

The Defender on the Move: Black Newspapers and the Great Migration

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Abstract

The First Great Migration (1915–1940) marked a turning point in American history: after 50 years of limited migration following emancipation, 1.5 million Black southerners made the journey north. During the same period, Black political organization in the South surged and racial violence fell. I estimate the causal effect of northern information on Black migration, political organization, and lynching. I first show that information about northern conditions was limited until the entry of the Chicago Defender, the most prominent northern Black newspaper, in the mid-1910s. To reach the South, the Chicago Defender partnered with Black railway porters working for the Illinois Central railroad. In cities along the railroad, I find that individuals who lived near a porter selling the Chicago Defender were 33% more likely to migrate north than similar individuals who did not. Black southerners with access to information pulled relatives to migrate, consistent with information diffusion across social networks, and moved to cities with more coverage in articles and job ads. Counties with access to the Chicago Defender were 1.5 times more likely to form an NAACP branch and experienced half as many lynchings.

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“They weren’t just selling a newspaper. They were informing the people of a better world.”

– Timuel Black

Civil Rights Activist and Migrant from Alabama¹

1 Introduction

In 1910, nearly 90% of the U.S. Black population lived in the “Jim Crow” South, about the same as in 1860. Yet, Black southerners received half as much schooling and annual income as did Black northerners and had a 20% higher death rate (Smith, 1986; Krieger et al., 2014). Migration north was limited by many factors. But from 1915 to 1940, 1.5 million Black southerners migrated north. During the same period, Black political organization in the South surged and racial violence fell. What facilitated the First Great Migration and growth of southern activism? I investigate the role of information conveyed by a unique group of messengers: a northern Black newspaper distributed by Black railway porters of the Illinois Central railroad.

I start by showing that prior to 1910, reliable information about conditions in the North was hard to obtain. In 1910, just 2% of Black southerners had a former household member living in the North. Southern employers, many dependent on Black labour, exaggerated the hardships Black southerners would experience in the North. Fines and arrests deterred northern employers from recruiting southern workers (Grossman, 2011).

To better understand the limited information environment of the Jim Crow South, I classify the coverage of thousands of southern newspapers by topic using large-language models. I find that only 2% of articles in White newspapers mentioned the Black community. Black newspapers in the South were cautious of racial boundaries and only 3% of articles covered the North positively.

Next, I show that the entry of the Chicago Defender, the most prominent northern Black newspaper, in the mid-1910s increased the information available to Black southerners.

¹(Michaeli, 2016).

Operating from the relative safety of the North, the Chicago Defender documented lynchings and discrimination in the South, and outlined the means to escape. I find that 34% of articles highlighted the advantages of the North, with full pages on Chicago news, entertainment, sports, and ads for jobs and housing. Copies were shared and communally read allowing hundreds of thousands of Black southerners to have access (Ottley, 1955).

I show that access to the Chicago Defender was quasi-random and use the resulting variation to estimate the causal effect of northern information on Black migration, political organization, and lynching. To reach southern readers and evade suppression, the Chicago Defender partnered with Black railway porters working for the Illinois Central railroad, which connected Chicago to the Deep South. Illinois Central porters lived in southern cities and went back and forth to Chicago. To supplement their wage, they purchased copies from the Chicago Defender to sell along the route and to friends and neighbours in their home cities.

In cities along the Illinois Central railroad, where porters sold the Chicago Defender, I estimate the relationship between residential proximity to a porter in 1910 and northern migration by 1920. The identifying assumption is that living near a porter was as good as random. To test it, I generate a predicted likelihood of migration for each individual based on Census characteristics. I find that the predicted measure is uncorrelated with individuals' proximity to a porter. As additional tests, I consider individuals with similar characteristics to Illinois Central porters. I find no effect of living near a placebo porter on migration.

My results reveal that access to information was a major determinant of who migrated north. Individuals who lived near a porter selling the Chicago Defender in 1910 were 3 percentage points or 33% more likely to migrate north by 1920 than similar individuals who did not. While sizable, direct estimates provide a lower-bound to the true effect of northern information as information diffused across social networks.

To trace how information diffused, I look at individuals who moved to an Illinois Central city from a rural county. Consistent with spillovers across family ties, I find that movers' proximity to a porter selling the Chicago Defender influenced rural relatives' likelihood of

migrating. Relatives of individuals who moved near a porter were more likely to migrate north than the relatives of individuals who moved far from a porter. The spillover effect was one-third the size of the direct effect.

Heterogeneous effects indicate that individuals who lived near a porter selling the Chicago Defender were more likely to migrate to Chicago than to the other nine largest northern cities combined. To test whether the Chicago Defender's coverage guided migrants to specific destinations, I identify mentions of northern cities in articles, classified ads for jobs and housing, and product ads. I find that individuals who lived near a porter were more likely to migrate to cities that received more coverage in articles and classified ads than individuals who did not, implying that both news coverage and mentions of economic opportunity were important determinants of where individuals migrated to. Letters from Chicago Defender readers corroborate the role of persuasion and economic channels.

I complement within-city estimates with a difference-in-differences approach to measure the aggregate effect of northern information on the South. Some readers who bought copies from a porter later subscribed to the Chicago Defender and received copies by mail. I digitize a shipping manifest listing Chicago Defender mail subscribers in 1918, and compare outcomes for counties with subscribers to counties without subscribers. The identifying assumption is that outcomes for counties with or without subscribers would have evolved in parallel in the absence of the Chicago Defender, which I test by comparing their outcomes in the pre-Chicago Defender period.

I find that the Chicago Defender's entry caused a 2.8 percentage point or 15% decline in counties' Black population share by 1940, presumably through out-migration. The Chicago Defender likely caused more than 172,000 Black southerners to migrate north by 1940, roughly 12% of the First Great Migration. Its influence extended beyond the initial migrants, who established pathways enabling 4 million migrants to follow in the Second Great Migration from 1940 to 1970. Accounting for chain migration effects, I estimate that the Chicago Defender caused over 327,000 individuals to migrate north.

Finally, I find that northern information facilitated the southern growth of the National Association for the Advancement of Colored People (NAACP), the oldest civil rights organization in the U.S., and a decline in lynchings. Counties with access to the Chicago Defender were 17 percentage points or 1.5 times more likely to form an NAACP branch and experienced 0.05 fewer lynchings per three-year interval, a 55% decline. The Chicago Defender likely caused 105 additional NAACP branches to open by 1964 and prevented 216 lynchings by 1930.

My results provide new evidence on the causes of the Great Migration. Existing studies examine its consequences for northern cities, causing White flight to suburbia, the rise of the urban ghetto, and reducing economic mobility for Black families today (Boustan, 2010; Cutler et al., 1999; Derenoncourt, 2022). They focus on the second wave around 1940 and rely on migration flows established by past migrants. My paper is possibly the first to look at individual-level drivers of the Great Migration and the decisions of the first wave of migrants. Push and pull factors such as World War I, the Boll Weevil cotton infestation, and lynchings, as important as they seem to us today, would still have required information to increase Black migration (Shertzer and Walsh, 2019; Tolnay and Beck, 1990).

I contribute to research on the growth of the NAACP and decline of southern lynchings. Existing studies highlight the role of school construction, civil war leaders, and Black radio in post-1940 NAACP branch growth (Aaronson et al., 2024; Dippel and Heblich, 2021; Wang, 2022). My results help explain the mechanisms behind the NAACP's initial growth. Ang and Chinoy (2024) similarly show that Black soldiers were important for NAACP membership growth post-World War I. I do not find evidence of violent backlash or inflammatory effects of media seen in other studies of the South after emancipation (Logan, 2023; Testa and Williams, 2025; Ang, 2023). Feigenbaum et al. (2020) observe a comparable reduction in lynchings in counties exposed to the Boll Weevil infestation.

I additionally contribute to a large literature on the effects of the media and a smaller literature on media covering minority or repressed groups. Studies of Spanish television in

the U.S and Western television in East Germany find increased voter turnout and shifts in individuals' beliefs and consumption patterns (Oberholzer-Gee and Waldfogel, 2009; Hennighausen, 2015; Bursztyn and Cantoni, 2016).²

To my knowledge, only two studies examine the effect of media on migration. Braga (2007) shows that Italian radio led Albanian workers to temporarily migrate to Italy and Greece. Farré and Fasani (2013) find that television reduced internal migration in Indonesia, where individuals previously overestimated its returns. By tracing out the diffusion of information across social networks, I build on studies showing how networks influence migration, and how information can facilitate moves to opportunity (Green, 2024; Koenen and Johnston, 2024; Spitzer and Zimran, 2023; Bergman et al., 2024).

The remainder of the paper is as follows. Section 2 provides historical context on the Jim Crow South and the Chicago Defender's entry. Section 3 describes my data. Section 4 describes my within-city estimation strategy and results. Section 5 describes my difference-in-differences approach and results. Section 6 concludes.

2 Historical Background

I provide background on the Jim Crow South and the Chicago Defender's southern distribution strategy. To document the Chicago Defender's effect on information in the South, I classify the topics covered in thousands of southern newspapers and the Chicago Defender.

2.1 The Jim Crow South

The 1877 removal of federal troops from the South led to a gradual erosion of Black economic and political freedom under "Jim Crow" regimes (Woodward, 2001). In Louisiana, for instance, Black voter registration fell from 130,334 individuals in 1896 to 5,320 in 1900 (U.S. Commission on Civil Rights, 1968). Letters collected by Emmett Scott, Special Assistant

²See DellaVigna and La Ferrara (2015) for a summary of research on the economic and social impacts of the media.

to the Secretary of War, highlight the oppressiveness of Jim Crow. A letter from Palestine, Texas in 1917 noted that “our southern white people are so cruel we collord people are almost afraid to walke the streets after night” (Scott, 1919a).

Migration under Jim Crow was costly and dangerous. Letters noted an inability to afford train fare (Scott, 1919b). A southern economy dependent on Black labour imposed additional barriers. Anti-enticement, vagrancy, and emigrant-agent laws limited job switching, criminalized unemployment, and restricted northern labour agents from recruiting southern workers (Naidu, 2010).³ Officials closed ticket offices and arrested Black individuals at train stations (Wilkerson, 2020). Lynchings targeted political activists, labour organizers, and individuals who challenged the social hierarchy (PBS, 2017).

For many, it was unclear whether the promise of northern jobs was real. A letter from Miami, Florida noted “It was a rumour about the great work going on in the north. But at the present time [...] people saying that all we have been hearing was false.” (Scott, 1919b). White employers misrepresented northern conditions, spreading rumours of Black families freezing to death in northern winters (Scott, 1920). Unlike other historical migrations, no humanitarian organization filled the information gap.⁴

White oppression limited Black movement to a freer North for nearly 50 years after the end of slavery. Most movement was lateral to states such as Texas and Oklahoma. The First Great Migration from 1915 to 1940 marked a turning point, as 1.5 million Black southerners migrated north. The share of the Black population living in the South fell from 89% in 1910 to 77% in 1940 (Figure A.1). Chicago was the largest recipient of migrants. Its Black population increased fivefold from 1910 to 1930 (Figure A.2). Four million followed in the

³For instance, the Macon, Georgia city council required agents to pay a \$25,000 license fee, be recommended by 10 local ministers, 10 manufacturers and 25 businessmen. In Montgomery, Alabama agents were sentenced to 6 months of hard labour (Scott, 1920). Extreme restrictions reflected the perceived threat of labour agents, but in reality, their prevalence appears to have been greatly exaggerated by White officials (Leavell, 1919). Scams involving agents were common: the Savannah Morning News reported that “hundreds of negroes in this section recently have been fleeced by white men posing as agents of large employment bureaus and industrial companies in the eastern States” (Scott, 1920).

