The Displacement Dividend: How Cotton Acreage Reduction Accidentally Invested in Black Children's Human Capital

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March 25, 2026

Abstract

In 1933, the Agricultural Adjustment Act paid cotton landowners to idle up to 35% of their acreage, triggering the displacement of nearly one million Black sharecroppers. Conventional accounts cast this as unambiguously harmful. Using 125,884 linked census observations and within-family sibling fixed effects, I show that Black children who were school-aged when the AAA struck gained 0.38 additional years of education relative to their younger siblings in the same household—a moderate standardized effect of 0.13σ. By 1950, these children held higher-status occupations. The mechanism: destroying cotton labor opportunities eliminated the primary alternative to schooling. Effects are concentrated among girls and in high-cotton-intensity counties, consistent with the opportunity-cost channel. Within displaced families, a discriminatory federal program inadvertently produced a relative human capital gain for children at the school-attendance margin.

JEL Codes: J15, N32, I26, Q18

Keywords: Agricultural Adjustment Act, human capital, child labor, Great Migration, racial inequality, New Deal

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1. Introduction

Between 1933 and 1936, the Agricultural Adjustment Administration's cotton program displaced approximately 900,000 Black sharecroppers across the American South. Landowners who received federal payments to reduce cotton acreage systematically evicted their tenants rather than sharing the proceeds—a violation of the AAA's terms that the federal government did little to prevent (Alston and Ferrie, 1993). The episode is widely cited as one of the New Deal's most consequential racial injustices (Katznelson, 2005; Fishback et al., 2003). What has never been measured is what happened to the children.

This paper provides the first individual-level evidence on how AAA cotton displacement affected Black children's long-run human capital and economic trajectories. Using the Multigenerational Longitudinal Panel (MLP) linking the 1930, 1940, and 1950 U.S. censuses, I follow 125,884 Black farm children from seven cotton-belt states through two decades of their lives. The central finding is surprising: school-age children in counties with higher pre-AAA cotton intensity—and therefore greater displacement exposure—accumulated *more* education than their younger siblings in the same household, not less. The estimated effect is 0.38 additional years of schooling (a standardized effect of 0.13σ), translating by 1950 into measurably higher occupational attainment.

Identification. The design exploits a triple-difference: within-family variation across siblings of different ages, interacted with county-level variation in AAA displacement intensity. Household fixed effects absorb all time-invariant family characteristics—parental education, wealth, social networks, local school quality—that might confound a simple cross-county comparison. The identifying variation asks: did the relationship between a child's age and their adult outcomes differ more steeply across high- versus low-AAA-intensity counties? The key assumption is that within families, the age gradient in outcomes would have been similar across counties absent the AAA shock. This assumption is supported by placebo tests on white farm children, who show no comparable effect, and by stable estimates across leave-one-state-out specifications.

Mechanism. The finding has a clean opportunity-cost interpretation. For Black farm children in the cotton South, the primary alternative to school attendance was field labor—planting, chopping, and picking cotton from ages as young as six (Wright, 1986). When the AAA contracted cotton acreage, it destroyed precisely this alternative. Children who were at the critical school-attendance margin (ages 6–12 in 1933) found the opportunity cost of schooling suddenly reduced. Their older siblings, already past the educational investment window, gained less. Their younger siblings, not yet school-age, were affected through different

channels. The data confirm this logic: in 1940, school-age children in high-AAA counties had higher educational attainment but *lower* occupational status than siblings who had already entered the labor force—consistent with time spent in school rather than in the fields. By 1950, the pattern reversed: the education dividend translated into higher-status occupations.

Contribution. This paper contributes to three literatures. First, it adds to the growing body of work using linked historical census data to trace the long-run consequences of policy shocks (Abramitzky et al., 2021; Aaronson et al., 2021; Boustan, 2010). The innovation here is the within-family design: rather than comparing children across counties or cohorts, I compare siblings within the same household, eliminating the family-level confounders that plague cross-sectional analyses of historical human capital formation.

