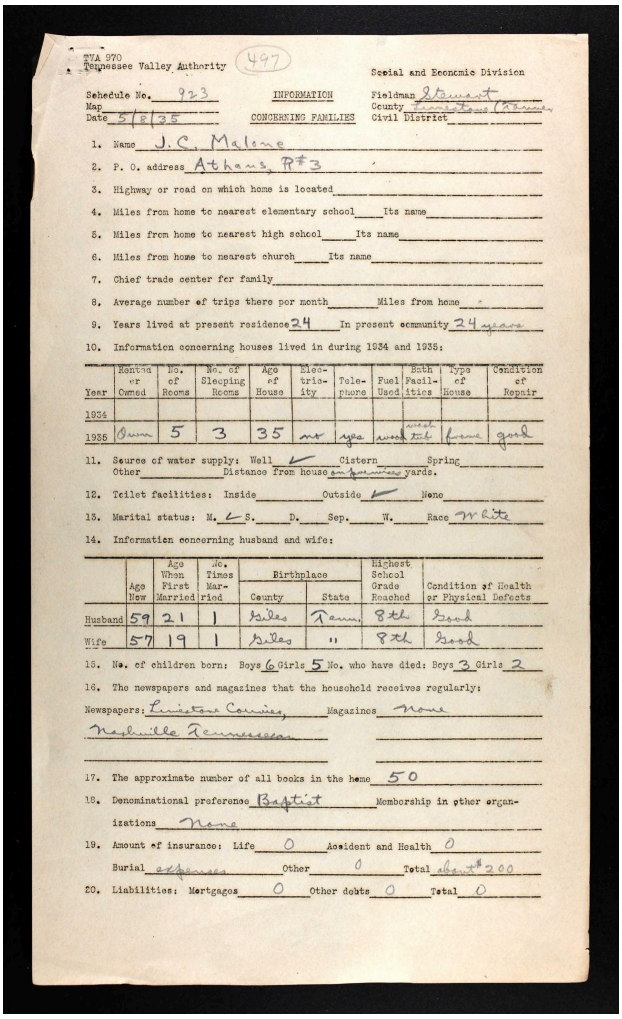


Figure II.I. Sample Relocation Application



TVA 970
Tennessee Valley Authority (497)

Social and Economic Division

Schedule No. 923 — INFORMATION — Fieldman Stewart
Map — County Livingston (Tenn.)
Date 5/5/35 — CONCERNING FAMILIES — Civil District

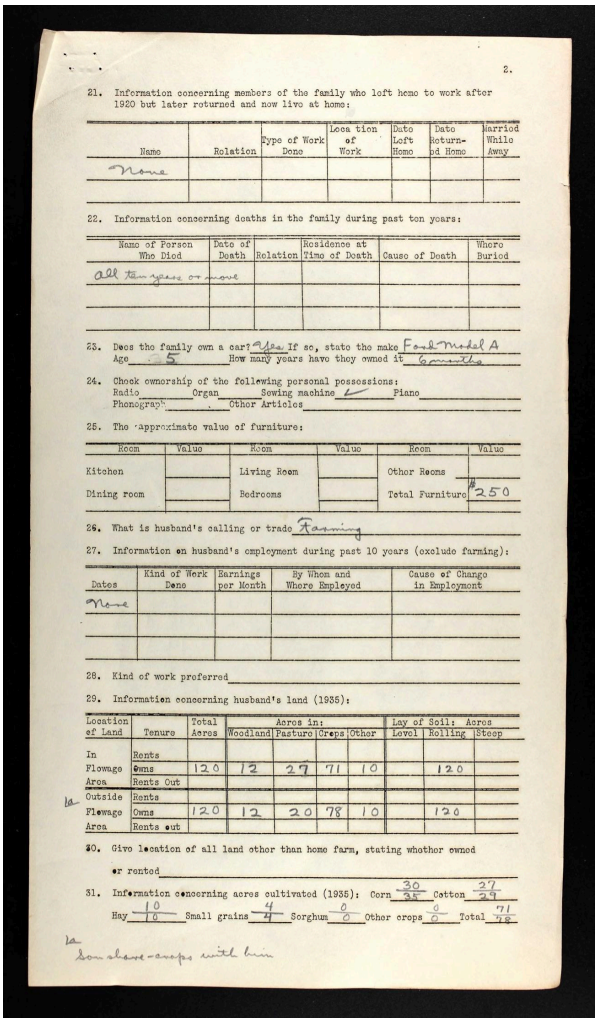
1. Name J. C. Malone
2. P. O. address Athens, R#3
3. Highway or road on which home is located
4. Miles from home to nearest elementary school ___ Its name
5. Miles from home to nearest high school ___ Its name
6. Miles from home to nearest church ___ Its name
7. Chief trade center for family
8. Average number of trips there per month ___ Miles from home
9. Years lived at present residence 24 In present community 24 years
10. Information concerning houses lived in during 1934 and 1935:

Year	Rented or Owned	No. of Rooms	No. of Sleeping Rooms	Age of House	Electricity	Telephone	Fuel Used	Bath Facilities	Type of House	Condition of Repair
1934										
1935	Own	5	3	35	no	yes	wood	toilet	frame	good

11. Source of water supply: Well ✓ Cistern ___ Spring ___ Other ___ Distance from house on premises yards.
12. Toilet facilities: Inside ___ Outside ✓ None ___
13. Marital status: M. ✓ S. ___ D. ___ Sep. ___ W. ___ Race White
14. Information concerning husband and wife:

	Age Now	Age When First Married	No. Times Married	Birthplace: County	Birthplace: State	Highest School Grade Reached	Condition of Health or Physical Defects
Husband	59	21	1	Giles	Tenn.	8th	Good
Wife	57	19	1	Giles	"	8th	Good

15. No. of children born: Boys 6 Girls 5 No. who have died: Boys 3 Girls 2
16. The newspapers and magazines that the household receives regularly:
Newspapers: Livingston Comines, Nashville Tennessean — Magazines None
17. The approximate number of all books in the home 50
18. Denominational preference Baptist Membership in other organizations None
19. Amount of insurance: Life 0 Accident and Health 0
Burial expenses Other 0 Total about $200
20. Liabilities: Mortgages 0 Other debts 0 Total 0



2.

21. Information concerning members of the family who left home to work after 1920 but later returned and now live at home:

Name	Relation	Type of Work Done	Location of Work	Date Left Home	Date Returned Home	Married While Away
None						

22. Information concerning deaths in the family during past ten years:

Name of Person Who Died	Date of Death	Relation	Residence at Time of Death	Cause of Death	Where Buried
all ten years or more					

23. Does the family own a car? yes If so, state the make Ford Model A
Age 5 How many years have they owned it 6 months
24. Check ownership of the following personal possessions:
Radio ___ Organ ___ Sewing machine ✓ Piano ___
Phonograph ___ Other Articles ___
25. The approximate value of furniture:

Room	Value	Room	Value	Room	Value
Kitchen		Living Room		Other Rooms	
Dining room		Bedrooms		Total Furniture	$250

26. What is husband's calling or trade Farming
27. Information on husband's employment during past 10 years (exclude farming):

Dates	Kind of Work Done	Earnings per Month	By Whom and Where Employed	Cause of Change in Employment
None				

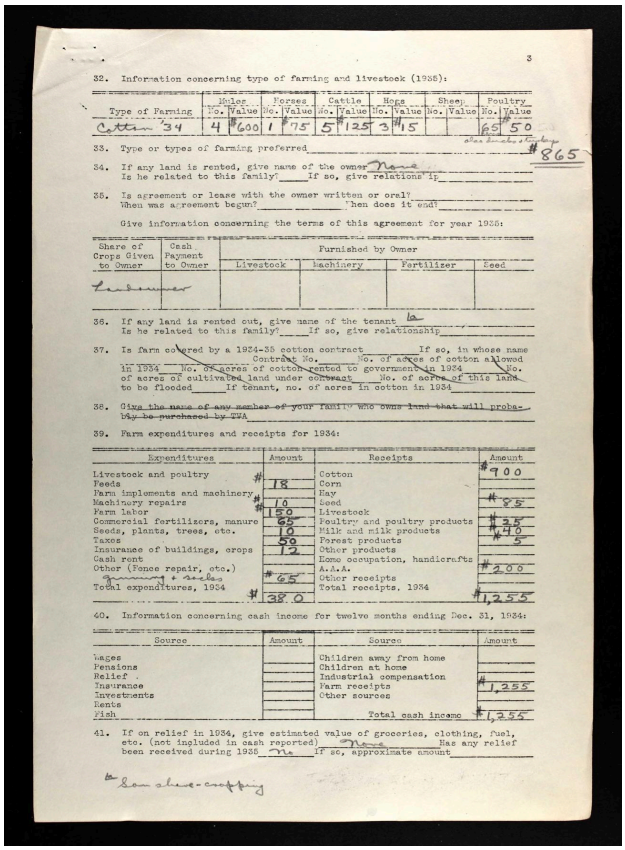
28. Kind of work preferred
29. Information concerning husband's land (1935):

Location of Land	Tenure	Total Acres	Acres in: Woodland	Pasture	Crops	Other	Lay of Soil: Acres Level	Rolling	Steep
In Flowage Area	Rents								
	Owns	120	12	29	71	10		120	
	Rents Out								
1a Outside Flowage Area	Rents								
	Owns	120	12	20	78	10		120	
	Rents out								

30. Give location of all land other than home farm, stating whether owned or rented
31. Information concerning acres cultivated (1935): Corn 30 (35) Cotton 27 (29)
Hay 10 (10) Small grains 4 Sorghum 0 Other crops 0 (0) Total 71 (78)

1a Some above - crops with home

Figure II.II. Sample Relocation Application Continued.



3

32. Information concerning type of farming and livestock (1935):

Type of Farming	Mules No.	Mules Value	Horses No.	Horses Value	Cattle No.	Cattle Value	Hogs No.	Hogs Value	Sheep No.	Sheep Value	Poultry No.	Poultry Value
Cotton '34	4	$600	1	$75	5	$125	3	$15			65	$50

$865

33. Type or types of farming preferred

34. If any land is rented, give name of the owner None
Is he related to this family? If so, give relations ip

35. Is agreement or lease with the owner written or oral?
When was agreement begun? Then does it end?

Give information concerning the terms of this agreement for year 1936:

Share of Crops Given to Owner	Cash Payment to Owner	Furnished by Owner: Livestock	Machinery	Fertilizer	Seed
Landowner					

36. If any land is rented out, give name of the tenant
Is he related to this family? If so, give relationship

37. Is farm covered by a 1934-35 cotton contract If so, in whose name
Contract No. No. of acres of cotton allowed in 1934 No. of acres of cotton rented to government in 1934 No. of acres of cultivated land under contract No. of acres of this land to be flooded If tenant, no. of acres in cotton in 1934

