

# The Economic and Political Effects of Black Outmigration from the US South

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Between 1940 and 1970, the US South lost more than 4 million African Americans, or 40 percent of its 1940 black population. This paper examines how this large reduction in labor supply influenced the mechanization of southern agriculture and the realignment of the southern political landscape.

At the onset of the Great Black Migration, many African Americans in the South were employed in the farm sector, particularly in the production of cotton, a labor intensive crop. The typical rural black worker was either a sharecropper or a wage laborer. In the middle decades of the twentieth century – and coincident with outmigration from the region – the cotton harvest was mechanized, average farm size increased, and the system of sharecropping was gradually abandoned in favor of capital-intensive production techniques (Wright, 1986; Kirby, 1987). Both contemporary and more recent historical accounts have suggested a possible link between black out-migration and this economic transformation (Raper, 1946; Holley, 2000).

In this paper, we formally investigate the relationship between black out-migration and southern economic and political conditions between 1940 and 1970. Our main empirical innovation is to construct an instrument for black outflows at the county level using a “reversed” version of the classic shift-share instrument common to studies of the economics of immigration (Card, 2001; Boustan, 2010).<sup>3</sup> In particular, we measure the share of migrants arriving in each northern county  $n$  before 1940 who originated in each southern county  $s$ , and use these shares to assign the observed flows of migrants to northern county  $n$  back to their likely southern county of origin.

We combine a series of data sources to construct our instrument for black migrant flows. First, using full count census data, we matched African Americans who were living in a southern county in 1920 and had moved to a northern county by 1940.<sup>4</sup> From this matrix, we calculate the share of black residents of northern county  $n$  in 1940 who originated in southern county  $s$ . Second, for each decade between 1940 and 1970, we interacted these shares with net black migration flows to each northern county to assign black migrants to a (predicted) southern location. Third, we predicted the total number

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<sup>3</sup> In the immigration literature, the shift-share instrument predicts the number of migrants to a given area by combining geographic variation in historical settlements of different ethnic groups with time-series variation in national immigration flows (from each sending region).

<sup>4</sup> To match individuals over Census years, we followed Abramitzky, Boustan, and Eriksson (2014). As a robustness check, we also created a similar (1935-1940) migration matrix using data on county of residence five years before, which was asked for the first time in 1940.

of black migrants leaving each southern county by summing the predicted county-to-county flows over all northern destinations. Finally, we convert these black migrant flows into a predicted black population share in the county, assuming no other changes to population. We then stack county data from 1940 to 1970 and estimate the relationship between a series of economic and political outcomes and the black population share, controlling for county and state-by-year fixed effects.

We have three sets of results. First, the outflow of blacks from southern counties favored the mechanization of agriculture. Consistent with higher levels of farm capital, we also document an increase in average farm size and an expansion of land under cultivation: as production became more capital-intensive, the profitability of small scale farms fell, and land-holdings became more concentrated. Despite the fact that black out-migration increased the marginal cost of labor, the introduction of advanced production techniques like mechanical harvesters may have made it profitable to expand the land area under cultivation.

Second, we find that black outflows induced planters to switch away from the production of labor-intensive crops such as cotton. Changes in the crop-mix might have occurred directly, as the marginal cost of labor increased, or indirectly, as new capital investments lowered the (relative) profitability of cotton. Finally, we show that black outmigration reduced the share of blacks working as farm tenants. We suspect that a shift out of farm tenancy reflects a falling demand for tenant farming, as white planters chose to farm their own land instead, relying on hired labor rather than renting out small plots to tenants and sharecroppers.

Taken together, black outmigration and the subsequent investment in capital-intensive agriculture appears to have increased productivity in the farm sector, as reflected by higher value per acre of farmed land. Productivity likely increased both on the extensive margin (i.e. less productive farms exiting the market) and the intensive margin (i.e. increased productivity of remaining farms).

Our study complements the large literature examining how the Great Black Migration affected receiving areas, and how migrants fared at their destinations (Boustan, 2010, 2017; Black et al., 2016; Shertzer and Walsh, 2016). Our results are also consistent with Hornbeck and Naidu (2014), who document that the black outmigration induced by the 1927 Mississippi flood had long-lasting effects on agricultural development and mechanization in counties along the Mississippi River. We expand on their paper by studying persistent out-migration over three decades, which affected (to different degrees) all southern states.

More generally, our findings contribute to two areas in the economics of immigration. First, we add to our understanding of how firms endogenously respond to immigrant inflows through product mix and capital investment (Lewis, 2011; Clemens, Lewis, and Postel, 2017). Second, we expand on a nascent literature investigating the effect of mass migration on sending regions. Anderson, Karadja, and Prawitz (2017) and Karadja and Prawitz (2016) show that mass migration from Sweden to the US during the nineteenth century increased innovation and fostered demand for political change, leading local governments to adopt more inclusive political institutions and to increase welfare expenditures.