⁴For instance, HIAS, the world’s oldest refugee agency, assisted the 1880s migration of Jews from Eastern Europe to the U.S. (HIAS, 2025).

Second Great Migration from 1940 to 1970, moving to neighbourhoods where individuals from their community previously migrated (Stuart and Taylor, 2021).

The First Great Migration coincided with a surge of southern political organization—the NAACP opened 222 southern branches from 1915 to 1940—and a decline in lynchings (Figure A.3). By 1940, 41% of NAACP members were from the South despite the personal risk and cost of joining.⁵ I examine whether the expansion of information on southern conditions and northern life through the Chicago Defender’s entry can explain the increase in migration and political organization, and decrease in lynchings.

2.2 The Chicago Defender’s Southern Diffusion

The Chicago Defender was founded in 1905 by Robert S. Abbott, a migrant from Georgia, as the “defender of his race” (Michaeli, 2016). Unlike White newspapers, which earned two-thirds of their revenue from advertisements, Black newspapers depended on individual subscriptions and newsstand sales, and were often short-lived (Michaeli, 2016). The Chicago Defender’s mid-1910s entry in the South helped it achieve financial stability and maximize impact by reaching a large southern Black community without access to reliable information.

To evade White suppression, the Chicago Defender partnered with Pullman railway porters working for the Illinois Central railroad, which connected Chicago to the Deep South (Figure A.4).⁶ The Pullman Company employed Black porters to carry baggage, shine shoes, set up beds, and serve food on sleeping railcars across the country. Porters were predominantly hired from the South, as Pullman general manager L.C. Hungerford believed “the old southern colored man makes the best porter on the car” (Tye, 2004).

While widely respected in the Black community, porters received low pay and worked long hours. A 1915 Commission on Industrial Relations reported that “the standard salary

⁵Membership fees were \$1 per year (Ang and Chinoy, 2024). Southern members were frequently the target of violence and harassment. For instance, branch members in Anderson, South Carolina were forced to flee after the local White newspaper blamed the NAACP for “the increasing insolence of many Negroes in the city” (Ang and Chinoy, 2024).

⁶For instance, Mississippi passed a law making it a misdemeanor to sell publications advocating “equality or marriage between the white and the Negro race” (Michaeli, 2016).

of porters (\$27.50 per month) is such that the porters are obliged to secure tips from the public in order to live” (Walsh et al., 1915). Porters were allowed four hours of sleep per night on trips and subject to arbitrary salary deductions (Walsh et al., 1915).

To supplement their wage, Illinois Central porters purchased copies from the Chicago Defender at bulk rates and sold them along the route and to individuals in their home cities (Waters, 1987). Like the Chicago Defender, porters’ motives were both financial and ideological.⁷ Founder Robert Abbott noted that “a railroad porter of Chicago feels proud of a paper that does big things, and he shows it to a friend or an acquaintance” (Grossman, 1985). One article remarked that “Porters and waiters among most active in extending its circulation – they circle the globe and the paper goes with them” (Figure A.5).

By expanding south the Chicago Defender sold more issues than its competitors—the Pittsburgh Courier, Baltimore Afro-American, and Norfolk Journal and Guide—combined (Figure A.6).⁸ Circulation grew from 33,000 in 1916 to 125,000 in 1918, suggesting a large increase in access to the Chicago Defender in 1918. True readership was higher as the Chicago Defender encouraged readers to share copies with their neighbours (Figure A.7). Copies were often read communally in Black churches and barbershops (Grossman, 1985).

2.3 Coverage of the Chicago Defender and Southern Newspapers

Newspapers were an important source of information for Black southerners. To better understand the limited information environment of the Jim Crow South and the unique role of the Chicago Defender, I classify the coverage of thousands of southern White and Black newspapers and Chicago Defender issues from 1910 to 1919 by topic using large-language models. Southern newspapers are from the Library of Congress’ Chronicling America col-

⁷In 1910, the Chicago Defender launched a weekly column “Sparks from the Rail” written by a porter. Some porters received press badges from the Chicago Defender for relaying news from their journeys back to the newspaper (Waters, 1987).

⁸Despite being a weekly newspaper, the Chicago Defender’s circulation was comparable to prominent White daily newspapers including the Los Angeles Times, San Francisco Chronicle, and Pittsburgh Gazette Times.

lection. Chicago Defender issues are from ProQuest.⁹

White newspapers were the most prevalent source of news but largely ignored the Black community. In Figure A.8, I find that only 2% of articles or ads mentioned Black individuals. Black coverage in White newspapers was typically negative in tone, targeting White readers. Nearly 60% were about crime or death. A Black porter noted “we pay no attention to what the southern white papers report” (Leavell, 1919).

Before the Chicago Defender reached the South, Black southerners relied on small and financially precarious Black newspapers. I find that both the Chicago Defender and southern Black newspapers focused almost exclusively on the Black community. However, the Chicago Defender offered more news—the median issue was 16 pages compared to 4 in southern newspapers—and different types of information.

Figure A.9 breaks down the geographic coverage of southern Black newspapers and the Chicago Defender. I find that southern Black newspapers rarely covered news outside of their state. Nearly 66% of articles covered local news, compared to 4% on other southern news, and 6% on northern news. Ads focused on local jobs and products. The Chicago Defender exposed southern readers to news beyond their local community. Nearly 47% of articles covered Chicago, 33% covered news from the rest of the North, and 14% covered news from the South. Job and housing ads were primarily in Chicago but 24% were in other northern cities. Southern jobs made up 5%. Ads mostly promoted Chicago-based products.

In Figure 1, I contrast the share of articles by topic in southern Black newspapers and the Chicago Defender. Southern Black newspapers were cautious of racial boundaries. Only 1% of articles included direct criticism of the southern White community, 6% covered lynchings, discrimination, and other forms of oppression, and 3% covered the North positively. Caution was understandable given the risk of operating in the South. For instance, a mob attack following a Memphis Free Speech article that denounced lynching forced NAACP founder

⁹I examine 3,448 and X southern White and Black newspaper issues, and Z Chicago Defender issues from 1910 to 1919. I classify articles and ads in my sample of Black newspapers using Claude’s Sonnet 4 model. For White newspapers, I classify a 1% sample of articles and ads. See Appendix B.1 for more details on newspaper digitization and classification.

Ida B. Wells to flee the South (Simmons, 1933).

Operating from the relative safety of the North, the Chicago Defender was able to more freely criticize southern conditions and highlight oppression. I find that 4% of articles covered the South negatively and 10% covered lynchings, discrimination, and other forms of oppression. Nearly 34% of articles highlighted the benefits of northern life, with full pages on Chicago news, entertainment, sports, jobs, and housing. Articles on the NAACP and Urban League, which helped Black northerners find employment, housing and legal support, highlighted the resources available in the North.

Southern Black newspapers often highlighted risks associated with migrating. For the Chicago Defender, northern migration accomplished founder Robert Abbott's goals of helping Black southerners, strengthening northern Black economic and political life, and increasing the Chicago Defender's circulation (Spear, 1967).

Letters from Chicago Defender readers in the South offer unique insight into the ways the newspaper inspired northern migration. In Figure A.10, I classify the coverage of 148 letters sent to the Chicago Defender and Chicago Urban League between 1916 and 1918 collected by Emmett Scott (Scott, 1919a,b).

Roughly 80% of letters reference job and housing ads in the Chicago Defender. A letter from Patterson, Louisiana noted "I saw your ad in the Defender for Laborers I am anxious to get north to do something." Around 5% of letters reference the Great Northern Drive, a mass migration event organized by the Chicago Defender scheduled for May 15, 1917 and promoted in the preceding months. A letter from New Orleans, Louisiana noted that "nearly the whole of the south is getting ready for the drive." Another 12% mention the Chicago Defender's descriptions of Chicago. A reader from Mobile, Alabama noted that it is a "help to a lot of the people of our race it shows us the difference between north and south."

Coverage of southern oppression and northern life and jobs pushed and pulled Black southerners north. Many migrants chalked poems from the Chicago Defender on the sides of northbound trains as they crossed the Mason-Dixon line (Bontemps and Conroy, 1966).

3 Data

To measure the effect of information on southern conditions and northern life on Black migration north and southern activism, I use data on individual- and county-level migration, and county-level data on political organization and lynching. I combine them with newly digitized records of Chicago Defender mail subscribers.

3.1 Data on Migration, Political Organization, and Lynching

I measure individual-level migration decisions around the Chicago Defender's entry in the South by linking individuals across the 1910 and 1920 Censuses. I use crosswalks from the Census Tree database, which combines user-reported links from the FamilySearch platform with machine learning and algorithmic methods (Price et al., 2021; Buckles et al., 2023).¹⁰ Census Tree links 39% of southern Black individuals in 1910 to the 1920 Census, a much higher rate than alternate linking approaches with similar accuracy (Figure A.11).¹¹ Between 1910 and 1920, 11% of Black southerners changed states and 4% migrated north. Migration was higher in cities: 17% changed states and 9% moved north.¹²

To measure the effect of northern information on Black migration north, I focus on individuals living in cities along the Illinois Central railroad where porters sold the Chicago Defender. The Illinois Central railroad stretched south from Chicago to New Orleans and southeast to Savannah passing through much of the Deep South (Figure A.4). I code cities in the 1910 Census as being along the Illinois Central if they were within 150 kilometres (90 miles) from the nearest track, using shapefiles from Atack (2015).

¹⁰See Buckles et al. (2023) for details on the linking procedure, comparison to past approaches, and representativeness.

¹¹I follow the Census definition of the South region, which includes Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, and West Virginia. I code all other states as the North.

¹²Machine learning and probabilistic linking methods tend to underestimate migration, as people who remained in the same location have more information to establish links than people who moved. Census Tree's machine learning algorithm allows the geographic distance between townships to confirm but not reject potential matches. Price et al. (2021) find no evidence that including residence introduces selection bias on other observable dimensions.

I identify 35 Illinois Central cities. Figure A.12a maps Illinois Central cities and other southern cities, where porters could not have sold the Chicago Defender and were unlikely to have sold newspapers of other northern cities. Figure A.12b shows that Illinois Central cities were similar to other southern cities in terms of 1910 Black population, Census linking rate, railway porters per capita, and proximity to a major north-south railroad.¹³ Porters in other southern cities had ties to northern destinations like New York, Philadelphia, and Los Angeles (Figure A.14). Residents of Illinois Central cities gained unique access to the Chicago Defender through its distribution by Illinois Central railway porters.