38. Give the name of any member of your family who owns land that will probably be purchased by TVA

39. Farm expenditures and receipts for 1934:

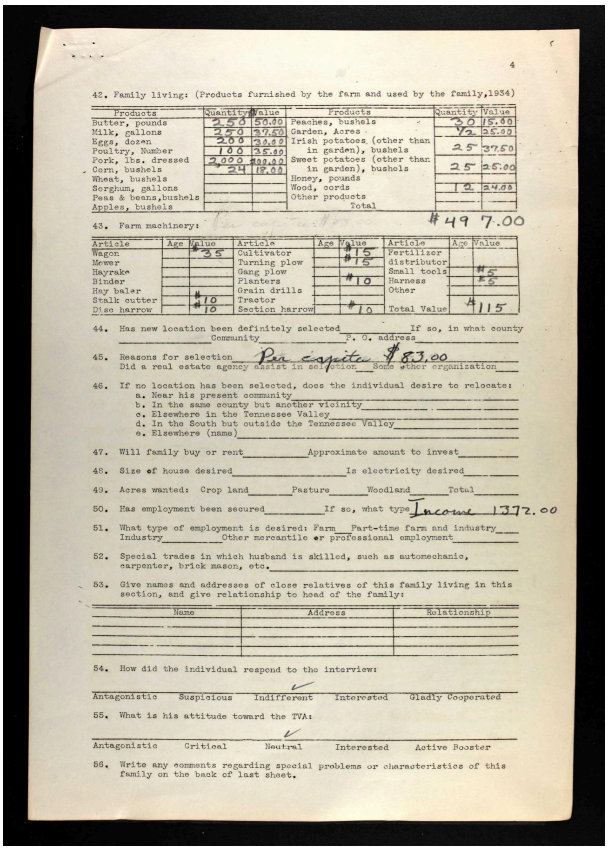
Expenditures	Amount	Receipts	Amount
Livestock and poultry		Cotton	$900
Feeds	$18	Corn	
Farm implements and machinery		Hay	
Machinery repairs	$10	Seed	$85
Farm labor	$150	Livestock	
Commercial fertilizers, manure	95	Poultry and poultry products	$35
Seeds, plants, trees, etc.	10	Milk and milk products	$40
Taxes	50	Forest products	$5
Insurance of buildings, crops	12	Other products	
Cash rent		Home occupation, handicrafts	
Other (Fence repair, etc.)		A.A.A.	$200
Grazing + seeds	$65	Other receipts	
Total expenditures, 1934	$380	Total receipts, 1934	$1,255

40. Information concerning cash income for twelve months ending Dec. 31, 1934:

Source	Amount	Source	Amount
Wages		Children away from home	
Pensions		Children at home	
Relief		Industrial compensation	
Insurance		Farm receipts	$1,255
Investments		Other sources	
Rents			
Fish		Total cash income	$1,255

41. If on relief in 1934, give estimated value of groceries, clothing, fuel, etc. (not included in cash reported) None Has any relief been received during 1935 No If so, approximate amount

See above-cropping



4

42. Family living: (Products furnished by the farm and used by the family, 1934)

Products	Quantity	Value	Products	Quantity	Value
Butter, pounds	250	50.00	Peaches, bushels	30	15.00
Milk, gallons	250	37.50	Garden, Acres	Va	25.00
Eggs, dozen	200	30.00	Irish potatoes (other than in garden), bushels	25	37.50
Poultry, Number	100	35.00	Sweet potatoes (other than in garden), bushels	25	25.00
Pork, lbs. dressed	2,000	$80.00	Honey, pounds		
Corn, bushels	24	18.00	Wood, cords	12	24.00
Wheat, bushels			Other products		
Sorghum, gallons			Total		
Peas & beans, bushels					
Apples, bushels					

$497.00

43. Farm machinery:

Article	Age	Value	Article	Age	Value	Article	Age	Value
Wagon		$35	Cultivator		$15	Fertilizer distributor		
Mower			Turning plow		$15	Small tools		$5
Hayrake			Gang plow			Harness		$5
Binder			Planters		$10	Other		
Hay baler			Grain drills					
Stalk cutter		$10	Tractor					
Disc harrow		$10	Section harrow		$10	Total Value		$115

44. Has new location been definitely selected If so, in what county
Community P. O. address

45. Reasons for selection Per capita $83.00
Did a real estate agency assist in selection Some other organization

46. If no location has been selected, does the individual desire to relocate:
a. Near his present community
b. In the same county but another vicinity
c. Elsewhere in the Tennessee Valley
d. In the South but outside the Tennessee Valley
e. Elsewhere (name)

47. Will family buy or rent Approximate amount to invest

48. Size of house desired Is electricity desired

49. Acres wanted: Crop land Pasture Woodland Total

50. Has employment been secured If so, what type Income 1372.00

51. What type of employment is desired: Farm Part-time farm and industry
Industry Other mercantile or professional employment

52. Special trades in which husband is skilled, such as automechanic, carpenter, brick mason, etc.

53. Give names and addresses of close relatives of this family living in this section, and give relationship to head of the family:

Name	Address	Relationship

54. How did the individual respond to the interview:

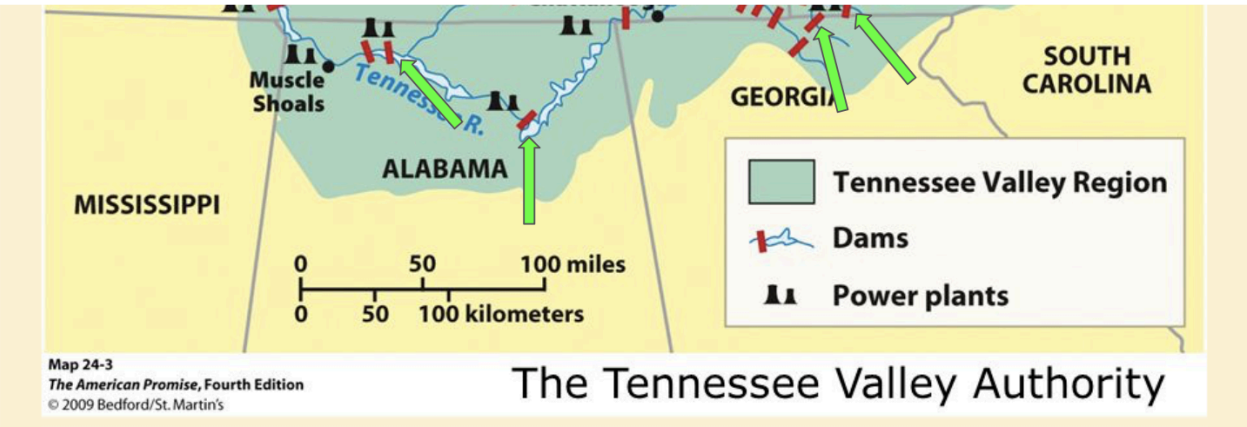
Antagonistic Suspicious Indifferent Interested Gladly Cooperated

55. What is his attitude toward the TVA:

Antagonistic Critical Neutral Interested Active Booster

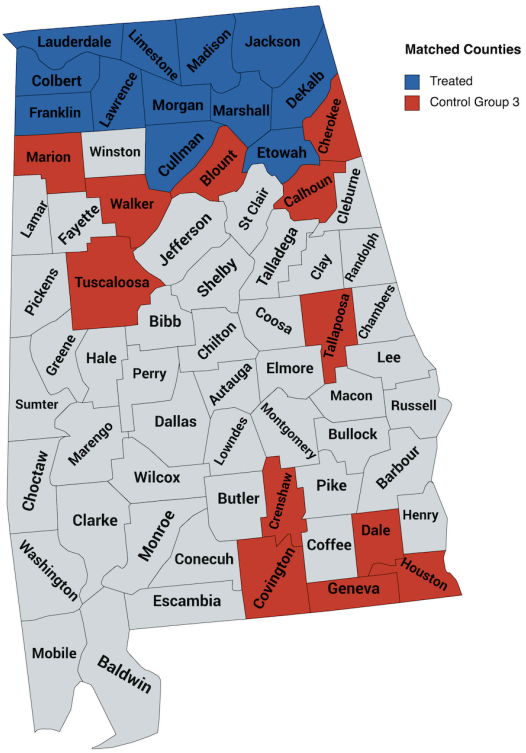
56. Write any comments regarding special problems or characteristics of this family on the back of last sheet.

Figure III.I Treatment and control areas



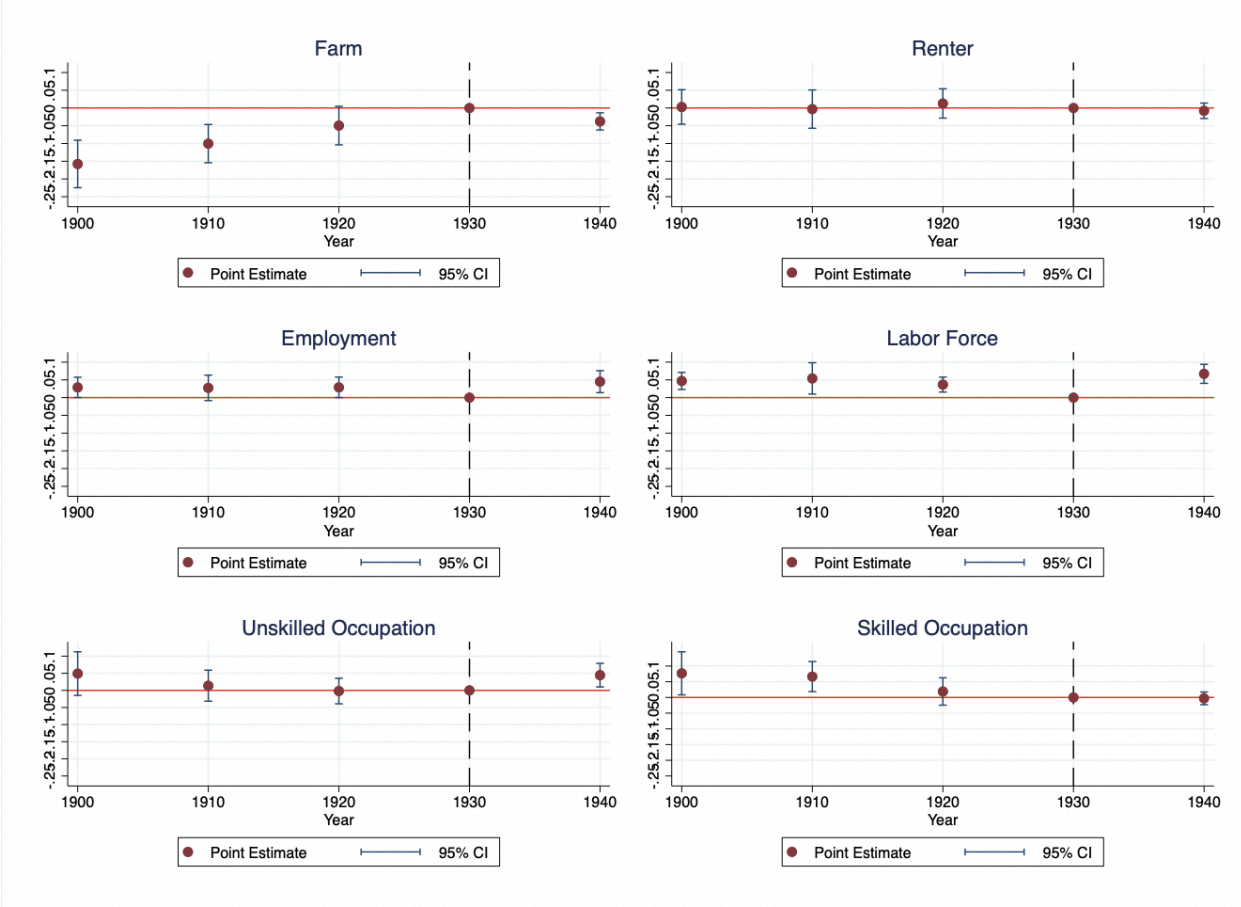
Note: Arrows point to the dams that are displacing people within our sample's time frame. Wheeler and Guntersville dams are located in Alabama, and Nottely and Chatuge dams are in Georgia. The placement of the Alabama dams displaced people in our treatment group whereas the placement of the Georgia dams displaced people in our control group in our robustness check.