Second, the paper speaks to the economics of child labor and schooling in developing agricultural economies. The theoretical prediction that reducing child labor opportunities increases educational investment is well-established (Basu and Van, 1998; Edmonds, 2005), but causal evidence from historical settings is scarce. The AAA provides a uniquely clean test: a policy shock that reduced demand for child agricultural labor without directly targeting schools or families.

Third, the finding reframes the conventional narrative about the AAA's racial impact. While the aggregate harm to Black sharecropping families is well-documented (Alston and Ferrie, 1993; Woodruff, 1936; Grubbs, 1971), the program's unintended developmental consequences have received no empirical attention. The evidence here does not overturn the conclusion that the AAA was racially discriminatory—landlords captured the payments while tenants bore the costs. But it reveals an irony: by destroying the cotton economy's demand for child labor, the policy inadvertently increased Black children's human capital at a pivotal moment in American economic history, when the returns to education were rising and the Great Migration was opening urban labor markets that rewarded schooling over field experience.

The remainder of the paper proceeds as follows. Section 2 describes the institutional setting of the AAA cotton program. Section 3 presents the data and sample construction. Section 4 details the empirical strategy. Section 5 reports the main results, heterogeneity, and robustness checks. Section 6 discusses the implications.

2. Institutional Background

The AAA cotton program. The Agricultural Adjustment Act, signed May 12, 1933 (48 Stat. 31), created the Agricultural Adjustment Administration to raise farm commodity

prices by restricting supply. The cotton program was the AAA's largest initiative, contracting with landowners to reduce planted acreage by up to 35% of their pre-program base. In the first year alone, the "plow-up" campaign destroyed approximately 10.4 million acres of standing cotton across the South (Nourse et al., 1935). Participating landowners received rental payments for idled acreage plus parity payments based on the share of cotton they had previously produced.

Racial displacement. Under the AAA's terms, benefit payments were supposed to be shared between landowners and their tenants and sharecroppers. In practice, this rarely occurred. Landlords in the cotton South systematically used the program to displace Black sharecroppers, either evicting them outright or reclassifying them as day laborers who had no claim to AAA payments (Grubbs, 1971; Mertz, 1978). The displacement was concentrated among Black households: Black farmers constituted roughly 40% of Southern tenant farmers but bore a disproportionate share of evictions. Between 1930 and 1940, the number of Black tenant farmers in the cotton South declined by approximately 192,000 (Wright, 1986).

Children and the cotton economy. In the pre-AAA cotton South, children were integral to the agricultural labor force. Black farm children as young as six participated in cotton cultivation—weeding, thinning, and picking—during the growing season. The agricultural calendar structured the school year: many rural Black schools operated only when children were not needed in the fields. County-level variation in cotton dependence therefore directly shaped children's schooling opportunities. When the AAA reduced cotton acreage, it diminished the demand for child field labor—particularly in the most cotton-intensive counties.

3. Data

3.1 The MLP Linked Panel

The primary data source is the Multigenerational Longitudinal Panel (MLP), which links individuals across the 1930, 1940, and 1950 U.S. censuses using probabilistic record linkage on names, ages, birthplaces, and other identifiers (Abramitzky et al., 2021). The linked panel allows me to observe the same individuals at three points: as children in 1930, as young adults in 1940, and as established adults in 1950.

Sample construction. I restrict the sample to Black children (race = 2) residing on farms (farm = 2) in seven cotton-belt states—Alabama, Arkansas, Georgia, Louisiana, Mississippi, South Carolina, and Texas—who were aged 0–17 in 1930. This yields 236,773 children. For

the sibling fixed effects analysis, I further restrict to children of the household head (relate $\in \{3, 4\}$) in households with two or more linked siblings, yielding 125,884 children in 51,022 households.

Outcomes. I measure four classes of outcomes. *Education*: years of completed schooling in 1940, constructed from IPUMS EDUC codes using standard crosswalk values. *Occupational attainment*: the Duncan occupational income score (occscore) in 1940 and 1950, an index mapping occupations to their median income levels. *Migration*: a binary indicator for whether the individual changed county of residence between 1930 and 1940. *Farm transition*: whether the individual resided off-farm by 1940 or 1950.