Within Illinois Central cities, I measure individuals' exposure to northern information through their residential proximity to an Illinois Central railway porter. I calculate the difference in Census enumeration order between individual i 's household and the household of the nearest porter.¹⁴ Until 1960, Census enumerators went door-to-door along a street, visiting houses in the order in which they were physically situated (Logan and Parman, 2017).¹⁵ While a one-dimensional measure omitting neighbours living behind or across the street, enumeration distance correlates strongly with distance in metres and allows for a much larger sample size due to geocoding rates under 50% (Figure A.15).¹⁶

Across counties, I examine migration from 1890 to 1940 using decennial population data by race from the US Census and County Data Books (Haines, 2010).¹⁷ I calculate the Black population share in each southern county by decade and use changes in the share as a proxy

¹³Competitor north-south railroads included Southern Railway, Southern Pacific Railroad, Atlantic Coast Line, Seaboard Air Line, and Pennsylvania Railroad. Figure A.13 shows that the Illinois Central and competitor railroads had similar ridership per mile of track.

¹⁴I identify railway porters by their Census occupation and industry code. Illinois Central cities had 40 porters on average, representing 0.3% of the Black population. The Census does not specify individual employers so I am unable to distinguish Illinois Central porters from porters working on other railroads in Illinois Central cities. I interpret estimates of proximity to a railway porter as a lower bound to the effect of proximity to an Illinois Central railway porter.

¹⁵Unlike northern cities where Black neighbourhoods were densely populated, Black individuals in southern cities were more likely to live in peripheral single-family homes (Flowerdew, 1979).

¹⁶I geocode processed addresses from Logan et al. (2024) for southern cities with a total population exceeding 30,000 and a Black population of at least 1,000. I am able to geocode around 50% of addresses. Geocoding rates are likely to be much lower in small cities. I thank Dan Hartley for sharing their address locator file.

¹⁷To create consistent county boundaries over time, I assign counties to 2010 boundaries using crosswalks from Eckert et al. (2018).

for out-migration. To measure southern political organization, I use data on the opening year and location of NAACP branches from 1913 to 1964 compiled by the Mapping American Social Movements project (Gregory, 2006). I look at whether a county had a NAACP branch in a given year. Finally, I examine data compiled by Project HAL on the timing and location of southern lynchings from 1882 to 1930 (Hines and Steelwater, 2012).

3.2 Measuring Chicago Defender Diffusion

Some readers who bought copies from porters later subscribed to the Chicago Defender and received copies by mail. To document the Chicago Defender’s diffusion, I digitize a 96-page shipping manifest listing the names and addresses of mail subscribers in 1918. Figure A.16 shows an excerpt of the manifest, obtained by the Military Intelligence Division during an investigation into the Chicago Defender, part of a postwar effort to monitor Black leaders and organizations (Kornweibel Jr., 1986). The manifest’s circulation was 53,004 or 42% of the Chicago Defender’s reported circulation in 1918.¹⁸ Nearly a third was in the South.

Across counties, I use the presence of a mail subscriber as an indicator of the Chicago Defender’s diffusion in 1918. Counties with subscribers should have had greater exposure to the Chicago Defender than counties without subscribers. Communal reading in Black churches and barbershops, coupled with the outsize influence of news readers on information provision in social networks suggest that even a few subscribers could have shaped the information available within a county (Ottley, 1955; Carlson, 2019). Figure A.17 maps the circulation of mail subscribers across southern counties, showing considerable heterogeneity in access to the Chicago Defender.

While the manifest provides a snapshot of diffusion in 1918, the Chicago Defender likely reached some counties earlier. Circulation grew rapidly from 33,000 in early 1916 to 125,000 in 1918, suggesting that southern readership was limited prior to 1918 (Figure A.6). I test

¹⁸Grossman (1985) estimates Chicago Defender circulation in 1918 to be 125,000. N. W. Ayer & Son’s American Newspaper Annual and Directory, which admitted Black newspapers in 1919, reports its 1919 circulation at 120,000. Newspaper directories were read by advertisers, which incentivized publishers to inflate circulation numbers in their statements (Hefner and Timke, 2020).

for pre-trends caused by earlier access using an event-study design described in Section 5.1.

To provide evidence of individual readership, I link mail subscribers to the 1910 Census. I search for Census records of Black adults living in the same county as a subscriber with similar name and address.¹⁹ I am able to link 2,450 or 69% of southern Chicago Defender mail subscribers to the 1910 Census. Because some subscribers bought multiple copies, the number of subscribers was less than the total circulation in the manifest. Subscription was costly: an annual subscription in 1919 cost \$2 compared to incomes around \$690.

Table A.1 describes southern Chicago Defender subscribers in the 1910 Census. Subscribers were positively selected across a range of socioeconomic attributes. They were more likely to be in the labour force, literate, own a home, and work in higher-income occupations than the average southern Black adult.²⁰ They were predominately male and more likely to be married. Subscribers look similar to self-identified southern Chicago Defender readers in letters collected by Emmett Scott between 1916 and 1918.

4 Within-City Effects on Northern Migration

My first set of results uses within-city variation in exposure to the Chicago Defender to estimate the causal effect of information on southern conditions and northern life on Black migration north. I describe the empirical strategy and main findings. Then, I examine spillovers across social networks, heterogeneous effects, mechanisms, and the returns to migration.

¹⁹As individuals may have moved between the 1910 Census and 1918 shipping manifest, I follow the same procedure to link subscribers for which no 1910 Census record meets the linking criteria to the 1920 Census. I link subscribers found in the 1920 Census back to the 1910 Census using Census Tree crosswalks. See Appendix B.2 for further details on the linking procedure.

²⁰I use LIDO scores as a proxy for income, which was not recorded in a U.S. Census until 1940. LIDO predicts income using occupation, industry, and demographic characteristics (Saavedra and Twinam, 2020). Results look similar using the IPUMS occupational score measure.

4.1 Empirical Strategy

In cities along the Illinois Central railroad where porters sold the Chicago Defender, I use quasi-random variation in individuals' residential proximity to a porter to measure the direct effect of northern information on migration north. I compare the migration decisions of individuals who lived near, and probably knew, a porter with similar individuals who lived far from a porter. The treatment was a combination of access to the Chicago Defender and contact with a porter with northern ties, who could help interpret the newspaper's coverage and guide the journey north. I estimate the relationship between proximity to a porter in 1910 and northern migration by 1920:

$$Migrate_i = \lambda_c + \gamma DistPorter_i + \epsilon_i \quad (1)$$

where $Migrate_i$ is an indicator for whether individual i migrated north between 1910 and 1920, after the Chicago Defender reached the South in the mid-1910s. The key predictor, $DistPorter_i$, represents individual i 's log number of households from an Illinois Central railway porter in 1910. Its coefficient, γ , captures the effect of living one log household closer to a porter on the probability of migrating north.²¹ City fixed effects control for city-specific migration shocks. I cluster standard errors at the city-level, which is the level of treatment.

Figure 2 illustrates the variation by mapping Illinois Central railway porters in Memphis, Tennessee. Porters appear to be spread across the city's Black population, not clustered next to other porters or the city's railway station. However, porters were a widely respected occupation and despite being underpaid relative to White railroad workers, their occupational income was in the 95th percentile of southern Black adults. It is possible that individuals who lived near porters were a selected group, for instance, if porters lived in wealthier neigh-

²¹I use log proximity rather than a linear-in-levels specification to account for information diffusion decaying log-linearly with distance (Figueiredo et al., 2015). A similar rationale underlies the use of log distance in gravity and commuting models (Ahlfeldt et al., 2015; Head and Mayer, 2014). Results are similar using levels for individuals who lived within 350 households from a porter.

bourhoods. Selection would be a concern if wealthier individuals were more likely to migrate north in the absence of northern information.

To interpret γ as the causal effect of northern information, proximity to an Illinois Central porter should have been as good as random with respect to an individual's likelihood of migrating north. To test whether it was, I generate predicted likelihoods of migration for each individual based on 1910 Census characteristics and regress the predicted likelihoods on proximity to a porter. I include the following characteristics: school attendance, home ownership, gender, year of birth, marital status, literacy, labour force participation, occupation, and city fixed effects.

Table A.2 shows the coefficients of the model used to predict migration. Individuals who were in school, young, male, unmarried, literate, and not in the labour force were significantly more likely to migrate north. Figure A.18 plots the relationship between predicted likelihoods and observed migration decisions, and shows that on average predicted likelihoods are strongly correlated with observed migration. A strong correlation implies that the predicted measure approximates migration likelihoods in the absence of northern information.

4.2 Results

I begin by testing the assumption that proximity to a porter was as good as random. I estimate the relationship between proximity to a porter in cities along the Illinois Central railroad, where porters sold the Chicago Defender starting in the mid-1910s, and the predicted measure of migration from Section 4.1. Figure 3 plots the relationship in grey, including city fixed effects.

Proximity to a porter appears uncorrelated with the predicted measure. While the coefficient is statistically significant its magnitude is close to zero. A precise null effect provides evidence that any observed difference in migration reflects access to northern information rather than differences in who lived near a porter.²²

²²Table A.3 shows robustness to including enumeration district fixed effects, lasso-selected predictors of

The black line in Figure 3 presents my main estimate of the effect of northern information on individual migration decisions. I estimate the relationship between log proximity to a porter selling the Chicago Defender in 1910 and northern migration by 1920. The regression includes city fixed effects.

My results reveal that access to northern information was a major determinant of who migrated north. Individuals who lived near a porter selling the Chicago Defender in 1910 were 3 percentage points or 33% more likely to migrate north by 1920 than similar individuals who lived 7 log households from a porter, which corresponds to about 780 metres (0.5 miles).²³ The relationship is statistically significant at a 1% level.

In Figure A.21, I estimate the same relationship measuring distance as the crow flies for geocoded addresses. Individuals within 100 metres (330 feet) of a porter were over 3 percentage points or 33% more likely to migrate north than individuals who lived 500 metres (0.3 miles) from a porter. Results are unchanged controlling for individuals' distance to the nearest railway station in a city, confirming that proximity to a porter was not capturing railroad access (Table A.4)

Table 1 reports results using variations of my baseline specification. Column (1) shows my baseline specification with city fixed effects, corresponding to the black line in Figure 3. Column (2) controls for the characteristics I use to predict migration (the grey line): school attendance, home ownership, gender, year of birth, marital status, literacy, labour force participation, and occupation. Column (3) includes enumeration district fixed effects. Column (4) looks at rural individuals who moved to an Illinois Central city. Column (5) restricts to 11 cities within 5 kilometres (3 miles) of the Illinois Central railroad. Column (6) measures proximity to the nearest porter within a county and includes county fixed effects.

Results are consistent across specifications. Proximity to a porter selling the Chicago

migration, and logit and probit functional forms. Proximity to a porter was similarly uncorrelated with individuals' probability of being linked to the 1920 Census (Figure A.19).

²³While 1920 represents the first period after the Chicago Defender's southern expansion, its effects may not have occurred immediately. Figure A.20 shows that effects look similar for migration by 1930. Individuals who lived near a porter in 1910 were 4 percentage points or 21% more likely to migrate north by 1930 than individuals who lived 7 log households from a porter.