Figure III.II. Treatment and control areas



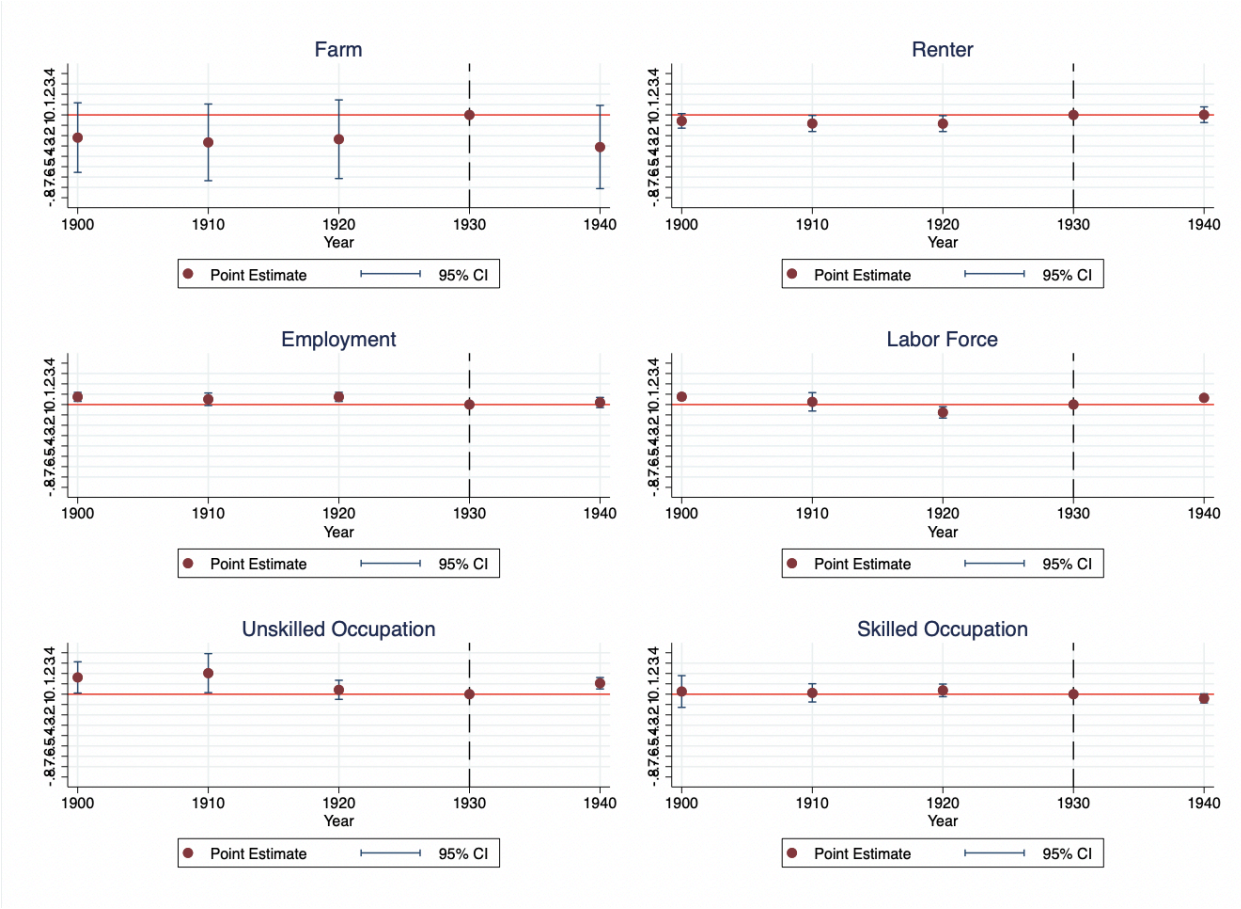
Note: Our third comparison group consists of people living in counties that are similar to those of the treated group based on 1930 county characteristics. Blue counties contain people who were displaced by the dam construction and red counties contain people who were not displaced by the dam construction,

Figure IV. Event study estimates of socioeconomic outcomes, within county control group



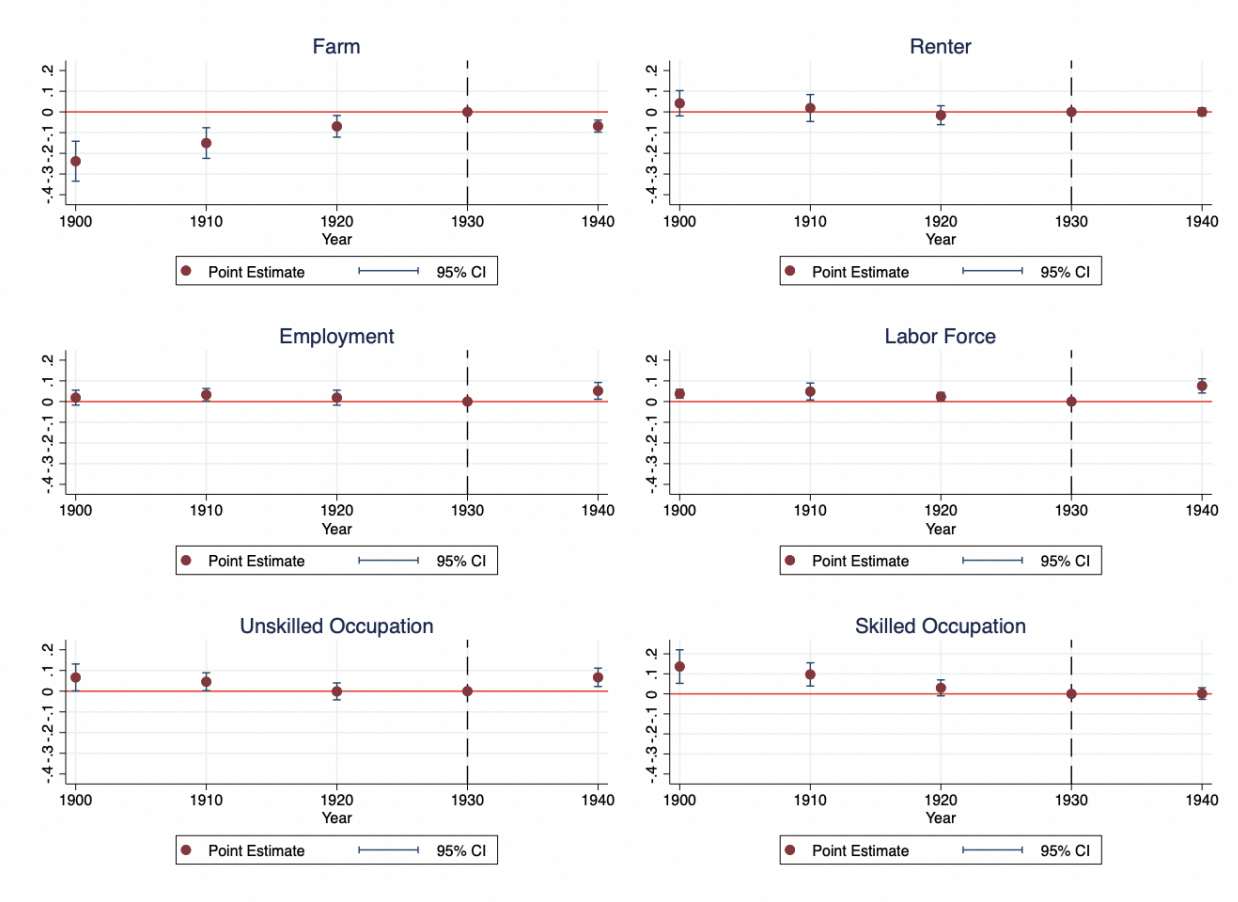
Notes: Control group includes individuals who were living in the same county of those forced to relocate, but were not in the path of the dam construction. Estimates for farm and rent are at the household level, and estimates for other outcomes are at the individual level.

Figure V.1. Event study estimates of socioeconomic outcomes, Georgia control group



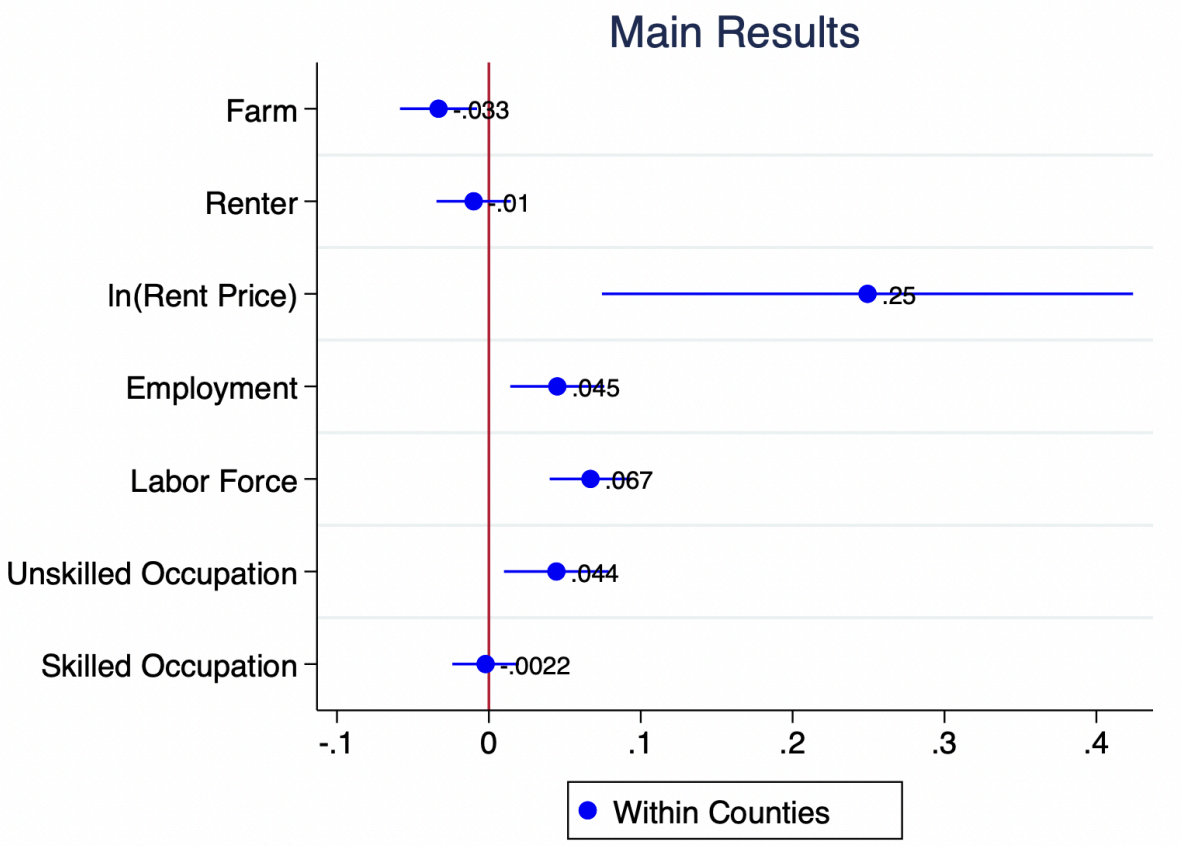
Notes: Control group includes individuals living in Georgia who have-not-yet been treated (relocated) due to a later dam construction year. Estimates for farm and rent are at the household level, and estimates for other outcomes are at the individual level.