3.2 Treatment: AAA Cotton Intensity

The treatment variable is a county-level measure of pre-AAA cotton dependence: the share of the county's total linked population that consisted of Black farm residents in 1930. In the cotton South, Black farm residence was nearly synonymous with cotton production—sharecropping contracts overwhelmingly involved cotton cultivation (Wright, 1986; Ransom and Sutch, 2001). Counties with higher Black farm population shares had greater exposure to AAA cotton acreage reduction and the associated displacement.

I standardize this measure to have mean zero and unit variance across the 747 counties in the sample. The treatment variable has substantial cross-county variation (raw standard deviation = 0.14, range 0–0.68), reflecting the sharp geographic concentration of cotton production and Black farm labor across the South.

Treatment proxy validity. The Black farm share is an imperfect proxy for actual AAA cotton contract intensity, which would ideally be measured from USDA county-level contract enrollment records. The proxy may capture pre-existing county structural characteristics beyond cotton dependence alone. Two features of the design mitigate this concern. First, the household fixed effects absorb the main effect of county characteristics—any county-level confounder affects all siblings equally. Second, the identifying variation requires that these county characteristics interact differentially with child age, a more restrictive confounding pathway. The racial comparison (Section 5.3) provides further reassurance: if the proxy captured general county features rather than Black-specific displacement, white children should show similar age-gradient effects.

3.3 Summary Statistics

Table 1: Summary Statistics: Black Farm Children in Cotton South (Sibling Sample)

Variable	Mean	Std. Dev.	Min	Max	N
Panel A: Individual Characteristics					
Age in 1930	6.78	4.84	0	17	125,884
Female	0.31	0.46	0	1	125,884
Panel B: Outcomes					
Years of education (1940)	4.27	2.85	0	17	122,414
Years of education (1950)	1.16	2.84	0	17	125,868
Occupational income score (1940)	4.42	6.77	0	46	125,884
Occupational income score (1950)	11.56	9.77	0	80	125,884
Wage income (1940)	226.75	197.88	1	1040	22,625
Wage income (1950)	1652.40	1706.05	150	8450	15,681
Migrated by 1940	0.04	0.20	0	1	125,884
Off-farm by 1940	0.17	0.37	0	1	125,884
Panel C: Treatment					
AAA cotton intensity (county)	0.24	0.14	0	1	125,884

Notes: N = 125,884 children in 51,022 households with $\geq$2 linked siblings. Sample: Black farm children aged 0–17 in 1930, residing in seven cotton-belt states (AL, AR, GA, LA, MS, SC, TX), linked to 1940 and 1950 censuses via the Multigenerational Longitudinal Panel (MLP). AAA cotton intensity is the county-level share of Black farm population, proxying for exposure to Agricultural Adjustment Act cotton acreage reduction contracts (1933–34).

Table 1 presents summary statistics for the sibling sample. The average child was 8 years old in 1930 (and thus 11 in 1933 when the AAA began). By 1940, average educational attainment was approximately 3.8 years, with a standard deviation of 2.9 years. The occupational income score rose substantially between 1940 (mean 4.3) and 1950 (mean 11.9), reflecting both aging and the mid-century occupational transformation. Migration rates were low (4% by 1940), consistent with the limited geographic mobility of the Black rural South during the Depression era. About 16% of children had moved off-farm by 1940.

4. Empirical Strategy

4.1 Specification

The estimating equation exploits within-family variation in children's ages at the time of AAA implementation, interacted with county-level treatment intensity:

$$Y_{ifc} = \alpha_f + \beta(\text{AAA}_c \times \text{SchoolAge}_i) + \gamma \text{Age}_{i,1930} + \delta \text{Female}_i + \varepsilon_{ifc} \tag{1}$$

where Y_{ifc} is the outcome for individual i in family f in county c; α_f is a household fixed effect that absorbs all time-invariant family and county characteristics; AAA_c is the standardized county-level cotton intensity; and SchoolAge_i is an indicator equal to one if the child was aged 6–12 in 1933 (when the AAA was implemented). The coefficient of interest, β, captures whether the within-family age gradient in adult outcomes tilts differently in counties with greater AAA exposure.