Defender was a strong predictor of migration including controls and within enumeration districts, which were the size of a small neighbourhood (Logan and Parman, 2017). Effects are similar for the subset of rural to urban movers. While movers are a selected group, where a mover ended up in relation to a porter is likely to be idiosyncratic.

Compared to my baseline specification, which includes 35 cities within 150 kilometres (90 miles) of the Illinois Central railroad, proximity to a porter had a larger effect on migration in closer cities, where porters were more likely to work for the Illinois Central. Because I cannot distinguish Illinois Central porters from porters working for other railroads in the same city, my baseline specification likely under-estimates the true effect of proximity to a porter selling the Chicago Defender.²⁴ Measuring proximity within counties instead of cities increases the estimated effect.

Column (7) includes all southern cities and reports the interaction between proximity to a porter and whether the city was along the Illinois Central railroad. The coefficient on the interaction is smaller than my baseline estimate but remains large and statistically significant. A large effect provides evidence that my results are not driven by unobservable differences in who lived near a porter, or by porters' northern ties.²⁵

In panel (a) of Figure 4, I estimate the effect of proximity to individuals with similar characteristics to porters. Individuals who lived near a placebo porter were likely comparable to individuals who lived near an actual porter but did not have access to northern information.

I estimate the effect of proximity to: (1) individuals with a top 0.01 percentile predicted likelihood of being a railway porter based on 1910 Census characteristics; (2) individuals

²⁴Raw industry strings in the 1910 Census provide limited insight into employers: only 27 of the 1,415 railway porters in Illinois Central cities list a railroad. Of them, 44% report working for the Illinois Central or a subsidiary, while 56% list a competitor railroad. Occupational turnover further attenuates the estimated effect. Only 23% of railway porters in the 1910 Census still worked as porters in 1920. Taking the share of porters working for the Illinois Central literally and depending on when porters switched occupations, the true effect of living near a porter selling the Chicago Defender could be up to 10 times larger.

²⁵I observe similar effects using alternate definitions of proximity including whether an individual lived in the same enumeration district or same street and enumeration district as a porter, or if they were recorded on the same microfilm page as a porter (Figure A.22). Estimates are also consistent across linking approaches, using crosswalks from the Census Linking Project and Multigenerational Longitudinal Panel (Figure A.23).

who became Illinois Central porters by 1930 but worked in different occupations in 1910 and 1920; (3) other Illinois Central railroad workers who worked at stations but rarely travelled; (4)–(6) steel workers, longshoremen, and coal miners, the most similar occupations to railway porters based on occupational income. I find small and statistically insignificant effects of living near a placebo porter on migration north. Null effects provide further evidence that my results are not explained by differences in who lived near a porter.

In panel (b), I estimate the effect of northern ties directly. If both information and its dissemination matter, northern ties on their own should have had a smaller but noticeable effect on northern migration compared to a porter selling the Chicago Defender.

I estimate the effect of proximity to: (1) porters in cities along alternate north-south railroads; (2) Illinois Central porters in 1900 and migration by 1910 before the Chicago Defender reached the South; (3) past Illinois Central porters who switched occupations by 1910; (4) Illinois-born individuals who moved to the South. Effects are mostly statistically significant but 2–4 times smaller than the effect of a porter selling the Chicago Defender, consistent with the Chicago Defender amplifying the impact of northern ties.

Figure A.24 provides evidence that living near an Illinois Central porter increased newspaper readership, using subscription by mail in 1918 as a proxy. I find that individuals who lived near a porter in 1910 were 0.02 percentage points or 58% more likely to subscribe to the Chicago Defender in 1918 than individuals who lived far from a porter.²⁶

In Figure A.25, I estimate the effect of living near a subscriber and other ways individuals might have accessed the Chicago Defender. Copies were communally read in churches and barbershops. In cities along the Illinois Central railroad, I find statistically significant effects of living near a clergyman or barber that were 1.3 to 1.5 times smaller than the effect of a porter selling the Chicago Defender. I find no effect in other southern cities, consistent with their effect on migration operating through an information channel.

Proximity to a mail subscriber had a statistically significant but relatively small effect on

²⁶Proximity to a porter is uncorrelated with a predicted measure of subscription based Census characteristics, providing evidence that the relationship was not driven by differences in observable characteristics.

migration. A small effect could be due to the small number of subscribers in my sample, when they subscribed, or how they disseminated information. While limited as disseminators, mail subscribers were 7 percentage points or 81% more likely to migrate north by 1920.

My results document the role of information on southern conditions and northern life in sparking the first wave of Black migration north. Individuals who lived near an Illinois Central porter were exposed to a newspaper that criticized the South and covered news and jobs in the North, sold by a porter who shared stories of opportunity and represented the promise of a better life. In the next section, I trace how information diffused across social networks, making its true effect larger.

4.3 Spillovers

As information about the North spread, it could have influenced the migration decisions of individuals without direct access. For instance, an individual with access to the Chicago Defender could have shared information about the North with a relative living elsewhere.

To trace how information diffused across social networks, I examine the migration decisions of individuals with a relative who had access to the Chicago Defender. I define relatives as individuals who lived in the same household in 1900 but elsewhere in 1910. To capture urban-rural spillovers, I expand my sample to include individuals outside of cities. Regressions include county fixed effects and cluster standard errors at the county-level.

Columns (1) and (2) of Table 2 estimate the relationship between northern migration and whether an individual was related to a porter selling the Chicago Defender or a Chicago Defender mail subscriber. I find that relatives of porters and subscribers were 2.1 and 3.8 percentage points, or 46% and 85%, more likely to migrate north by 1920.

Column (3) describes my preferred measure of spillovers. I look at individuals from the same rural county who had a relative move to a city along the Illinois Central railroad. Relatives who moved near a porter selling the Chicago Defender had greater exposure to northern information than relatives who did not. If information traveled through family

ties, a relative's proximity to a porter selling the Chicago Defender could have influenced a rural individual's likelihood of migrating north.

Consistent with informational spillovers, I find that individuals with a relative who moved near a porter selling the Chicago Defender were 1 percentage point or 22% more likely to migrate north than individuals with a relative who moved 7 log households from a porter. The spillover effect was roughly one-third the size of the direct effect of living near a porter. Column (4) shows a similar pattern: individuals with a relative who moved near a mail subscriber were more likely to migrate north than individuals with a relative who moved far from a subscriber.

The results in Table 2 indicate how the introduction of northern information established new patterns of chain migration through social networks. Rural individuals often moved to nearby southern cities before migrating north (Alexander, 1998). I find that individuals who were exposed to northern information upon moving to a city were more likely to pull their families to migrate north.

4.4 Heterogeneity and Mechanisms

I investigate whether the effect of living near a porter selling the Chicago Defender on migration north varied based on individual characteristics. Figure A.26 finds limited evidence of differential effects by individuals' occupational income, predicted migration likelihood, gender, or school enrollment. The most pronounced differences are by literacy and age.

Literacy lowered the cost of accessing the Chicago Defender. However, communal reading in churches and barbershops, and dissemination by porters who could interpret the newspaper's content, allowed the Chicago Defender to reach illiterate individuals as well. I find that access to northern information increased migration for both groups, but the literate effect is more than twice as large. Effects decrease with age but remain significant for all age groups, suggesting that individuals who migrated were young and moved with extended family.

In Figure 5, I look at heterogeneity in where individuals with access to the Chicago De-

fender migrated to, and the mechanisms by which the Chicago Defender influenced migration north. Panel (a) breaks down the effect of proximity to a porter selling the Chicago Defender on northern migration by destination city. The largest effect is for Chicago: individuals were more likely to migrate to Chicago than to the other nine largest northern cities combined.

A large Chicago effect is consistent with the Chicago Defender’s local news coverage and ads for housing and jobs. However, if the newspaper’s main benefit was to increase the salience of the North, migrants would have chosen the destination that minimized their moving cost. As the endpoint of the Illinois Central railroad, Chicago would have been a convenient destination for individuals who migrated “vertically” (Black et al., 2015).

Two tests support the Chicago Defender’s role in guiding migrants to specific destinations. First, I find null effects on migration to cities with similar moving costs to Chicago: Cincinnati, Indianapolis, and St. Louis, which were served by the Illinois Central railroad, and nearby Detroit and Cleveland. Second, I observe increased migration to Philadelphia, New York, and Los Angeles where moving was costly from Illinois Central cities. Across regions, northern information increased migration to the Northeast and West in addition to the Midwest (Figure A.27).

In panel (b), I examine whether mentions in the Chicago Defender directly influenced migration destinations. For instance, in 1918 the Chicago Defender introduced a full page devoted to New York news, entertainment, jobs, and housing. Using large language models, I identify the corresponding city for each Chicago Defender news article, classified job and housing ad, and product ad in 1918. I estimate whether individuals who lived near a porter selling the Chicago Defender were more likely to migrate to cities that received above-median mentions in articles, classifieds, and product ads than individuals who lived far from a porter. I exclude Chicago, which received the most mentions and migrants.

I find that individuals who lived near a porter selling the Chicago Defender were significantly more likely to migrate to cities that received greater coverage in articles and classifieds than individuals who did not live near a porter. I find no effect of living near a porter on

migration to cities that received below-median coverage. By contrast, I observe no statistical difference in migration to cities with more or less coverage in product ads. My results imply that both news coverage and job and housing opportunities were important determinants of where individuals migrated to.²⁷

By offering a window into northern life and jobs, the Chicago Defender reshaped Chicago and other highly-covered cities. Before the Great Migration, Black individuals in Chicago had similar occupational income, labour force participation, home ownership, and literacy to individuals in other large northern cities (Figure A.29). Migrants had higher labour force participation and income than the northern-born Black population (Figure A.30).

I do not find evidence of reduced migration to other northern cities, implying that northern information increased migration in aggregate rather than divert migrants headed elsewhere, which would reduce welfare gains. An aggregate increase in migration is consistent with northern information reaching individuals who would not have migrated otherwise. In the next section, I estimate the welfare gains associated with migrating north.

4.5 Returns to Northern Migration

I examine whether migrating north led to greater economic opportunity. To estimate the returns to northern migration, I look at individuals who lived on the same street as a porter selling the Chicago Defender, and compare the outcomes of migrants with individuals who stayed in the South. Including individuals who migrated because of northern information allows for more credible estimates of the returns to migration, as migrants were otherwise a positively-selected group (Collins and Wanamaker, 2014).

Columns (1)–(3) of Table 3 report the returns to northern migration by 1930 for individuals who lived on the same street as a porter in 1910. Each row represents an outcome in the 1930 Census.²⁸ Column (1) shows the mean for stayers in 1930. Column (2) shows my

²⁷In Figure A.28, I residualize cities' log mentions on their log Black population in 1910. I find similarly large effects on migration to cities with above-median residualized mentions in articles and classifieds, providing evidence that mentions are not capturing city size.

²⁸The 1930 Census is a natural benchmark, as it introduces new questions about socioeconomic status

preferred estimates including origin city fixed effects. Column (3) controls for the outcome at baseline. Columns (4)–(6) report the returns to migrating from 1900 to 1910.