Figure V.2. Event study estimates of socioeconomic outcomes, matched county control group



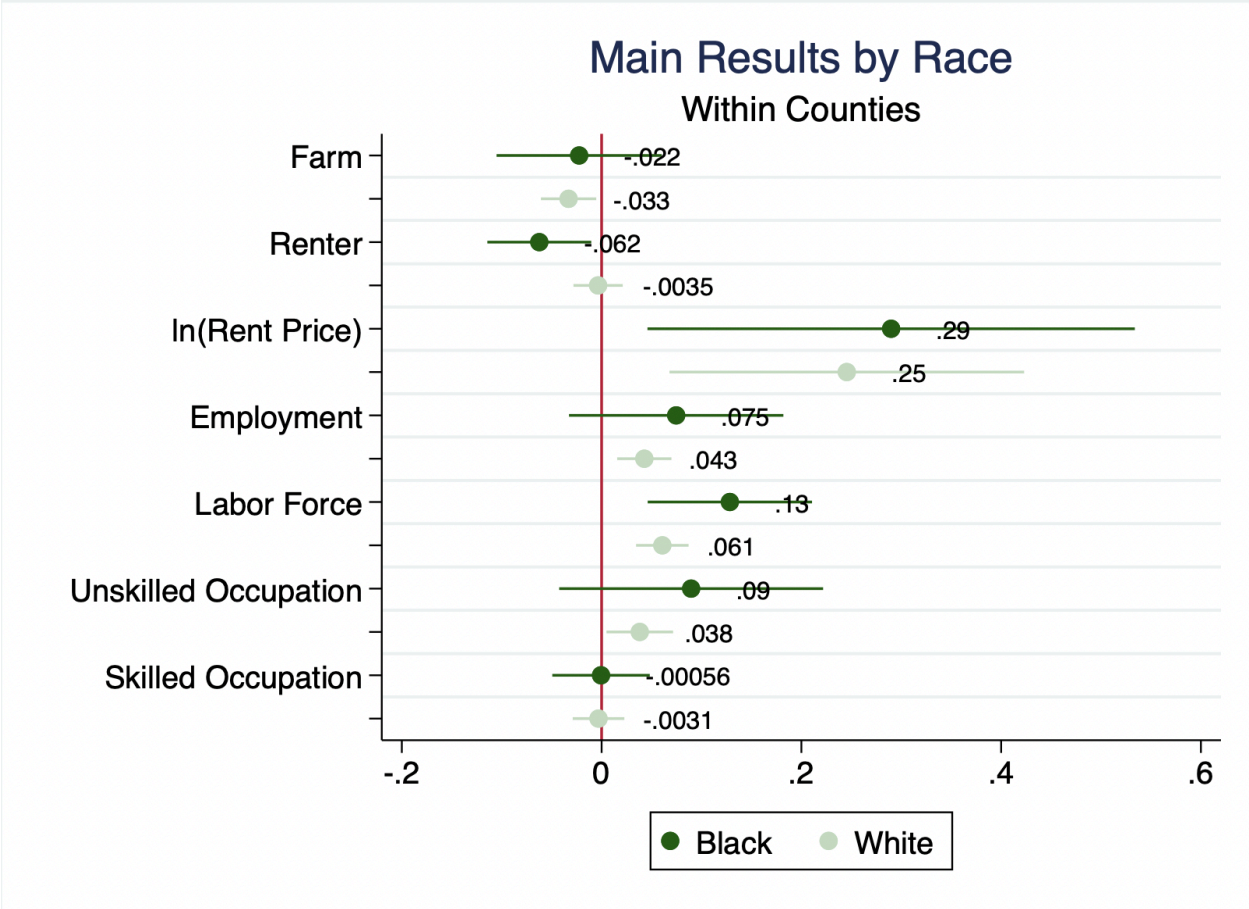
Notes: Control group includes individuals living in counties that were matched to treatment counties using a nearest neighbor matching algorithm based on 1930 county characteristics. Estimates for farm and rent are at the household level, and estimates for other outcomes are at the individual level.

Figure VI. The average treatment effect of a forced relocation, main results.



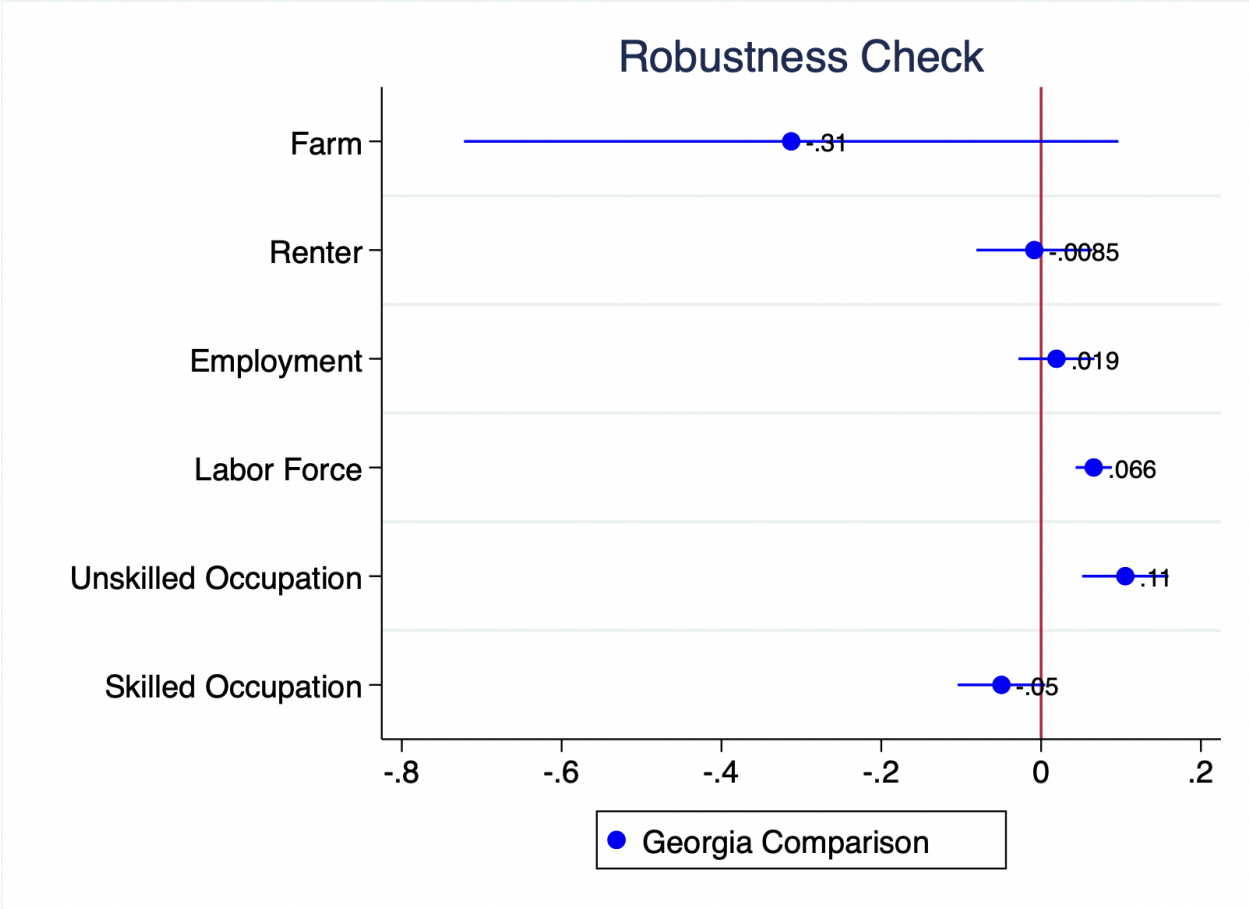
Notes: Regression coefficients by outcomes are shown graphically for our within-counties control group: individuals who were living in the same county of those forced to relocate, but were not in the path of the dam construction. The graphed bars are the standard errors.

Figure VII. The average treatment effect of a forced relocation on outcomes, main results by race



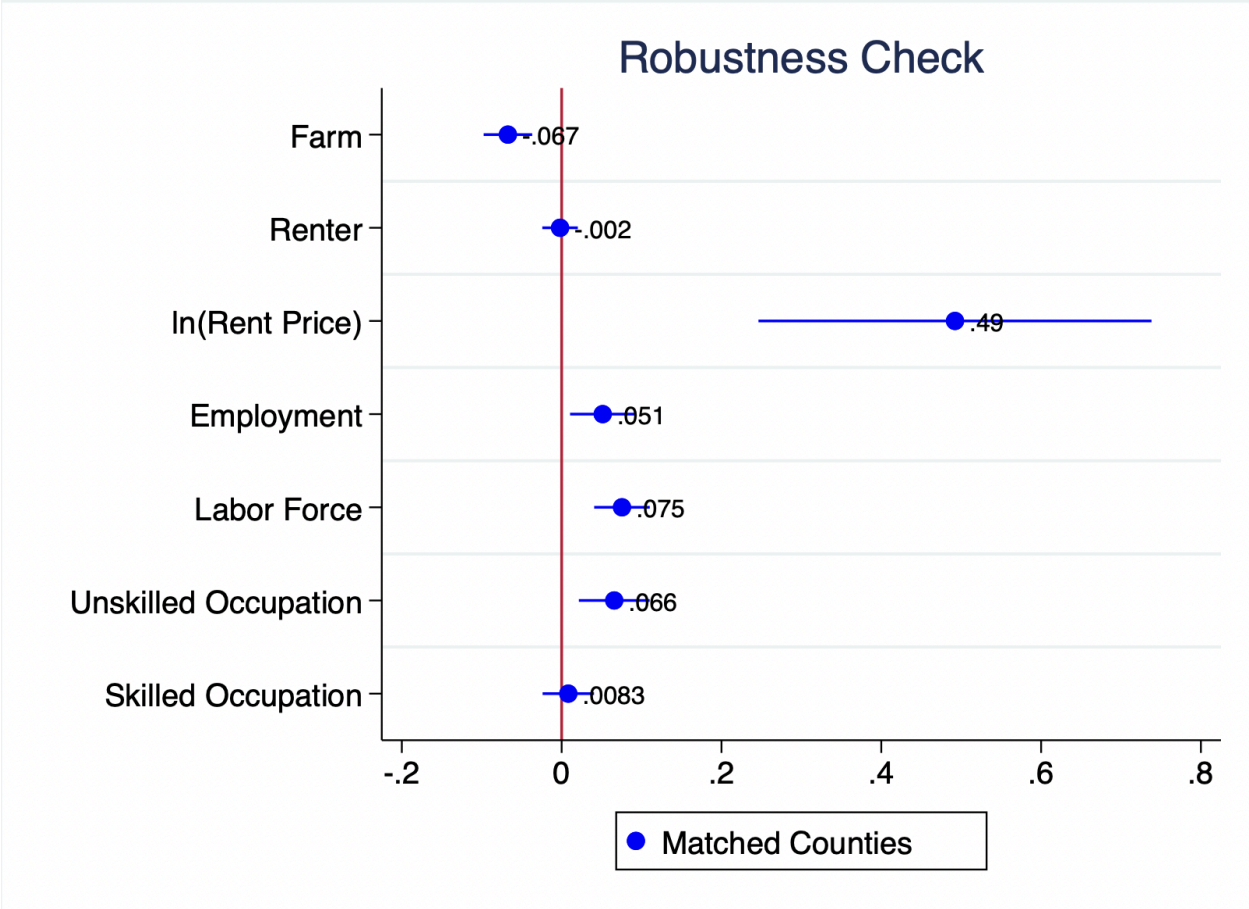
Notes: Regression coefficients by outcomes are shown graphically for our within-counties control group by race: individuals who were living in the same county of those forced to relocate, but were not in the path of the dam construction. The graphed bars are the standard errors.