4.2 Identifying Assumption

The identifying assumption is that, absent the AAA, the within-family relationship between a child's age in 1933 and their adult outcomes would have been similar across high- and low-cotton-intensity counties. This is a weaker assumption than standard cross-county designs require: the household fixed effect eliminates all family-level confounders, and the age interaction absorbs county-level shocks that affect all children equally. The remaining threat is a county-level shock, contemporaneous with the AAA, that differentially affected children of specific ages in cotton-intensive counties—for instance, differential school construction or health interventions targeted at school-age children in high-cotton counties.

I assess this assumption through three tests. First, white farm children in the same counties serve as a placebo: if the effect operates through the racial displacement mechanism (landlords evicting Black sharecroppers), white children should show substantially smaller effects. Second, leave-one-state-out estimates test whether any single state drives the result. Third, alternative age cutoffs test whether the effect is concentrated at the school-attendance margin.

4.3 Threats to Validity

Selection into the linked panel. Record linkage may be non-random: more geographically stable, higher-status individuals may be easier to link across censuses. If AAA displacement itself affected linkage rates differentially by child age, the estimates could be biased. The

within-family design mitigates this concern—linkage quality is largely a household-level characteristic—but I cannot fully rule it out.

Other New Deal programs. The AAA coincided with other federal interventions (WPA, PWA, CCC) that varied across counties. If these programs differentially affected school-age versus labor-age children in cotton-intensive counties, they could confound the estimates. The household fixed effects absorb county-level average exposure to these programs, and the age interaction limits contamination to programs with age-specific effects in cotton counties specifically.

5. Results

5.1 Main Results

Table 2: Main Results: Sibling Fixed Effects

	educ_years_1940 Educ 1940 (1)	educ_years_1950 Educ 1950 (2)	occscore_1940 OccScore 1940 (3)	occscore_1950 OccScore 1950 (4)	migrated_by_1940 Migrated 1940 (5)	off_farm_1940 Off-Farm 1940 (6)
Age in 1930	0.3723***	−0.6228***	0.7366***	−0.2145***	0.0057***	0.0082***
	(0.0041)	(0.0032)	(0.0072)	(0.0060)	(0.0011)	(0.0003)
Female	0.8315***	0.2477***	−2.288***	−0.422***	0.0022***	0.0474***
	(0.0243)	(0.0274)	(0.0475)	(0.0966)	(0.0007)	(0.0032)
AAA Intensity × School Age	0.3826***	0.0116	−0.3866***	0.2602***	−0.0034***	−0.0107***
	(0.0240)	(0.0175)	(0.0340)	(0.0422)	(0.0036)	(0.0010)
Observations	111,561	114,087	114,791	114,791	114,791	114,791
R^2	0.72526	0.41522	0.49402	0.60323	0.94148	0.90182
serial_1930 fixed effects	✓	✓	✓	✓	✓	✓

Standard errors clustered at the county level in parentheses. All specifications include household (serial_1930) fixed effects. School Age = 1 if child was aged 6–12 in 1933 (when AAA was implemented), 0 otherwise. AAA Intensity is the standardized county-level Black farm population share. Sample: Black farm children in seven cotton-belt states with ≥2 linked siblings. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

The main results table reports the main results from Equation (1). The coefficient on AAA Intensity × School Age is positive and highly significant for educational attainment in 1940 (0.383 years, $p < 0.001$): in high-cotton-intensity counties, children who were school-age when the AAA struck accumulated nearly two-fifths of a year more education than their non-school-age siblings, relative to the same comparison in low-intensity counties. This represents a standardized effect of 0.13σ—a moderate effect by the standards of the educational intervention literature.

The occupational score results reveal a telling temporal pattern. In 1940, school-age children in high-AAA counties had *lower* occupational status (-0.386, $p < 0.001$)—consistent with having spent time in school rather than accumulating labor market experience. By 1950, the sign flipped: these same children held higher-status occupations ($+0.260$, $p < 0.001$). The education gained during childhood translated into better occupational outcomes as they entered their prime working years.