Consistent with past work, I find that migrating north had large economic and non-economic returns (Boustan, 2017; Collins and Wanamaker, 2014; Baran et al., 2024). Relative to stayers, migrants earned on average \$667 or 62% more per year in 1930. Migrants were more likely to own a radio, get married, and live in residences with higher rents and home values. Returns were similarly large prior to World War I—migrants between 1900 and 1910 earned \$581 or 60% more per year in 1910—confirming that low returns were not a limiting factor to migration.

I provide suggestive evidence that migrants with information fared better than migrants without information. I estimate the relationship between proximity to a porter selling the Chicago Defender in 1910 and economic outcomes in 1930 conditional on migrating north. While conditioning on migration limits causal interpretation, Table A.5 shows that migrants who lived near a porter selling the Chicago Defender in 1910 were more likely to own a radio, live in residences with higher rents and home values, and were less likely to work in physically-demanding labourer jobs in 1930 compared to migrants who did not live near a porter.²⁹ Migrants with access to northern information were more likely to move to Chicago and less likely to live outside cities, where incomes were 27% lower than in Chicago, compared to migrants without information (Figure A.31).

5 County-Level Effects on Northern Migration, NAACP, and Lynching

To assess the magnitude of the Chicago Defender’s effect on migration and measure its impact on southern activism, I use a difference-in-differences approach comparing counties

(radio ownership) and dwelling characteristics (rent, house value).

²⁹Occupation descriptions are from the 1940 Census Classified Index of Occupations (Edwards, 1940).

with or without access to the Chicago Defender in 1918. I describe the approach and results for migration, southern political organization, and lynchings.

5.1 Across-County Approach

I estimate the impact of northern information on Black migration, political organization and lynching using quasi-random variation in access to the Chicago Defender in 1918. I use the presence of a Chicago Defender mail subscriber as a proxy for readership. Counties were “treated” if they had at least one mail subscriber in 1918 and “control” otherwise. The research design does not rely on random assignment. Rather, I assume that the outcomes of treated and control counties would have evolved in parallel in the absence of the Chicago Defender. I estimate the following difference-in-differences equation:

$$y_{c,t} = \delta_t + \lambda_c + \left[\sum_{\tau \neq -1} \beta_\tau \cdot \mathbb{1}(Defender)_{c,\tau} \right] + \epsilon_{c,t} \quad (2)$$

where $y_{c,t}$ represents the Black population share, presence of an NAACP branch, and number of lynchings in county c at time t . The coefficients of interest β_τ are on a vector of indicator variables, $\mathbb{1}(Defender)_{c,\tau}$, set to 1 for treated counties from 1918 onward and 0 prior to 1918, and 0 across all years for control counties. Circulation grew from 33,000 in 1916 to 125,000 in 1918, likely because of the Chicago Defender’s entry in the South (Figure A.6).

I omit the period prior to the Chicago Defender’s southern entry, $\beta_{\tau=-1}$, so that the other β_τ ’s can be interpreted relative to the pre-Chicago Defender baseline period. The β_τ ’s post-1918 can be interpreted as the differential change in $y_{c,t}$ for treated counties relative to control counties following the Chicago Defender’s entry. I include county and year fixed effects to account for county and time-specific shocks, and cluster my standard errors at the county-level, which is the level of treatment. To gauge the statistical significance of results, I also estimate a specification that pools the effect in the post-period.

The identifying assumption is parallel trends: conditional on county and year fixed ef-

fects, $y_{c,t}$ would have evolved similarly for treated and control counties absent the Chicago Defender. It would be violated if treated and control counties had different trends in t . For instance, if treated counties were more likely to receive the Chicago Defender and experience out-migration. My main approach to assess the validity of parallel trends is to examine outcomes for treated and control counties in the pre-Chicago Defender period.

5.2 Migration Results

I start by estimating the effect of northern information on counties' Black population share. Figure 6 plots difference-in-differences coefficients over time. I omit 1910 as the decade before the Chicago Defender reached the South. I find no systematic difference in the Black population share in treated and control counties in the decades before, providing support for my parallel trends identifying assumption.

Difference-in-differences estimates reveal that the Chicago Defender's entry caused a large increase in Black migration. After the Chicago Defender reached the South, I find that treated counties' Black population fell as a share of their total population relative to control counties, presumably through greater out-migration. Access to the Chicago Defender caused a 2.8 percentage point or 15% decline in counties' Black population share by 1940.

To interpret the magnitude of the effect, I multiply the estimated 2.8 percentage point decline in 1940 by the 6.1 million Black individuals living in treated counties in 1910. Back of the envelope calculations indicate that the Chicago Defender likely caused 172,000 individuals to migrate north by 1940, roughly 12% of the First Great Migration. The initial migrants established pathways for future waves, as 4 million followed during the Second Great Migration from 1940 to 1970.

Stuart and Taylor (2021) estimate that one Black individual moving north caused an additional 1.9 migrants from the same birth town to move to the same county. Incorporating their multiplier, I estimate that the Chicago Defender directly or indirectly caused 327,000 individuals to move north during the Great Migration.

Panel (a) of Table 4 tests the robustness of my difference-in-differences results. Column (1) shows my baseline specification from Figure 6 pooled across the post-period. It includes county and decade fixed effects. Column (2) controls for counties' farm share, home ownership rate, and literacy rate in the 1900 Census. Including controls decreases the difference-in-differences coefficient slightly but it remains large and statistically significant.

Columns (3) and (4) control for counties' 1890 Black population and log distance to the Illinois Central railroad. Effects increase in magnitude, indicating that my results are not explained by counties with large Black populations, which might have been more likely to receive the Chicago Defender and send migrants north, or by county distance to the Illinois Central, which could have facilitated migration independent of the newspaper.

In Panel (a) of Figure A.32, I look at whether the effect of the Chicago Defender varied based on county characteristics. I observe similar effects in rural and urban counties and in counties with above- or below-median state anti-enticement fines, which were imposed on employers who made offers to workers already under contract to restrict mobility.³⁰ Effects were 6 times larger in counties with an above-median tenant farming rate than in below-median counties, which might have had lower exit costs.³¹ Heterogeneity results suggest that the Chicago Defender's effect on migration was not mediated by barriers to exit.

5.3 NAACP Results

Next, I examine whether northern information contributed to the southern growth of the NAACP, the oldest U.S. civil rights organization. I test whether counties with access to the Chicago Defender were more likely to open an NAACP branch. The Chicago Defender encouraged resistance to White oppression and promoted the NAACP's accomplishments in the North, featuring editorials written by NAACP founders Ida B. Wells and W.E.B. Du

³⁰I define urban counties as having an urban Black population of at least 2,500 in 1890, following the 1910 Census threshold for urban areas.

³¹The degree to which sharecropper and tenant farming relationships were exploitative is a source of debate. Ransom and Sutch (1977), Feigenbaum et al. (2020), and Muller and Schrage (2021) consider sharecropping a form of exploitation, challenged by Goldin (1979), Roback (1984), and Wright (1986).

Bois. Indirectly, increased migration from Chicago Defender counties could have reduced White coercion, increased exposure to a northern Black community that voted and held political positions, or led to a brain drain of potential NAACP leaders.

Figure 7 plots difference-in-differences coefficients over time. Because NAACP branches were uncommon in the early 1910s, I measure whether there was a branch in a three-year interval and omit 1914–1916 as the period before the Chicago Defender reached the South.³² I find no systematic difference in branch openings in treated and control counties in the pre-period, providing support for the parallel trends identifying assumption.

Following the Chicago Defender’s entry, I find that treated counties were 17 percentage points or 1.5 times more likely to form an NAACP branch by 1964. Half of the increase was within six years of its entry, highlighting the role of information in the NAACP’s early growth. Historical evidence suggests that NAACP branch openings reflected local demand for political activism toward desegregation rather than national policy changes (Aaronson et al., 2024).

Local branches in the early 1900s led protest, lobbying, and legal campaigns against lynching, segregation, and discrimination (Aaronson et al., 2024; Ang and Chinoy, 2024).³³ The national NAACP played an important role in fights against mob violence and the segregation of schools and public places. Landmark legal victories include the 1923 *Moore v. Dempsey* supreme court decision that increased federal oversight of state criminal justice systems, and the 1954 *Brown v. Board of Education* decision that led to the integration of public schools (Ang and Chinoy, 2024; Aaronson et al., 2024).³⁴

To interpret the Chicago Defender’s aggregate effect on southern political organization, I multiply the estimated 17 percentage point increase in the likelihood of forming an NAACP

³²There were only 12 southern NAACP branches prior to a large expansion in 1918, when the NAACP opened 58 branches (Figure A.3).

³³For instance, NAACP members in Charleston, South Carolina protested efforts to exclude Black women from clothing factory jobs (Ang and Chinoy, 2024). The threat of violence limited the scope of local political action until a surge of legal victories around World War II (Tolnay and Beck, 1995; Aaronson et al., 2024).

³⁴NAACP influence diminished by the 1960s as other civil rights organizations emerged (Aaronson et al., 2024).

branch by 612, the number of treated counties. Back of the envelope calculations indicate that the Chicago Defender likely caused 105 additional NAACP branches to open by 1964, implying that northern information facilitated a large increase in southern activism.

Panel (b) of Table 4 shows that the result in Figure 7 is robust across specifications. Column (1) reports the baseline estimate with county and year fixed effects. Column (2) shows it is unchanged controlling for counties' farm share, home ownership, literacy, and labour force participation rates. Column (3) controls for 1910 Black population to account for the possibility that counties with large Black populations were more likely to receive the Chicago Defender and form an NAACP branch. Column (4) controls for log distance to the Illinois Central railroad. The effect size increases in both cases.

In Panel (b) of Figure A.32, I look at heterogeneity in which counties organized. I find larger effects in urban counties, which had higher literacy, and counties with a below-median tenant farming share and below-median anti-enticement fines. Heterogeneity results suggest that the introduction of northern information facilitated political organization in counties with less restrictive labour markets.

Using data on NAACP members from Ang and Chinoy (2024), I provide suggestive evidence on the mechanisms through which the Chicago Defender influenced southern political organization. In Table A.6, I estimate the relationship between proximity to a porter selling the Chicago Defender in 1910 and whether an individual joined the NAACP by 1940.³⁵

I find that individuals who lived near to a porter selling the Chicago Defender were 1 percentage point or 54% more likely to join the NAACP than individuals who lived 7 log households from a porter. The effect was driven by literate individuals. The effect for illiterate individuals was approximately zero and statistically insignificant. Both individuals who stayed in the South and northern migrants were significantly more likely to join, however, the effect for migrants was nearly twice as large.

³⁵Ang and Chinoy (2024) digitize NAACP membership records from 1912 to 1940 and link them to the 1930 Census. They restrict to Black men in the Census and are able to link 57% of records. I am grateful to Desmond and Sahil for sharing their data with me.

A stronger effect for literate individuals is consistent with the Chicago Defender's coverage increasing political engagement, for instance, if reading about the NAACP motivated individuals to join. However, it could also reflect the NAACP recruiting literate members rather than a direct effect of Chicago Defender coverage. An effect for both stayers and migrants suggests that southern political organization was a combination of the Chicago Defender's coverage and information transmitted back by northern migrants.