Figure VIII.I. The average treatment effect of a forced relocation on outcomes, robustness check - Georgia comparison



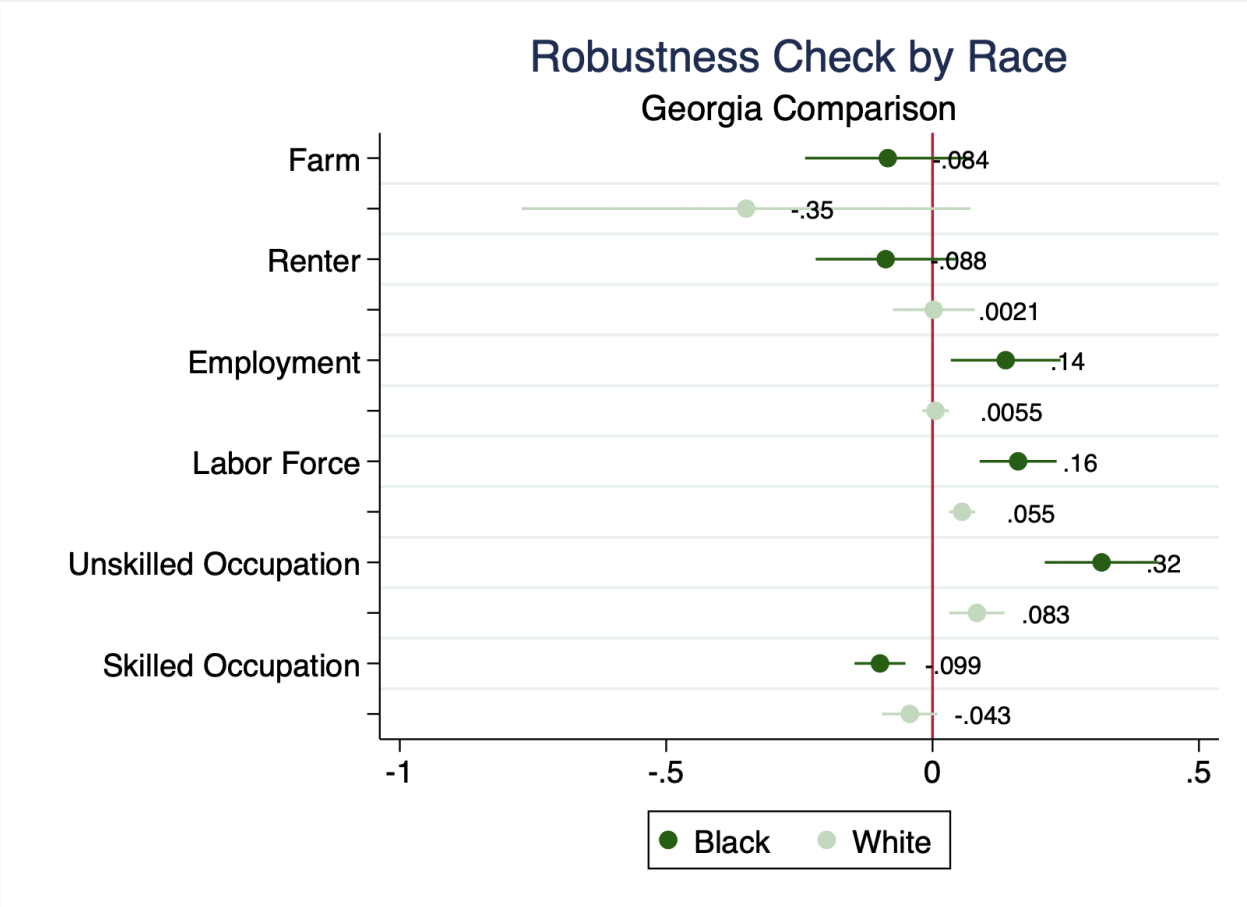
Notes: Regression coefficients by outcomes are shown graphically for our robustness check, Georgia control group: individuals living in Georgia who have-not-yet been treated (relocated) due to a later dam construction year. The graphed bars are the standard errors.

Figure VIII.I The average treatment effect of a forced relocation on outcomes, robustness check - matched counties comparison



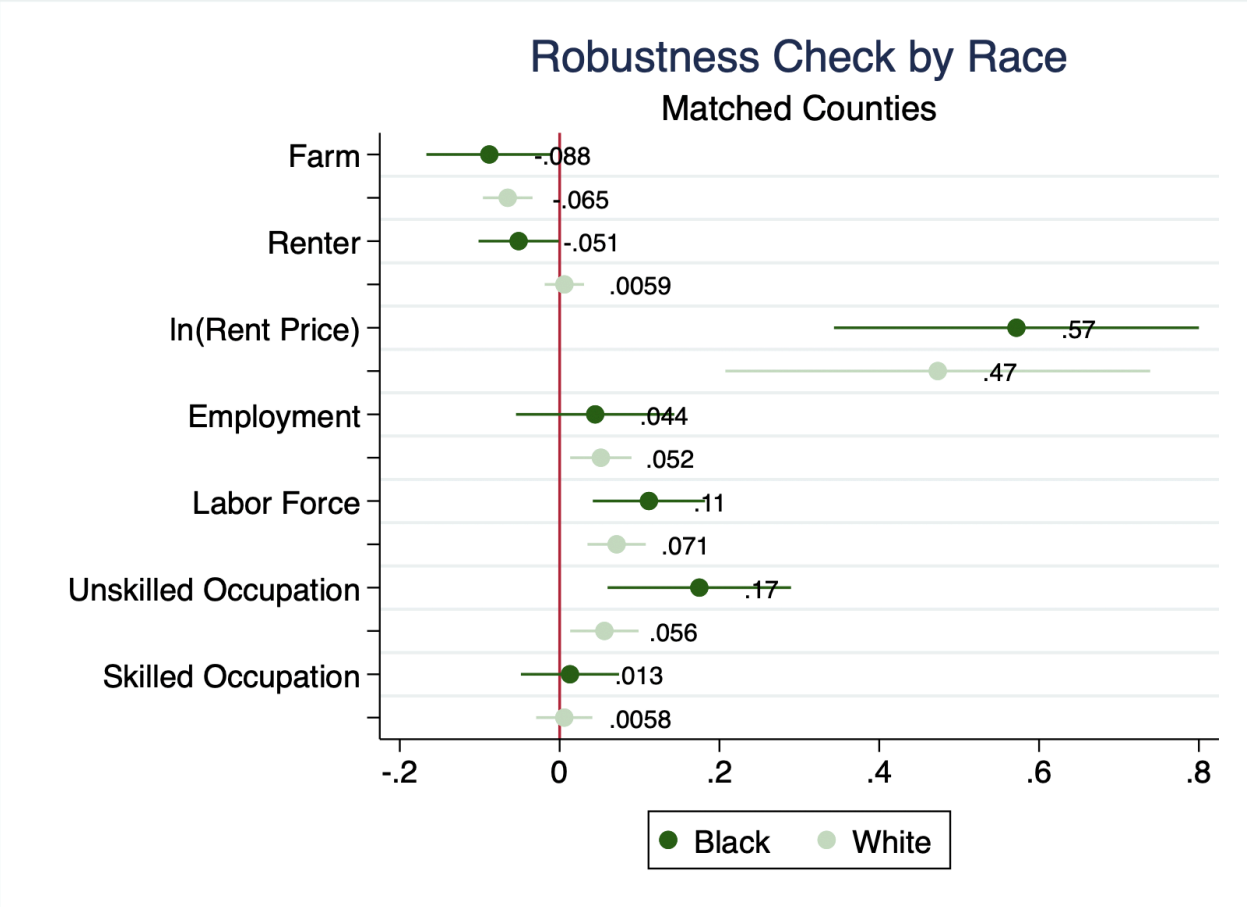
Notes: Regression coefficients by outcomes are shown graphically for our robustness check - matched counties control group: includes individuals living in counties that were matched to treatment counties using a nearest neighbor matching algorithm based on 1930 county characteristics. The graphed bars are the standard errors.

Figure IX.I. The average treatment effect of a forced relocation on outcomes by race, robustness check - Georgia comparison



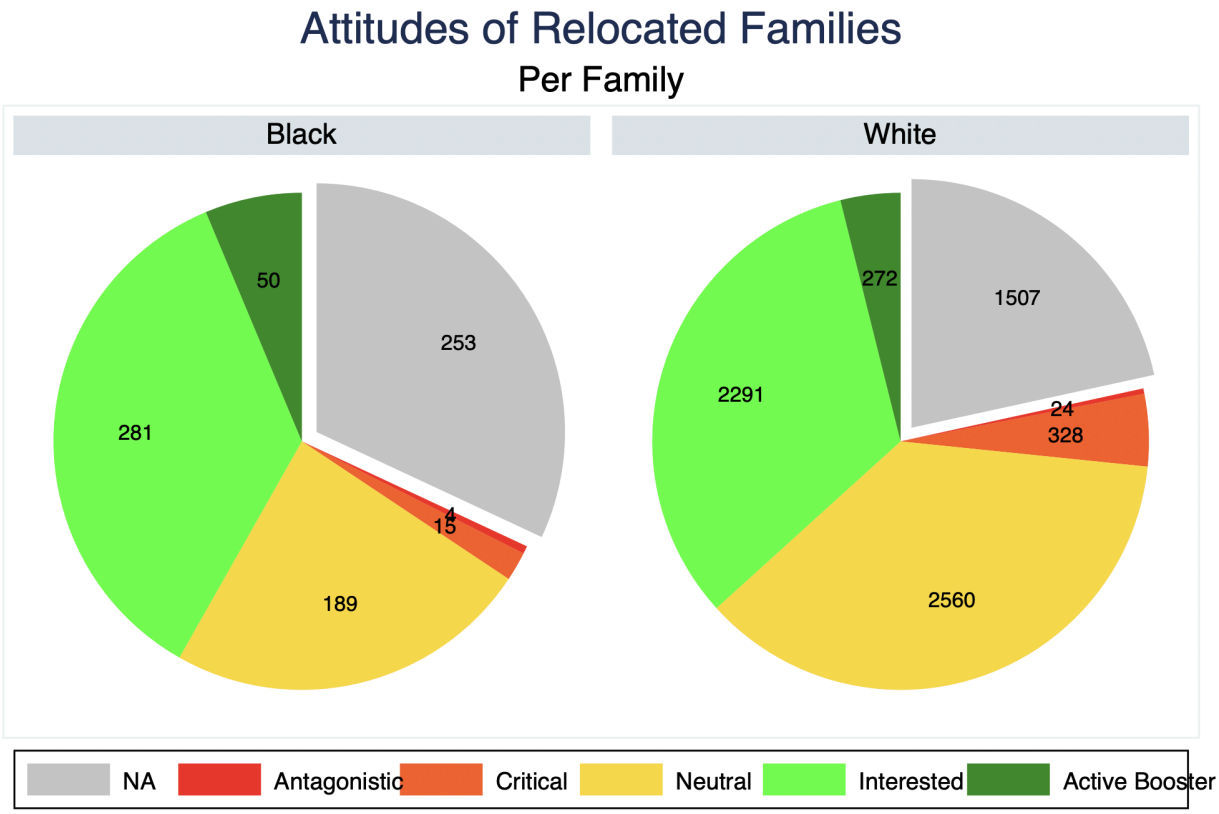
Notes: Regression coefficients by outcomes are shown graphically by race for our robustness check - Georgia control group: individuals living in Georgia who have-not-yet been treated (relocated) due to a later dam construction year. The graphed bars are the standard errors.