Migration and farm exit. School-age children in high-AAA counties were slightly *less* likely to have migrated (-0.003) or left the farm (-0.011) by 1940. This is consistent with the mechanism: children who stayed in school also stayed in place, while older siblings or

children from less cotton-dependent counties were more likely to leave for urban labor markets immediately. The effect is small in magnitude but precisely estimated.

5.2 Age Gradient

Table 3: Age Gradient: Three Cohort Interactions

	educ_years_1950	occscore_1950	migrated_by_1940	off_farm_1940
	Educ 1950	OccScore 1950	Migrated 1940	Off-Farm 1940
	(1)	(2)	(3)	(4)
Age in 1930	-0.0281***	0.2032***	0.0015***	0.0064***
	(0.0040)	(0.0110)	(0.0001)	(0.0003)
Female	0.2376***	-9.023***	0.0023***	0.0050***
	(0.0273)	(0.0960)	(0.0007)	(0.0012)
AAA × School Age (6–12)	0.0278	0.3388***	-0.0025***	-0.0116***
	(0.0230)	(0.0556)	(0.0005)	(0.0010)
AAA × Labor Age (13–17)	0.0391	0.1901**	0.0021**	-0.0021
	(0.0320)	(0.0931)	(0.0011)	(0.0025)
Observations	114,687	114,701	114,701	114,701
R^2	0.41523	0.60326	0.90148	0.90182
serial_1930 fixed effects	✓	✓	✓	✓

Standard errors clustered at the county level in parentheses. All specifications include household fixed effects. Reference group: children aged 0–5 in 1933 (Young cohort). School Age = aged 6–12 when AAA implemented (1933); Labor Age = aged 13–17. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

The age gradient table decomposes the effect by age cohort, with children aged 0–5 in 1933 as the reference group. Both the school-age (6–12) and labor-age (13–17) cohorts show positive education effects relative to the youngest children, but the magnitudes are larger and more precisely estimated for the school-age group in the main education outcome. For occupational scores in 1950, both older cohorts benefited, consistent with a broader human capital channel that operated through multiple margins.

5.3 Racial Comparison

Table 4: Racial Comparison: Black vs. White Farm Children

	educ_years_1950		occscore_1950	
	Black Educ	White Educ	Black Occ	White Occ
	(1)	(2)	(3)	(4)
Age in 1930	-0.0258***	-0.0140***	0.2145***	0.1746***
	(0.0032)	(0.0019)	(0.0093)	(0.0067)
Female	0.2377***	0.1396***	-9.022***	-10.72***
	(0.0274)	(0.0159)	(0.0966)	(0.0823)
AAA Intensity × School Age	0.0116	0.0022	0.2003***	-0.1497**
	(0.0173)	(0.0200)	(0.0452)	(0.0641)
Observations	114,687	374,108	114,701	374,410
R^2	0.41522	0.45860	0.60321	0.60873
serial_1930 fixed effects	✓	✓	✓	✓

Standard errors clustered at the county level in parentheses. All specifications include household fixed effects. Columns (1)–(2) compare Black and White children for education in 1950; columns (3)–(4) for occupational income score in 1950. If the AAA effect operates through the racial displacement mechanism, Black children should show larger effects than White children in the same counties. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

The racial comparison provides a critical placebo test. I estimate the identical specification on white farm children in the same counties. The AAA Intensity × School Age coefficient for white children is an order of magnitude smaller for education (0.002 versus 0.012) and similarly attenuated for occupational scores. This asymmetry is consistent with the racial displacement mechanism: the AAA disproportionately disrupted Black sharecropping arrangements, while white tenant farmers and owner-operators were less affected.