5.4 Lynching Results

I examine the impact of northern information on racial hate by looking at the incidence of lynching, an extreme form of violence used by White mobs to intimidate and extrajudicially police the southern Black community. Lynchings represented only one dimension of racial hate and were relatively infrequent: the South experienced around 69 lynchings per year from 1882 to 1930 (Figure A.3). Yet, the public display of brutality made lynchings a historically significant measure of the Black community's safety.³⁶ Lynchings often targeted political activists, labour organizers, and individuals seen as challenging the social hierarchy (PBS, 2017). They had chilling spillovers on innovation and economic growth (Cook, 2014).

The effect of northern information on racial hate is ex-ante ambiguous. Northern information could have reduced violence through increased migration and political organization. Tolnay and Beck (1995) argue that the threat of migration forced White landowners to improve conditions to retain Black labour. White newspapers shared their sentiment, for instance, the Montgomery Advertiser cautioned readers that Black individuals "prefer to remain here. But they want to be protected against lynching and personal abuse" (Grossman, 2011). The expansion of NAACP branches extended its anti-lynching campaign and legal

³⁶A horrific example was the May 15, 1916 lynching of Jesse Washington, a 17-year-old boy in Waco, Texas accused of rape and murder. Washington was chained by his neck and dragged out of the county courthouse, where he was paraded, stabbed, beaten, burned, castrated, and dismembered in front of over 10,000 spectators. His charred torso was dragged across town and postcards of the event were sold in Waco (Bernstein, 2006). Chicago Defender coverage of the lynching read "America's Shame" alongside a caption that "some day America MUST answer." Southern Black newspaper coverage was more muted. For instance, the Savannah Tribune stated "Boy convicted of assault and murder is burned" (Figure ??).

support into local communities, potentially reducing violence.³⁷

However, the presence of an inflammatory newspaper and ensuing out-migration and political organization could have incited backlash from a White population looking to exert social control. A letter to the Post Office Solicitor from Atlanta, Georgia warned “should any hot-headed person get one of the [Chicago Defender] re-printed in a white paper, there would undoubtedly be a Race riot” (Kornweibel Jr., 1986). Southern officials credited a Chicago Defender article on lynching with sparking a 1919 race riot in Longview, Texas, where a White mob destroyed the Black section of Longview searching for a teacher accused of leaking the story (Kerlin, 1920).

Figure 8 plots difference-in-differences coefficients over time. As lynchings were relatively infrequent, I aggregate the number in a county across three-year intervals, and omit 1914–1916 as the period before the Chicago Defender’s introduction. I find no evidence of pre-trends.

Following the Chicago Defender’s entry, I find that treated counties experienced 0.05 fewer lynchings per three-year interval, a 55% decrease relative to the mean. While the decrease may appear small in absolute terms, a major purpose of the violence was intimidation. Moreover, back of the envelope calculations imply that the Chicago Defender had a large protective effect overall. I multiply each post-period coefficient by 612, the number of treated counties, indicating that the Chicago Defender prevented 216 lynchings by 1930. Its true effect on racial hate was likely greater. For instance, Tolnay and Beck (2018) estimate that threatened lynchings were as common as actual ones.

Panel (c) of Table 4 shows that the result in Figure 8 is robust across specifications. Column (1) reports the baseline estimate with county and year fixed effects. Column (2) shows that the effect size decreases but remains large and statistically significant including controls for counties’ farm share, home ownership rate, and literacy rate. Columns (3) and (4) show that the effect size increases controlling for 1900 Black population and logged

³⁷Tolnay and Beck (1995) are skeptical of the NAACP’s protective role, arguing that White tolerance of the NAACP would have been the product of the same social forces that caused lynchings to decline.

distance to the Illinois Central railroad.

Panel (c) of Figure A.32 shows that the decrease in lynching was larger in counties with more restrictive labour markets. I find that rural counties had a slightly larger decrease than urban counties. The urban effect was statistically insignificant. The effect was 1.5 to 2.2 times larger in counties with above-median anti-enticement fines and tenant farming rate.

A larger effect in more restrictive counties is consistent with the threat of migration forcing White landowners to improve conditions. For instance, if rural counties were more dependent on Black labour, they might have had to curb violence more substantially to retain workers. More restrictive counties were less likely to form an NAACP branch, suggesting that the decrease in lynching was not because of the NAACP's presence.

6 Conclusion

I document the role of northern information in the Great Migration, the largest internal migration in U.S. history. Using quasi-random variation in exposure to the Chicago Defender, the most prominent northern Black newspaper, I estimate that northern information led over 172,000 Black southerners to migrate north by 1940, caused 105 NAACP branches to open, and prevented 216 lynchings. Its true effect was even larger as information diffused across social networks, pulling family members to migrate and facilitating future migration waves.

The legacy of the Chicago Defender's entry in the South is visible today. Northern migrants earned higher incomes than individuals who remained in the South and gained the right to vote. By guiding migrants toward Chicago and other frequently covered cities, northern information shaped the racial composition of the North and Black economic mobility. NAACP branches extended legal support to southern communities, ushered in a New Negro era of Black activism, and played a key role in civil rights victories. Counties with fewer lynchings have higher Black voter registration and employment (Williams et al., 2021).

While the information landscape has changed since the Chicago Defender first reached

the South, access to reliable information might be as important today as it was in 1910. Most low-income families in the U.S. live in low-economic opportunity neighbourhoods, often near neighbourhoods offering greater opportunity at a similar cost (Chetty et al., 2020). Despite potential gains from moving, individuals are moving less than they did 30 years ago, and policies designed to help families move to opportunity such as housing vouchers have limited take-up (Jones et al., 2025; Bergman et al., 2024).

The Creating Moves to Opportunity experiment shows that intensive moving assistance can facilitate moves to high-opportunity areas (Bergman et al., 2024). My findings suggest that reliable information delivered through trusted community liaisons can accomplish similar objectives at a low cost. The Chicago Defender built trust through coverage free from White influence and a partnership with Black railway porters, a job group with a natural connection to southern communities. Since 2016, the Confess Project has taken a similar approach training Black barbers as community mental health advocates (Colabello, 2023). Alsan et al. (2019) show that information disseminated by a trusted source, Black doctors, increases healthcare take-up among Black patients. Yet, more work is required to understand how policy-makers can best communicate information to vulnerable communities.

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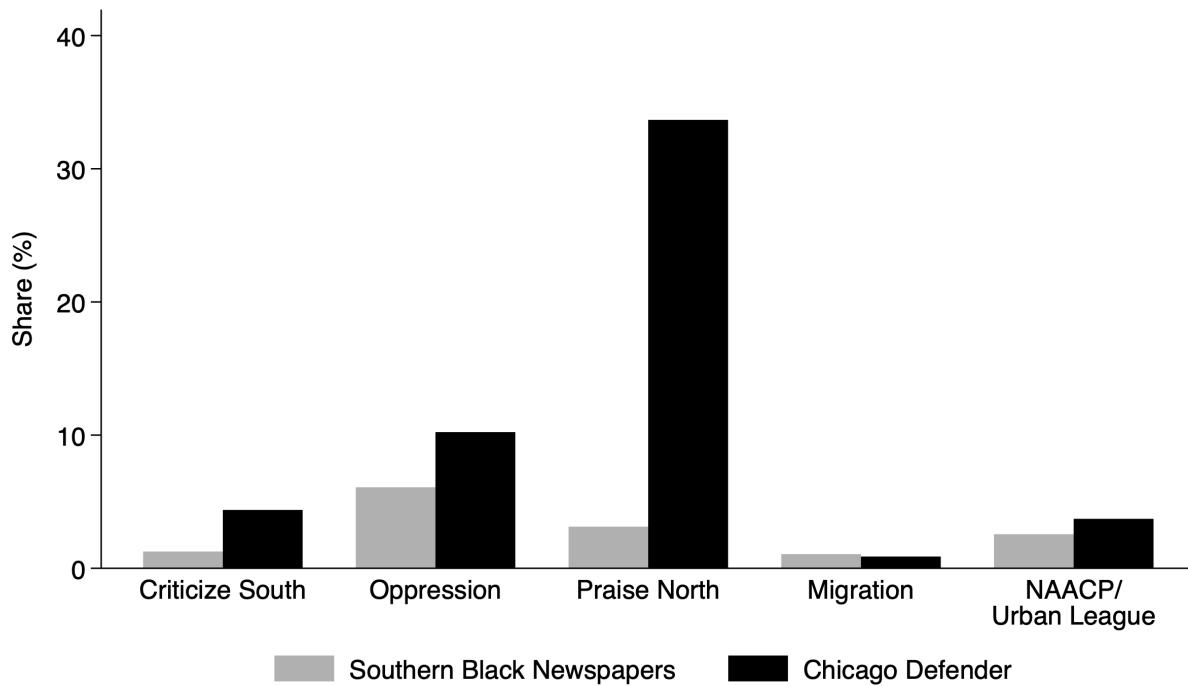
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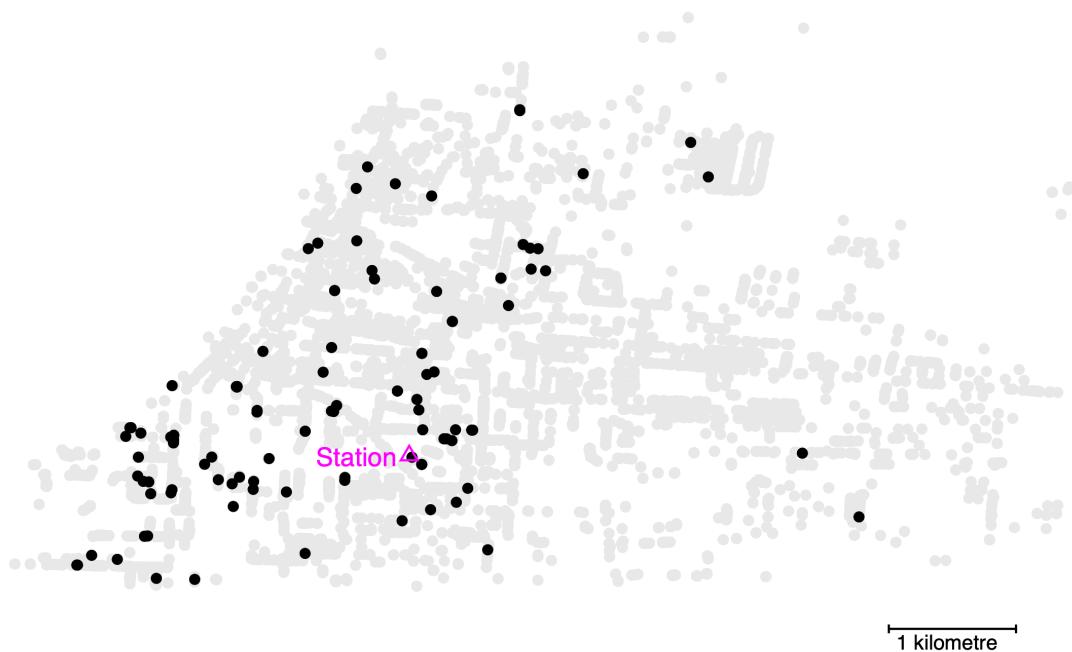
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Figure 1: Coverage of Southern Black Newspapers and Chicago Defender