Figure IX.II. The average treatment effect of a forced relocation on outcomes by race, robustness check - matched counties



Notes: Regression coefficients by outcomes are shown graphically by race for our robustness check - matched counties control group: includes individuals living in counties that were matched to treatment counties using a nearest neighbor matching algorithm based on 1930 county characteristics. The graphed bars are the standard errors.

Figure X. Attitude toward relocation for Black and White families



Notes: Data are from a survey of relocated families conducted by the TVA.

Table I. Summary statistics for treatment and control group, on individual and household data, 1930 Census

	TG	CG	Difference
A. Individual Data			
Dependent Variables			
Employment	0.743	0.749	-0.006
	[0.437]	[0.434]	(0.009)
Labor Force	0.704	0.759	-0.055***
	[0.457]	[0.428]	(0.009)
Unskilled Jobs	0.297	0.279	0.018*
	[0.457]	[0.448]	(0.011)
Skilled Jobs	0.105	0.418	-0.313***
	[0.306]	[0.493]	(0.007)
Independent Variables			
White	0.9	0.851	0.049***
	[0.3]	[0.356]	(0.006)
Black	0.1	0.149	-0.049***
	[0.3]	[0.356]	(0.006)
Observations	2,420	129,615	
B. Household Data			
Dependent Variables			
Farm	0.817	0.407	0.410***
	[0.386]	[0.491]	(0.008)
Owned	1.641	1.575	0.066***
	[0.483]	[0.504]	(0.011)
House Value	228.612	1207.273	-978.661***
	[1279.335]	[4912.377]	(31.541)
Rent ($/mo.)	1.535	9.425	-7.890***
	[5.296]	[12.62]	(0.152)
Independent Variables			
White	0.906	0.861	0.045***
	[0.293]	[0.346]	(0.005)
Black	0.094	0.139	-0.045***
	[0.293]	[0.346]	(0.005)
Observations	2,160	107,523	

Notes: TG indicates treatment group, CG includes individuals who were living in the same county of those forced to relocate, but were not in the path of the dam construction. Data are from the 1930 US Census. Standard deviations in brackets, standard errors in parentheses. *** p<0.01

Table II. Effect of TVA relocation on socioeconomic outcomes

VARIABLES	(1) Farm	(2) Renter	(3) ln(Rent $)	(4) Employment	(5) Labor Force	(6) Unskilled Occupation	(7) Skilled Occupation
A. Within Counties Comparison							
Treat*Post	-0.035**	-0.007	0.253***	0.045***	0.067***	0.044**	-0.002
	(0.013)	(0.011)	(0.081)	(0.014)	(0.012)	(0.016)	(0.010)
Observations	120,804	120,804	66,028	148,432	148,432	124,649	124,649
R-squared	0.072	0.021	0.284	0.014	0.041	0.023	0.074
Mean	*0.674*	*0.586*	*0.712*	*0.635*	*0.612*	*0.323*	*0.210*
B. Georgia Have-Not-Yet Been Treated							
Treat*Post	-0.311	-0.005	1.499***	0.019	0.066***	0.105***	-0.050*
	(0.193)	(0.034)	(0.070)	(0.022)	(0.011)	(0.025)	(0.026)
Observations	6,460	6,460	3,391	5,089	5,089	4,267	4,267
R-squared	0.040	0.034	0.364	0.030	0.075	0.020	0.039
Mean	*0.788*	*0.596*	*0.325*	*0.535*	*0.504*	*0.340*	*0.118*
C. Matched Counties							
Treat*Post	-0.073***	-0.002	0.489***	0.051**	0.075***	0.066***	0.008
	(0.014)	(0.011)	(0.121)	(0.020)	(0.017)	(0.021)	(0.016)
Observations	106,191	106,191	60,440	127,381	127,381	105,053	105,053
R-squared	0.039	0.024	0.206	0.012	0.035	0.033	0.064
Mean	*0.575*	*0.614*	*0.862*	*0.602*	*0.579*	*0.353*	*0.272*

Notes: Main effects for treatment and year fixed effects are included in each regression. Race controls are included in each regression. Control group 1 includes individuals who were living in the same county of those forced to relocate, but were not in the path of the dam construction, control group 2 indicates individuals living in Georgia who have-not-yet been treated (relocated) due to a later dam construction year, and control group 3 includes individuals living in counties that were matched to treatment counties using a nearest neighbor matching algorithm based on 1930 county characteristics. Robust standard errors in parentheses, *** p<0.01, ** p<0.05, * p<0.1

Table III. Effect of TVA relocation by race, within-counties control group

VARIABLES	(1) Farm	(2) Renter	(3) ln(Rent $)	(4) Employment	(5) Labor Force	(6) Unskilled Occupation	(7) Skilled Occupation
A. White							
Treat*Post	-0.036**	-0.002	0.246**	0.043***	0.061***	0.038**	-0.003
	(0.013)	(0.011)	(0.083)	(0.013)	(0.012)	(0.015)	(0.012)
Observations	109,723	109,723	58,385	135,556	135,556	113,723	113,723
R-squared	0.071	0.014	0.276	0.016	0.042	0.003	0.066
Mean	*0.677*	*0.573*	*0.739*	*0.626*	*0.603*	*0.308*	*0.224*
B. Black							
Treat*Post	-0.018	-0.051**	0.310**	0.075	0.128***	0.090	-0.001
	(0.042)	(0.020)	(0.111)	(0.050)	(0.038)	(0.061)	(0.023)
Observations	11,064	11,064	7,633	12,853	12,853	10,904	10,904
R-squared	0.143	0.010	0.359	0.004	0.026	0.022	0.053
Mean	*0.640*	*0.722*	*0.496*	*0.751*	*0.724*	*0.481*	*0.0715*
Coefficients Different by Race	No	Yes	No	No	Yes	No	No

Notes: Main effects for treatment and year fixed effects are included in each regression. Control group includes individuals who were living in the same county of those forced to relocate, but were not in the path of the dam construction. Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Table IV. Effect of TVA relocation by race, Georgia control group

VARIABLES	(1) Farm	(2) Renter	(3) ln(Rent $)	(4) Employment	(5) Labor Force	(6) Unskilled Occupation	(7) Skilled Occupation
A. White							
Treat*Post	-0.351*	0.006	1.511***	0.005	0.055***	0.083***	-0.043
	(0.197)	(0.036)	(0.077)	(0.012)	(0.012)	(0.025)	(0.025)
Observations	5,806	5,806	2,997	4,561	4,561	3,822	3,822
R-squared	0.044	0.024	0.357	0.032	0.074	0.002	0.030
Mean	*0.788*	*0.575*	*0.345*	*0.524*	*0.497*	*0.320*	*0.129*
B. Black							
Treat*Post	-0.068	-0.090	1.401***	0.137**	0.161***	0.317***	-0.099***
	(0.072)	(0.060)	(0.084)	(0.048)	(0.033)	(0.049)	(0.022)
Observations	648	648	391	520	520	438	438
R-squared	0.068	0.041	0.419	0.029	0.092	0.043	0.069
Mean	*0.791*	*0.782*	*0.177*	*0.629*	*0.571*	*0.490*	*0.0307*
Coefficients Different by Race	No	No	No	Yes	Yes	Yes	No

Notes: Main effects for treatment and year fixed effects are included in each regression. Control group includes individuals living in Georgia who have-not-yet been treated (relocated) due to a later dam construction year. Robust standard errors in parentheses, *** p<0.01, ** p<0.05, * p<0.1

Table V. Effect of TVA relocation by race, matched county controls

VARIABLES	(1) Farm	(2) Renter	(3) ln(Rent $)	(4) Employment	(5) Labor Force	(6) Unskilled Occupation	(7) Skilled Occupation
A. White							
Treat*Post	-0.070***	0.005	0.470***	0.052**	0.071***	0.056**	0.006
	(0.015)	(0.012)	(0.131)	(0.019)	(0.018)	(0.021)	(0.017)
Observations	91,587	91,587	50,130	110,944	110,944	91,134	91,134
R-squared	0.034	0.011	0.195	0.013	0.035	0.008	0.046
Mean	*0.580*	*0.593*	*0.900*	*0.589*	*0.568*	*0.328*	*0.294*
B. Black							
Treat*Post	-0.098**	-0.040*	0.569***	0.044	0.112***	0.175***	0.013
	(0.036)	(0.022)	(0.113)	(0.048)	(0.034)	(0.056)	(0.030)
Observations	14,580	14,580	10,300	16,409	16,409	13,892	13,892
R-squared	0.129	0.019	0.259	0.009	0.032	0.010	0.088
Mean	*0.542*	*0.747*	*0.668*	*0.699*	*0.669*	*0.514*	*0.127*
Coefficients Different by Race	No	Yes	No	No	No	Yes	No

Notes: Main effects for treatment and year fixed effects are included in each regression. Control group includes individuals living in counties that were matched to treatment counties using a nearest neighbor matching algorithm based on 1930 county characteristics. Robust standard errors in parentheses,
*** p<0.01, ** p<0.05, * p<0.1

Table VI. Effect of TVA relocation on labor market outcomes, by attitude

	Control Group 1			Control Group 2		
VARIABLES	Negative	Neutral	Positive	Negative	Neutral	Positive
A. Labor Force						
Treat*Post	0.006	0.060***	0.038***	-0.009	0.044***	0.022*
	(0.069)	(0.009)	(0.013)	(0.069)	(0.008)	(0.012)
1930 Mean	*0.733*	*0.732*	*0.732*	*0.728*	*0.728*	*0.728*
Observations	192,726	195,400	195,666	213,307	215,981	216,247
R-squared	0.277	0.278	0.277	0.287	0.287	0.287
B. Unskilled Jobs						
Treat*Post	0.031	0.038**	0.069***	0.039	0.046***	0.077***
	(0.039)	(0.017)	(0.019)	(0.038)	(0.014)	(0.018)
1930 Mean	*0.258*	*0.258*	*0.257*	*0.241*	*0.241*	*0.240*
Observations	192,726	195,400	195,666	213,307	215,981	216,247
R-squared	0.016	0.016	0.016	0.018	0.018	0.018
B. Skilled Jobs						
Treat*Post	-0.076***	-0.055**	-0.057***	-0.109***	-0.086***	-0.089***
	(0.025)	(0.019)	(0.018)	(0.028)	(0.021)	(0.022)
1930 Mean	*0.080*	*0.061*	*0.071*	*0.080*	*0.061*	*0.071*
Observations	192,726	195,400	195,666	213,307	215,981	216,247
R-squared	0.088	0.089	0.088	0.108	0.109	0.109
C. Employment						
Treat*Post	0.039	0.059***	0.033**	0.020	0.040***	0.014
	(0.036)	(0.008)	(0.014)	(0.037)	(0.010)	(0.016)
1930 Mean	*0.769*	*0.768*	*0.768*	*0.757*	*0.756*	*0.756*
Observations	192,726	195,400	195,666	213,307	215,981	216,247
R-squared	0.526	0.526	0.526	0.528	0.529	0.528

Notes: Main effects for treatment and year fixed effects are included in each regression. Race controls are included in each regression. Negative includes individuals who were antagonistic or critical of the relocation program. Positive includes individuals who were interested or active boosters of the relocation program. Control group 1 includes individuals who were living downriver of the dam, and control group 2 indicates individuals living in counties parallel to the counties bordering the Tennessee River. Robust standard errors in parentheses, *** $p<0.01$, ** $p<0.05$, * $p<0.1$

Appendix

Figure AI. Stages of dam construction mentioned by Howard (1936)

Step 1: Both engineers and social scientists must make numerous investigations. The engineers want to find a firm, physical foundation for their structure and for the finished product to withstand the forces of nature. Before the project is approved or the site is determined, the social scientists need to figure out if the anticipated benefits outweigh the monetary and social costs of the enterprise. If so, they should proceed with the dam construction.