Looking forward, we plan to extend our current analysis to study the effect of black out-migration on southern politics. Margo (1991) argues that out-migration strengthened the political clout of remaining black residents by increasing the threat of further departures. We will measure the political effects of outmigration in two ways: first, by looking at how the Great Migration affected county-level vote shares and turnout in Presidential elections; and second, by investigating if the outflow of African Americans resulted in more (or less) unequal spending on education between white and black schools. We also plan to extend the economic analysis by investigating the mechanisms behind our existing results, and by studying to what extent increased mechanization and changes in the crop-mix altered the income distribution.

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**Table 1. First Stage: Actual and Predicted Share of Blacks (1940-1970)**

	Dep. Variable: <i>Share of Blacks over County Population</i>					
	(1)	(2)	(3)	(4)	(5)	(6)
	<u>Panel A: IV constructed with 1920-1940 migration matrix</u>					
Pred. Share Black	0.269*** (0.028)	0.264*** (0.029)	0.324*** (0.051)	0.220*** (0.037)	0.365*** (0.049)	0.270*** (0.029)
Observations	3,165	3,165	3,165	1,602	1,584	3,165
	<u>Panel B: IV constructed with 1935-1940 migration matrix</u>					
Pred. Share Black	0.186*** (0.016)	0.136*** (0.017)	0.112*** (0.028)	0.098*** (0.023)	0.188*** (0.022)	0.130*** (0.017)
Observations	3,239	3,239	3,239	1,626	1,613	3,239
State by Year FE Weighted		X		X		
High Rural				X		
Low Rural					X	
Year by 1940 Fr. Movers						X

Note: this table presents results for panel regressions where data from each of the three decades (1940-1950; 1950-1960; and 1960-1970) are stacked. The sample includes all southern counties with at least 200 black residents, with strictly positive rural share in 1940, and for which the 1920-1940 (Panel A) and 1935-1940 (Panel B) migration matrix could be constructed. The dependent variable is the share of blacks at the end of the decade, and the regressor of interest is the predicted share of blacks described in the text. Col 3 weighs by 1940 black population, Col 4 (resp. Col 5) restricts the sample to counties with 1940 rural share above (resp. below) the median (0.852), and Col 6 includes interactions between year dummies and the 1940 fraction of movers (to any northern destination). All regressions control for county and state by year fixed effects, except for Col 1, which only includes county and year fixed effects. Standard errors, clustered at the county level, in parentheses. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

**Table 2. Economic Outcomes**

Dep. Var:	Share of cultivated land (1)	Share of land cultivated in cotton (2)	Log average farm size (3)	Log value per cultivated acre (4)	Share black tenants (5)	Log farm capital (6)
<i>Panel A: OLS</i>						
Share blacks	-0.019 (0.033)	0.208*** (0.048)	-1.167*** (0.201)	-0.648*** (0.178)	0.199*** (0.034)	0.765*** (0.195)
<i>Panel B: 2SLS (20-40 matrix)</i>						
Share blacks	-0.630*** (0.128)	0.838*** (0.185)	-5.777*** (0.765)	-3.097*** (0.590)	1.216*** (0.160)	-1.408** (0.579)
F-stat	79.29	79.40	79.29	79.29	79.29	78.87
Observations	3,161	3,160	3,161	3,161	3,161	1,045
<i>Panel C: 2SLS (35-40 matrix)</i>						
Share blacks	-0.590*** (0.204)	1.403*** (0.303)	-7.544*** (1.157)	-2.325*** (0.872)	1.500*** (0.228)	-0.281 (0.694)
F-stat	59.86	59.81	59.86	59.86	59.86	73.45
Observations	3,238	3,238	3,243	3,243	3,238	1,067

Note: this table presents results for panel regressions where data from each of the three decades (1940-1950; 1950-1960; and 1960-1970) are stacked in Cols 1 to 5. Due to data limitation, Col 6 reports results from a long difference (1940-1970) specification. The sample includes all southern counties with at least 200 black residents, with strictly positive rural share in 1940, and for which the 1920-1940 (Panels A and B) and 1935-1940 (Panel C) migration matrix could be constructed. The dependent variable is reported at the top of each column. The regressor of interest is the share of blacks at the end of the decade, and it is instrumented with the predicted share of blacks described in the text. To interpret these results, the 1940 to 1970 change in the share of blacks was -0.05 (resp. -0.03) for the average (resp. median) county. All regressions control for county and state by year fixed effects. Standard errors, clustered at the county level, in parentheses. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.