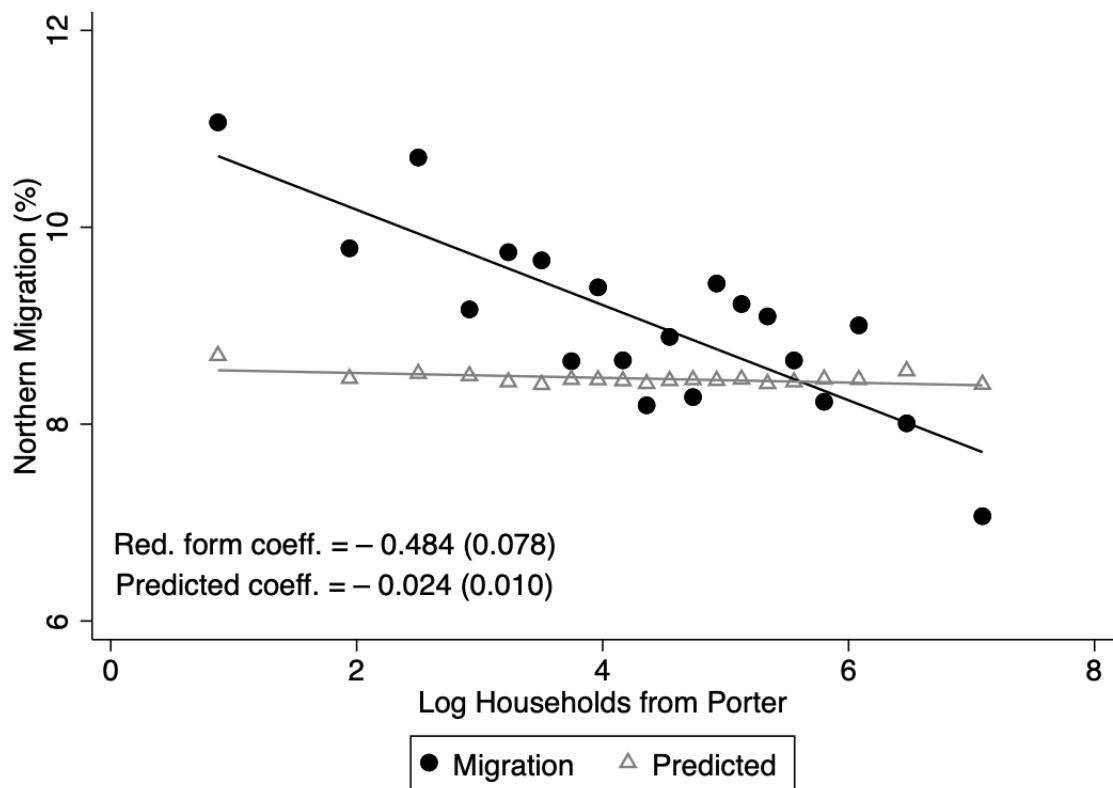
Note: Share of articles in southern Black newspapers and the Chicago Defender that cover the following topics: (1) criticism of the South, (2) lynching, discrimination, and other forms of oppression, (3) positive coverage of the North, (4) northern migration, and (5) civil rights organizations such as the NAACP and Urban League. Southern newspapers are from the Library of Congress' Chronicling America collection. Chicago Defender issues are from ProQuest. I examine 150 southern Black newspaper issues and 48 Chicago Defender issues in 1918. Topics are classified using Claude's Sonnet 4 large language model.

Figure 2: Railway Porters Selling Chicago Defender in Memphis, TN



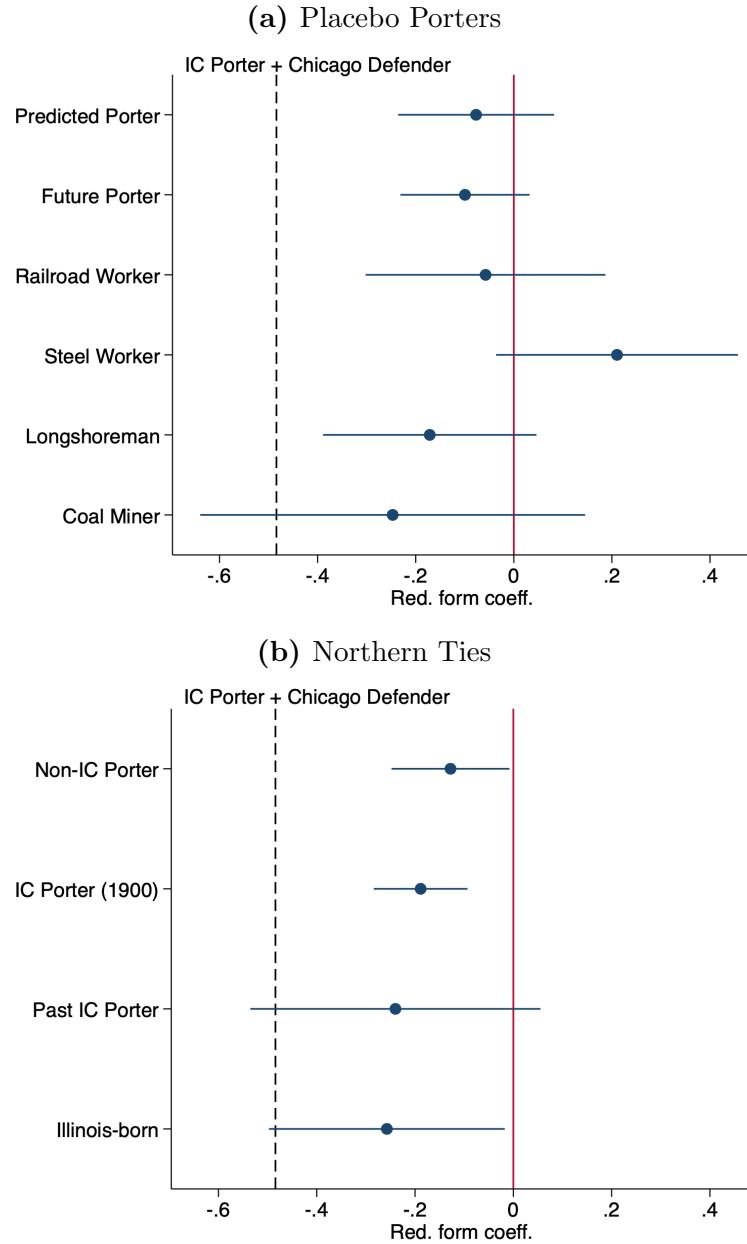
Note: Black population of Memphis, TN in 1910 in grey (53,000 individuals). Illinois Central railway porters who sold the Chicago Defender highlighted in black (209). Triangle shows the railway station. Scale corresponds to 1km or 0.6mi. I am able to geocode 69% of Memphis addresses.

Figure 3: Effect of Proximity to Porter Selling Chicago Defender on Northern Migration



Notes: Binned scatter plot of the relationship between northern migration and log residential proximity to the nearest railway porter in Illinois Central cities, where porters sold the Chicago Defender. Observed series (black) defines migration as an indicator for whether a Black individual who lived in the South in 1910 migrated north by 1920. Predicted series (grey) predicts migration using 1910 Census characteristics and city FE. I include school enrollment, home ownership, gender, year of birth, marital status, literacy, labour force status, and occupation. Proximity is measured by difference in Census enumeration order. I define Illinois Central cities as within 150km (90mi) from the nearest Illinois Central track and include city FE.

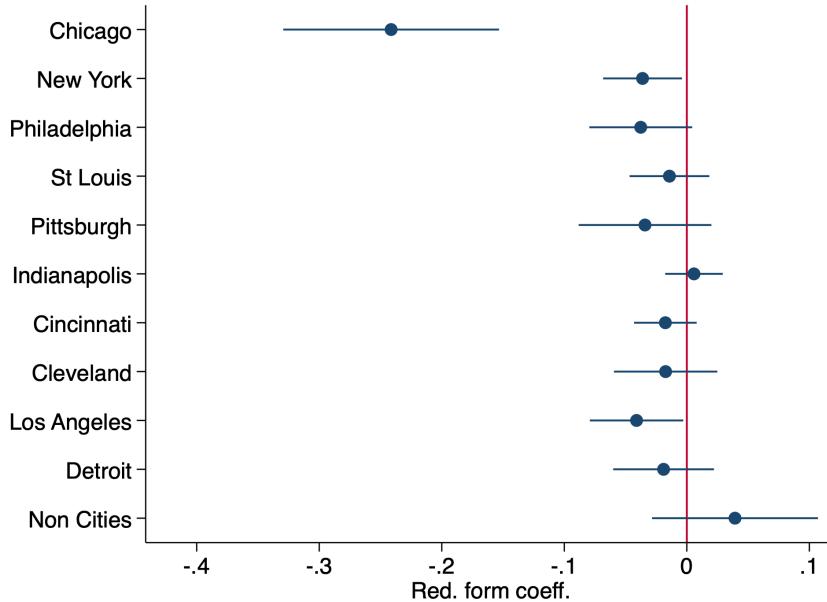
Figure 4: Effect of Proximity to Placebo Porters and Individuals with Northern Ties



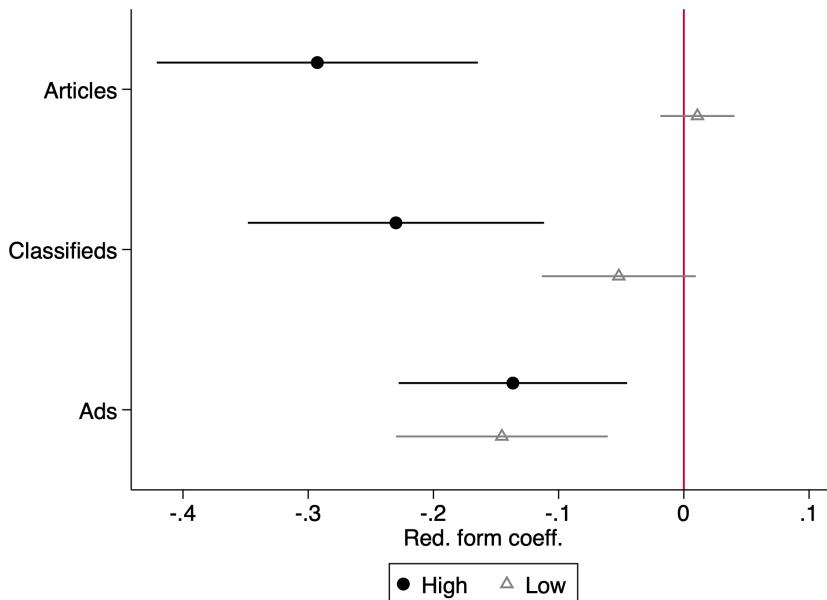
Note: Panel (a) reports the effect of log proximity to individuals with similar characteristics to porters on northern migration. I consider (1) individuals with a top 0.01 percentile predicted likelihood of being a porter based on Census characteristics, (2) future Illinois Central porters, defined as porters in 1930 who worked in different occupations in 1910 and 1920, (3) non-porter railroad workers, and (4)–(6) steel workers, longshoremen, and coal miners, the most similar occupations to porters based on occupational income. Panel (b) reports the effect of log proximity to individuals with northern ties. I consider (1) railway porters in non-Illinois Central cities, (2) Illinois Central porters in 1900, (3) past Illinois Central porters, defined as porters in 1900 who worked in different occupations in 1910 and 1920, and (4) Illinois-born individuals. Migration is an indicator for whether a Black individual who lived in the South in 1910 migrated north by 1920. For porters in 1900, the outcome is migration by 1910. Proximity is measured by difference in Census enumeration order. Regressions include city FE and cluster standard errors at the city-level. Dashed line represents the effect of proximity to a porter selling the Chicago Defender in 1910 on migration by 1920.