Step 2: After the decision to build the dam has been made, there should be focus on questions relating to construction. What labor supply is available within a reasonable distance of the project? What is the composition of the population? What skills are represented by the population? What race factors are present among the population?

Step 3: Consideration of the need for a camp to house employees after they are hired which includes awareness of all social implications involved in housing workers in construction communities.

Step 4: Understanding the people who are to be employed. What skills are needed? What type of employee training will be most useful? Will the training be on the construction site or will it be held at workers homes?

Step 5: Studies are made to assist in planning the educational facilities needed by the employees of the Authority.

Step 6: As the actual construction begins, there are a new series of questions to be considered. What commercial facilities must be provided? Are there any desirable recreational facilities? What other economic and social needs must be anticipated?

Step 7: Determine the type of community organization that will be most effective such as the community making decisions within popular participation.

Step 8: Figure out what cooperative arrangement can be worked out that will be mutually satisfactory to the Authority and the local governments. An example is to consider a reexamination of health facilities due to new demands.

Step 9: Social scientists must determine detailed facts concerning families to be displaced by the reservoir.

Step 10: As reservoir land is acquired and the people move out of the region, more questions for the public administration and economist. What will be the financial status of the local government after a large portion of an area has been purchased? What source of revenue is left? What is the debt and can it be paid? What is the future of this particular part of the local government?

Step 11: As the construction project nears completion, new problems arise. What vocational opportunities are open to workers whose period of employment is about to end? Can the Authority assist them in their efforts to utilize the experience and training received during this period of employment?

Step 12: Finally, important adjustments must be made after the construction project is over and people who were involved begin to leave the region.

Table AI. Difference-in-differences on baseline average county characteristics, based on 1940 residence, individual data

	Difference 1	Difference 2	Difference 3
Population	8471.865	8732.001***	-6801.373
	(7742.19)	(1348.281)	(4044.068)
	200373.47	*38904.047*	*42357.79*
Male	0.001	-0.002***	0.001
	(0.001)	(0.000)	(0.001)
	0.499	*0.504*	*0.501*
White	-0.004	0.004	0.012
	(0.01)	(0.011)	(0.012)
	0.764	*0.878*	*0.786*
Black	0.003	-0.005	-0.013
	(0.009)	(0.01)	(0.012)
	0.236	*0.122*	*0.214*
Hispanic	0.000	0.001***	0.000
	(0.000)	(0.000)	(0.000)
	0.001	*0.000*	*0.000*
Age	-0.21	1.878***	-0.206
	(0.183)	(0.205)	(0.215)
	24.936	*23.952*	*24.307*
In School	-0.001	-0.008*	0.002
	(0.004)	(0.004)	(0.005)
	0.24	*0.247*	*0.248*
Labor Force	0.001	-0.003	-0.006
	(0.005)	(0.005)	(0.008)
	0.357	*0.323*	*0.339*
Employment	-0.003	-0.035***	0.000
	(0.009)	(0.01)	(0.014)
	0.356	*0.336*	*0.356*
Occupation Score	0.031**	0.059***	0.587
	(0.012)	(0.014)	(0.998)
	0.145	*0.133*	*28.689*
Earnings Score	0.575	-1.023**	-0.105
	(0.591)	(0.436)	(0.578)
	32.209	*30.695*	*31.047*
Education Score	0.272	-1.245***	-0.353
	(0.444)	(0.361)	(0.489)
	31.88	*31.339*	*30.878*

Notes: Data are average county level characteristics from the 1930 census. Differences are from 1930 and 1940 between treated and control groups 1, 2, and 3 respectively, based on where an individual was living in each census year. Standard errors are in parentheses. Italicized are the 1930 means of both treatment group and respective control group. *** p<0.01, ** p<0.05, * p<0.1

Table AII. Difference-in-differences on average county characteristics, based on 1940 location, household data

	Difference 1	Difference 2	Difference 3
SEA SD	-0.497**	1.683***	1.910**
	(0.230)	(0.302)	(0.774)
	17.415	*9.277*	*45.078*
Renter	-0.002	0.013	0.003
	(0.006)	(0.008)	(0.011)
	0.628	*0.615*	*0.649*
Farmer	-0.077**	-0.095***	-0.052***
	(0.035)	(0.009)	(0.016)
	0.380	*0.708*	*0.513*
Rural	-0.065**	-0.064***	-0.013
	(0.028)	(0.012)	(0.017)
	0.572	*0.868*	*0.783*

Notes: Data are average county level characteristics from the 1930 census. Differences are from 1930 and 1940 between treated and control groups 1, 2, and 3 respectively, based on where an individual was living in each census year. SEA stands for State Economic Area which represents groups of counties that have similar economic characteristics when initially defined. Standard errors are in parentheses. Italicized are the 1930 means of both treatment group and respective control group.

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

Table AIII. Difference-in-differences on average county characteristics, based on 1940 residence, individual by race

	Black			White		
	Difference 1	Difference 2	Difference 3	Difference 1	Difference 2	Difference 3
Population	9591.032	7731.761**	-11861.102**	8341.900	8867.474***	-6062.853
	(5763.679)	(3038.551)	(5003.828)	(8257.368)	(1617.034)	(4195.355)
	308245.09	*37993.715*	*44,444.82*	*183131.39*	*39015.543*	*42,049.79*
Male	0.003***	-0.002**	0.000	0.001	-0.003***	0.001
	(0.001)	(0.001)	(0.001)	(0.001)	(0.000)	(0.001)
	0.495	*0.501*	*0.498*	*0.499*	*0.504*	*0.501*
Age	-0.182	1.969***	-0.120	-0.209	1.867***	-0.215
	(0.107)	(0.102)	(0.134)	(0.192)	(0.218)	(0.227)
	25.7	*23.937*	*24.685*	*24.814*	*23.954*	*24.252*
In School	-0.002	-0.003	0.009	0.000	-0.009**	0.002
	(0.004)	(0.006)	(0.007)	(0.005)	(0.004))	(0.005)
	0.227	*0.244*	*0.245*	*0.242*	*0.247*	*0.249*
Labor Force	-0.004	-0.010	-0.021	0.002	-0.002	-0.004
	(0.008)	(0.01)	(0.011)	(0.004)	(0.004)	(0.007)
	0.381	*0.329*	*0.347*	*0.353*	*0.322*	*0.334*
Employment	-0.022	-0.049**	-0.027	-0.001	-0.034***	0.004
	(0.015)	(0.018)	(0.018)	(0.009)	(0.009)	(0.013)
	0.365	*0.347*	*0.360*	*0.354*	*0.335*	*0.355*
Occupation Score	0.014	0.041**	-1.326	0.033**	0.061***	0.830
	(0.013)	(0.014)	(1.131)	(0.012)	(0.014)	(0.987)
	0.150	*0.155*	*29.107*	*0.144*	*0.131*	*28.627*
Earnings Score	1.657**	-0.379	0.897	0.428	-1.093**	-0.229
	(0.766)	(0.726)	(0.742)	(0.555)	0.391)	(0.565)
	33.076	*30.205*	*31.120*	*32.07*	*30.755*	*31.036*
Education Score	1.118*	-0.710	0.539	0.157	-1.305***	-0.467
	(0.592)	(0.591)	(0.612)	(0.419)	(0.325)	(0.482)
	32.224	*30.835*	*30.877*	*31.825*	*31.401*	*30.878*

Notes: Data are average county level characteristics from the 1930 census. Differences are from 1930 and 1940 between treated and control groups 1, 2, and 3 respectively, based on where an individual was living in each census year. Standard errors are in parentheses. Italicized are the 1930 means of both treatment group and respective control group. *** p<0.01, ** p<0.05, * p<0.1

Table AIV. Difference-in-differences on average county characteristics, based on 1940 location, household by race

	Black			White		
	Difference 1	Difference 2	Difference 3	Difference 1	Difference 2	Difference 3
SEA SD	-0.093	4.129***	4.075**	-0.427	1.445***	1.706**
	(1.183)	(1.117)	(1.728)	(0.267)	(0.340)	(0.750)
	19.756	*16.55*	*48.123*	*16.955*	*8.372*	*44.596*
Renter	-0.013	0.003	-0.009	-0.001	0.014*	0.005
	(0.008)	(0.011)	(0.014)	(0.006)	(0.007)	(0.011)
	0.657	*0.658*	*0.671*	*0.622*	*0.610*	*0.645*
Farmer	-0.112**	-0.106***	-0.062**	-0.071*	-0.095***	-0.051***
	(0.038)	(0.016)	(0.023)	(0.034)	(0.010)	(0.016)
	0.212	*0.702*	*0.482*	*0.414*	*0.709*	*0.517*
Rural	-0.073**	-0.054***	-0.040	-0.063**	-0.065***	-0.014
	(0.026)	(0.012)	(0.017)	(0.028)	(0.012)	(0.017)
	0.424	*0.873*	*0.743*	*0.601*	*0.867*	*0.790*

Notes: Data are average county level characteristics from the 1930 census. Differences are from 1930 and 1940 between treated and control groups 1, 2, and 3 respectively, based on where an individual was living in each census year. SEA stands for State Economic Area which represents groups of counties that have similar economic characteristics when initially defined. Standard errors are in parentheses. Italicized are the 1930 means of both treatment group and respective control group. *** p<0.01, ** p<0.05, * p<0.1

Table AV. Effect of relocation on occupation score

	Within Counties Comparison	Georgia Comparison	Matched Counties Comparison
A. All Individuals			
Treat*Post	-3.288*	1.683	-0.162
	(1.844)	(1.001)	(1.582)
Observations	427,068	9,550	225,969
R-squared	0.2162	0.1836	0.1716
Mean	*54.186*	*51.567*	*49.735*
B. White			
Treat*Post	-3.686	0.990	-0.4250
	(2.169)	(1.142)	(1.720)
Observations	362,057	8,550	196,127
R-squared	0.2178	0.1854	0.1736
Mean	*53.754*	*51.674*	*49.816*
C. Black			
Treat*Post	-2.105	6.745**	0.854
	(2.173)	(2.697)	(2.004)
Observations	64,967	991	29,811
R-squared	0.2120	0.1730	0.1619
Mean	*56.669*	*50.624*	*49.176*