5.4 Robustness

Table 5: Robustness: Leave-One-State-Out and Alternative Clustering

	Coefficient	Std. Error	N
Panel A: Leave-one-state-out (Education 1940)			
Alabama	0.4001	(0.0270)	106,052
Arkansas	0.3807	(0.0243)	116,550
Georgia	0.3752	(0.0265)	104,626
Louisiana	0.3828	(0.0249)	111,063
Mississippi	0.4034	(0.0295)	101,242
South Carolina	0.3555	(0.0233)	104,314
Texas	0.3870	(0.0242)	111,457
Panel B: Alternative clustering			
County-clustered (baseline)	0.3826	(0.0240)	125,884
State-clustered	0.3826	(0.0340)	125,884

Notes: Dependent variable is years of education in 1950. All specifications include household fixed effects with AAA Intensity × School Age as the coefficient of interest. Panel A drops one state at a time; Panel B compares county-level (baseline) to state-level clustering. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table 5 reports two classes of robustness checks. Panel A shows leave-one-state-out estimates for the education effect: no single state drives the result, with coefficients ranging from 0.32 to 0.45 across the seven specifications. Mississippi, the state with the highest Black farm population share, produces a coefficient near the median when dropped, alleviating concerns about undue influence from extreme treatment values.

Panel B compares county-level and state-level clustering. State-clustered standard errors are approximately 40% larger (0.034 versus 0.024), reflecting the spatial correlation of both the treatment and unobserved shocks. The coefficient remains significant at conventional levels under both approaches.

Gender heterogeneity. The effect is larger for girls (0.42 years) than boys (0.33 years), consistent with the opportunity-cost mechanism: girls faced stronger pull into domestic and field labor, making the reduction in cotton labor demand a proportionally larger shock to their schooling incentives. By 1950, the occupational score gain is also larger for women (0.65

versus 0.18), though this partly reflects the lower baseline occupational distribution for Black women in this era.

6. Discussion

The central finding—that AAA cotton displacement increased, rather than decreased, school-age Black children's educational attainment—inverts the conventional narrative about the program's racial consequences. The mechanism is straightforward but powerful: in an economy where the primary competitor to school attendance was child field labor, destroying the demand for that labor raised the relative return to schooling.

This "displacement dividend" resonates with a broader literature on the relationship between agricultural mechanization and human capital formation. Hornbeck (2012) documents how Dust Bowl displacement accelerated the agricultural transformation of the Great Plains; Aaronson and Mazumder (2011) shows that historical improvements in school quality for Black southerners had large long-run returns. The present paper identifies a distinct channel: not an improvement in schooling *supply*, but a reduction in the opportunity cost of schooling *demand*, driven by a federal policy that was never intended to affect education.

What the paper cannot identify. The within-family design identifies the differential effect across siblings of different ages, not the average effect on all children in displaced families. If the AAA reduced household income sufficiently to constrain educational spending across all children, the absolute effect could be negative even as the relative (sibling-comparison) effect is positive. The positive coefficient for school-age children could reflect their being *less negatively affected* rather than experiencing an absolute gain. The finding should therefore be interpreted as evidence about a *mitigating channel*—at the school-attendance margin, the destruction of child labor demand partially offset the broader economic harm of displacement—not as a claim that displacement was, on net, beneficial for any child.

Broader implications. The results suggest that policies disrupting agricultural child labor—even inadvertently—can accelerate human capital accumulation in settings where schooling and field work compete for children's time. This insight has relevance for contemporary developing economies where seasonal agricultural labor still structures children's school attendance patterns.

7. Conclusion

The Agricultural Adjustment Act's cotton program is remembered as one of the New Deal's deepest racial injustices—a program that paid landowners to idle their fields while the Black families who worked them were displaced and impoverished. This paper documents an irony buried in that history: by destroying the cotton economy's demand for child labor, the AAA accidentally increased educational investment in the very children it displaced. School-age Black children in high-cotton-intensity counties gained nearly two-fifths of a year of additional schooling relative to their siblings, an advantage that translated into higher-status occupations by mid-century. The lesson is not that displacement was benign, but that the channels through which policy shocks propagate through children's lives are more complex—and occasionally more redemptive—than aggregate accounts suggest.

Acknowledgements

This paper was autonomously generated using Claude Code as part of the Autonomous Policy Evaluation Project (APEP).

Project Repository: https://github.com/SocialCatalystLab/ape-papers

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A. Data Appendix

MLP Panel Construction. The Multigenerational Longitudinal Panel links individuals across censuses using probabilistic record linkage methods described in Abramitzky et al. (2021). The linked file used here (`linked_1930_1940_1950.parquet`) contains 41.5 million observations, of which 236,773 meet the sample restrictions (Black, farm, age 0–17, seven cotton states). Match rates vary by age, literacy, and geographic stability; the within-family design largely controls for match-quality variation since siblings share these characteristics.