Table AVI. Effect of TVA relocation by race, nearest neighbor matched sample

VARIABLES	(1) Farm	(2) Renter	(3) ln(Rent $)	(4) Employment	(5) Labor Force	(6) Unskilled Occupation	(7) Skilled Occupation
A. White							
Treat*Post	-0.111***	-0.045	0.148	0.099**	0.141**	0.141***	-0.028
	(0.026)	(0.049)	(0.092)	(0.036)	(0.049)	(0.025)	(0.021)
Observations	8,790	8,790	8,790	12,073	12,073	12,073	12,073
R-squared	0.061	0.012	0.116	0.005	0.028	0.011	0.074
1930 Mean	*0.717*	*0.611*	*0.375*	*0.795*	*0.771*	*0.358*	*0.0644*
B. Black							
Treat*Post	-0.036	-0.040**	0.266**	0.096*	0.140***	0.144**	-0.012
	(0.036)	(0.014)	(0.122)	(0.052)	(0.041)	(0.060)	(0.016)
Observations	9,423	9,423	9,423	11,672	11,672	11,672	11,672
R-squared	0.142	0.013	0.163	0.005	0.026	0.024	0.045
1930 Mean	*0.658*	*0.711*	*0.323*	*0.798*	*0.774*	*0.366*	*0.0582*
Coefficients Different by Race	Yes	No	No	No	No	No	No

Notes: Main effects for treatment and year fixed effects are included in each regression. Race controls are included in each regression. Control group consists of individuals in our within-counties control group who were living in the same county of those forced to relocate, but were not in the path of the dam construction. Robust standard errors in parentheses, *** p<0.01, ** p<0.05, * p<0.1

Table AVII. Characteristics of relocated families that did and did not link to the 1930s census

Linked	(1) White	(2) Male	(3) Average Income	(4) Rented	(5) Farmers	(6) Completed 12th grade or higher	(7) Total Individuals
Step 1: Linking all treated Alabama residents to the 1930s census							
Yes	81.91%	57.22%	$456.12	78.33%	66.14%	2.5%	14746
No	79.59%	43.20%	$438.62	80.06%	69.85%	2.5%	9215
Step 2: Linking the above 14746 to at least one of the prior census' (1900-1920)							
Yes	85.24%	66.27%	$526.23	72.44%	72.68%	4.9%	3652
No	80.81%	54.24%	$434.64	80.27%	63.98%	1.7%	11094
Step 3: Final comparison of relocated individuals in our sample to relocated individuals who did not link							
Yes	85.24%	66.27%	$526.23	72.44%	72.68%	4.9%	3652
No	80.26%	49.23%	$435.37	80.17%	66.64%	2.3%	20309

Notes: Each percentage serves as a description of the sample of relocated families and individuals that did and did not link to the historical census'. We start with an initial linking of relocatees to the 1930s census, as it serves as the pre period in our Difference-in-Difference analysis. We then reduced our sample to relocatees who linked to the 1940s census (post period) and to at least one of the prior census', 1900-1920, to establish parallel trends. Step 3 shows our final linked relocated sample in comparison to all relocatees who did not link in the linkage process.

Table AVIII. Effect of housing and labor variables from 1930 on the probability of being in the treatment group

Variables	Control Group 1	Control Group 2	Control Group 3
A. Household Level			
ln(Housing Value)	0.004	0.000	0.000
	(0.006)	(0.000)	(0.000)
Renter	-0.009	-0.000*	-0.000
	(0.007)	(0.000)	(0.001)
ln(Rent Price)	0.001	0.000	0.001
	(0.001)	(0.000)	(0.001)
Farmer	0.021**	0.000	0.002
	(0.008)	(0.000)	(0.002)
B. Individual Level			
Labor force	-0.005	-0.000	-0.000
	(0.007)	(0.000)	(0.001)
Employment	0.004	0.000*	-0.002
	(0.003)	(0.000)	(0.001)
Unskilled Occupation	-0.007**	-0.000	-0.000
	(0.002)	(0.000)	(0.000)
Skilled Occupation	-0.010**	0.000	-0.001
	(0.004)	(0.000)	(0.001)
Household Observations	61,732	1,817	33,200
Individual Observations	99,331	2,022	51,799

Notes: We regress each outcome on treatment status in the year 1930. Race controls are included in each regression. Control group 1 includes individuals who were living in the same county of those forced to relocate, but were not in the path of the dam construction, control group 2 indicates individuals living in Georgia who have-not-yet been treated (relocated) due to a later dam construction year, and control group 3 includes individuals living in counties that were matched to treatment counties using a nearest neighbor matching algorithm based on 1930 county characteristics. Robust standard errors in parentheses, *** $p<0.01$, ** $p<0.05$, * $p<0.1$

Table AIX. Effect of TVA relocation by home ownership, within-counties control group

VARIABLES	(1) Farm	(2) Employment	(3) Labor Force	(4) Unskilled Occupation	(5) Skilled Occupation
A. Renter					
Treat*Post	-0.046**	0.062***	0.092***	0.050**	0.009
	(0.020)	(0.013)	(0.015)	(0.020)	(0.013)
Observations	68,064	84,102	84,102	72,021	72,021
R-squared	0.079	0.013	0.043	0.022	0.079
Mean	*0.663*	*0.666*	*0.649*	*0.320*	*0.201*
B. Owner					
Treat*Post	0.007	0.023	0.029	0.011	-0.022
	(0.013)	(0.023)	(0.019)	(0.018)	(0.013)
Observations	52,709	64,330	64,330	52,628	52,628
R-squared	0.076	0.015	0.038	0.038	0.072
Mean	*0.690*	*0.598*	*0.567*	*0.327*	*0.223*
Coefficients Different	No	Yes	Yes	Yes	Yes

Notes: Main effects for treatment and year fixed effects are included in each regression. Control group includes individuals who were in the same county of those forced to relocate, but were not in the path of the dam construction. Robust standard errors in parentheses.

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

Table AX. Effect of TVA relocation by home ownership, Georgia control group

VARIABLES	(1) Farm	(2) Employment	(3) Labor Force	(4) Unskilled Occupation	(5) Skilled Occupation
A. Renter					
Treat*Post	-0.098***	0.063**	0.102***	0.089***	0.035
	(0.019)	(0.024)	(0.021)	(0.025)	(0.023)
Observations	62,344	75,433	75,433	63,521	63,521
R-squared	0.063	0.013	0.037	0.033	0.089
Mean	*0.544*	*0.627*	*0.610*	*0.354*	*0.280*
B. Owner					
Treat*Post	0.006	0.032	0.032*	0.016	-0.040**
	(0.019)	(0.021)	(0.018)	(0.024)	(0.016)
Observations	43,821	51,948	51,948	41,532	41,532
R-squared	0.031	0.012	0.035	0.042	0.040
Mean	*0.624*	*0.568*	*0.537*	*0.352*	*0.259*
Coefficients Different	No	Yes	Yes	Yes	Yes

Notes: Main effects for treatment and year fixed effects are included in each regression. Control group includes individuals living in Georgia who have-not-yet been treated (relocated) due to a later dam construction year. Robust standard errors in parentheses, *** p<0.01, ** p<0.05, * p<0.1

Table AXI. Effect of TVA relocation by home ownership, matched county controls

VARIABLES	(1) Farm	(2) Employment	(3) Labor Force	(4) Unskilled Occupation	(5) Skilled Occupation
A. Renter					
Treat*Post	-0.241	0.072***	0.101***	0.088	0.014
	(0.159)	(0.023)	(0.020)	(0.064)	(0.076)
Observations	3,776	3,103	3,103	2,633	2,633
R-squared	0.050	0.037	0.094	0.025	0.047
Mean	*0.828*	*0.555*	*0.521*	*0.337*	*0.0831*
B. Owner					
Treat*Post	-0.331	-0.034	0.019	0.054	-0.112***
	(0.204)	(0.021)	(0.015)	(0.042)	(0.028)
Observations	2,677	1,986	1,986	1,634	1,634
R-squared	0.054	0.028	0.055	0.037	0.051
Mean	*0.729*	*0.505*	*0.480*	*0.344*	*0.174*
Coefficients Different	No	Yes	Yes	Yes	Yes

Notes: Main effects for treatment and year fixed effects are included in each regression. Control group includes individuals living in counties that were matched to treatment counties using a nearest neighbor matching algorithm based on 1930 county characteristics. Robust standard errors in parentheses, *** p<0.01, ** p<0.05, * p<0.1

Table AXII. Unskilled Occupations Breakdown

VARIABLES	(1) Unskilled (Overall)	(2) Unskilled without Farming	(3) Unskilled Farming
A. Within-Counties Comparison			
treat_post	0.045**	0.060**	-0.010
	(0.016)	(0.025)	(0.010)
Observations	124,649	66,528	120,912
R-squared	0.003	0.013	0.013
Mean	*0.323*	*0.144*	*0.584*
B. Georgia Have-Not-Yet Been Treated			
treat_post	0.105***	0.124***	-0.083**
	(0.026)	(0.036)	(0.036)
Observations	4,267	1,803	4,375
R-squared	0.004	0.035	0.004
Mean	*0.340*	*0.133*	*0.688*
C. Matched Counties Comparison			
treat_post	0.066***	0.070**	-0.011
	(0.021)	(0.028)	(0.012)
Observations	105,053	57,049	101,271
R-squared	0.005	0.009	0.014
Mean	*0.353*	*0.168*	*0.593*

Notes: Main effects for treatment and year fixed effects are included in each regression. Column 1 consists of all unskilled jobs, which is the same variable used in our main analysis. Column 2 is similar to Column 1, but does not include any farm laborer jobs. Column 3 only consists of unskilled jobs related to farming such as farm laborers. Robust standard errors in parentheses, *** p<0.01, ** p<0.05, * p<0.1

Table AXIII. Unskilled Occupations Breakdown, by race

VARIABLES	(1) Unskilled (Black)	(2) Unskilled Non-Farmer (Black)	(3) Unskilled Farmer (Black)	(4) Unskilled (White)	(5) Unskilled Non-Farmer (White)	(6) Unskilled Farmer (White)
A. Within-Counties Comparison						
Treat*Post	0.090	0.120*	-0.014	0.038**	0.053*	-0.004
	(0.061)	(0.064)	(0.027)	(0.015)	(0.026)	(0.007)
Observations	10,904	5,232	9,351	113,723	61,286	109,094
R-squared	0.022	0.070	0.005	0.003	0.010	0.017
Mean	*0.481*	*0.361*	*0.674*	*0.308*	*0.125*	*0.576*
B. Georgia Have-Not-Yet Been Treated						
Treat*Post	0.317***	0.235***	-0.062**	0.083***	0.102**	-0.028
	(0.049)	(0.048)	(0.024)	(0.025)	(0.046)	(0.026)
Observations	438	155	413	3,822	1,643	3,837
R-squared	0.043	0.090	0.006	0.002	0.028	0.009
Mean	*0.490*	*0.418*	*0.799*	*0.320*	*0.0994*	*0.674*
C. Matched Counties Comparison						
Treat*Post	0.175***	0.189***	0.015	0.056**	0.058**	0.000
	(0.056)	(0.058)	(0.027)	(0.021)	(0.028)	(0.008)
Observations	13,892	7,172	11,631	91,134	49,860	87,001
R-squared	0.010	0.031	0.024	0.008	0.010	0.017
Mean	*0.514*	*0.403*	*0.668*	*0.328*	*0.132*	*0.583*
A. Sig Difference by race?	Yes	Yes	No	Yes	Yes	No
B. Sig Difference by race?	Yes	Yes	Yes	Yes	Yes	Yes
C. Sig Difference by race?	Yes	Yes	No	Yes	Yes	No

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