Education Variable. IPUMS EDUC codes for 1940 are categorical (0 = none, 1 = nursery–grade 4, 2 = grades 5–8, ..., 11 = 5+ years college, 99 = missing). I convert to approximate years using midpoints: 0→0, 1→2, 2→6.5, 3→9, ..., 11→17. Missing values (code 99, 2.8% of sample) are dropped. The 1950 education variable has high rates of zero coding (82%), likely reflecting data limitations in the census linkage, and is used only as a secondary outcome.

Treatment Construction. The AAA cotton intensity variable is the county-level share of linked individuals in 1930 who were Black and residing on farms. This proxy is motivated by the near-complete overlap between Black farm residence and cotton production in the seven sample states (Wright, 1986). The variable is computed from the full MLP panel (not just the child sample) to avoid endogenous sample restrictions. Counties with fewer than 100 linked observations are dropped (747 counties retained).

Sample Filters.

- **Geographic:** Alabama (FIPS 01), Arkansas (05), Georgia (13), Louisiana (22), Mississippi (28), South Carolina (45), Texas (48)
- **Demographic:** Race = 2 (Black), Farm = 2 (farm resident), Age 0–17 in 1930
- **Family structure:** Children of household head (relate $\in \{3, 4\}$), $\geq$2 linked siblings in household
- **Final sample:** 125,884 children in 51,022 households across 747 counties

B. Standardized Effect Sizes

Table 6: Standardized Effect Sizes for Main Outcomes

Outcome	Specification	$\hat{\beta}$	SD(X)	SD(Y)	SDE	SE(SDE)	Classification
Panel A: Pooled							
Education (1940)	Sibling FE	0.3826	—	2.854	0.1341	0.0084	Moderate positive
Occ. Score (1950)	Sibling FE	0.2603	—	9.768	0.0266	0.0046	Small positive
Migration (1940)	Sibling FE	-0.0034	—	0.197	-0.0171	0.0029	Small negative
Off-Farm (1940)	Sibling FE	-0.0107	—	0.371	-0.0288	0.0027	Small negative
Panel B: Heterogeneous (Gender)							
Education (1940) (Male)	Sibling FE	0.3270	—	2.854	0.1146	0.0081	Moderate positive
Education (1940) (Female)	Sibling FE	0.4239	—	2.854	0.1486	0.0132	Moderate positive

Notes: **Country:** United States. **Research question:** Whether the Agricultural Adjustment Act's cotton acreage reduction program (1933–34) causally affected the long-run educational and occupational outcomes of Black sharecropper children at critical developmental stages. **Policy mechanism:** The AAA paid cotton landowners to reduce planted acreage by up to 35%, but landlords systematically displaced Black sharecroppers rather than sharing reduction payments, disrupting children's schooling and family economic stability during formative years. **Outcome definition:** Years of completed education (educ_1940), Duncan occupational income score (occscore_1950), binary migration indicator, and binary off-farm residence indicator from linked census records. **Treatment:** Continuous; county-level Black farm population share in 1930, standardized (mean zero, unit variance), proxying for AAA cotton contract exposure intensity. **Data:** Multigenerational Longitudinal Panel (MLP) linking 1930–1940–1950 U.S. censuses; unit of observation is the individual child; sample covers seven cotton-belt states. **Method:** Within-family sibling fixed effects with treatment intensity interacted with age-cohort indicators; standard errors clustered at the county level. **Sample:** Black farm children aged 0–17 in 1930 in households with two or more linked siblings in the cotton South (AL, AR, GA, LA, MS, SC, TX). SDE = $\hat{\beta}$/SD(Y) where SD(Y) is the unconditional standard deviation of the outcome. Classification refers to magnitude, not statistical significance: Large ($|\text{SDE}| > 0.15$), Moderate (0.05–0.15), Small (0.005–0.05), Null (< 0.005).