Figure 5: Effect of Proximity to Porter Selling Chicago Defender by Destination

(a) By City

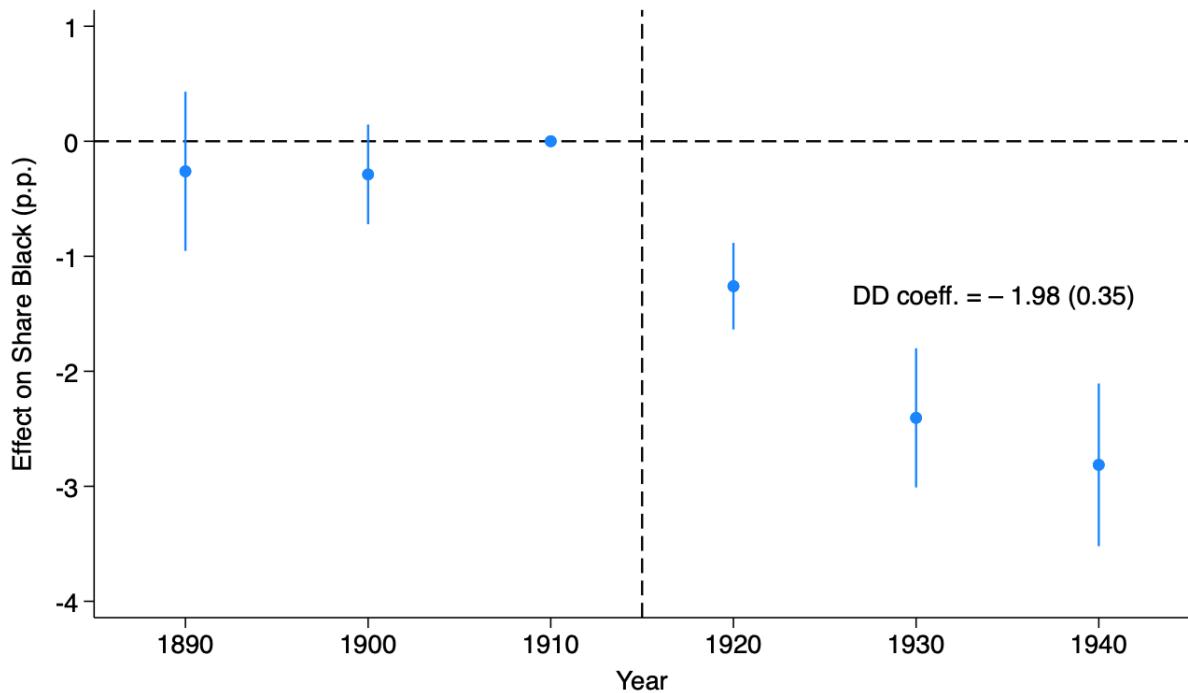


(b) By Mentions in Chicago Defender (excl. Chicago)



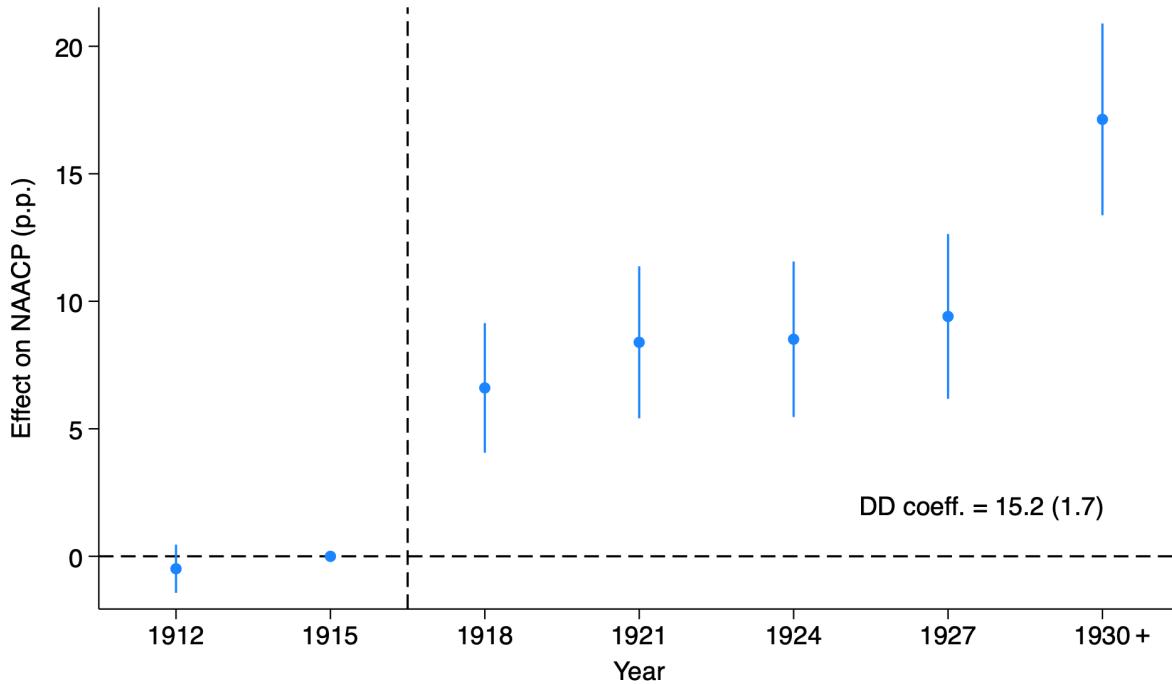
Note: Effect of log proximity to a porter selling the Chicago Defender by destination. In panel (a), the outcome is an indicator for whether a Black individual who lived in the South in 1910 moved to a northern city in 1920. In panel (b), the outcome is an indicator for whether they moved to a northern city that received above- or below-median mentions in Chicago Defender articles, classified ads for jobs and housing, and product ads. I exclude Chicago, which received the most migrants and mentions. Proximity is measured by difference in Census enumeration order. Regressions include origin city FE and cluster standard errors at the origin city-level.

Figure 6: Effect of Chicago Defender on Share Black



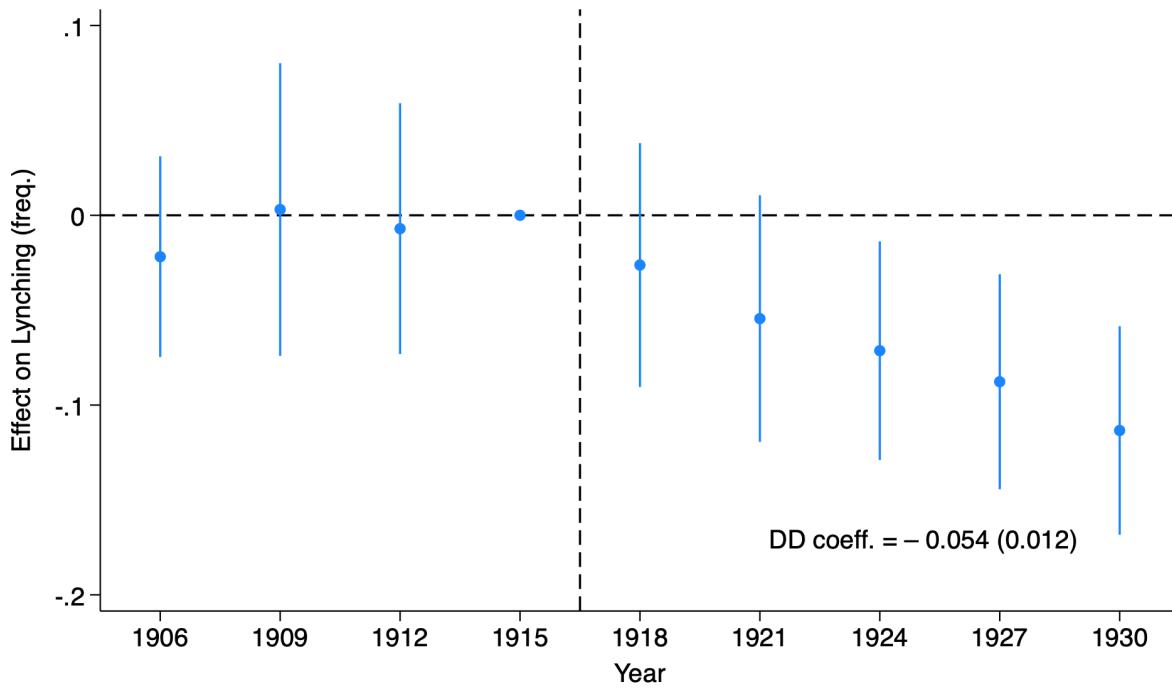
Notes: Effect of the Chicago Defender on counties' Black population share. Outcome is the Black population share in a county during a given decade. Plotted coefficients represent the interaction between indicator variables for the decades before and after the Chicago Defender reached the South in 1918, and whether a county had access to it. Regression includes county and decade fixed effects, and cluster standard errors at the county-level.

Figure 7: Effect of Chicago Defender on Presence of an NAACP Branch



Notes: Effect of the Chicago Defender on the presence of an NAACP branch. As NAACP branches were uncommon in the early 1910s, I aggregate across three-year intervals. Outcome is whether a county had an NAACP branch in a given three-year interval. Plotted coefficients represent the interaction between indicator variables for the years before and after the Chicago Defender reached the South in 1918, and whether a county had access to it. The x-axis shows the midpoint year of an interval. I top-code years beyond 1930 and include county and year fixed effects. I cluster standard errors at the county-level.

Figure 8: Effect of Chicago Defender on Lynching



Notes: Effect of the Chicago Defender on lynching. As lynchings were relatively infrequent, I aggregate across three-year intervals. Outcome is the number of lynchings in a county in a given three-year interval. Plotted coefficients represent the interaction between indicator variables for the years before and after the Chicago Defender reached the South in 1918, and whether a county had access to it. The x-axis shows the midpoint year of an interval. I bottom-code years before 1906 and include county and year fixed effects. I cluster standard errors at the county-level.

Table 1: Robustness of Individual-Level Migration Results

	Reduced Form Coefficients						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Log Hholds from Porter	-0.484*** (0.078)	-0.421*** (0.083)	-0.413*** (0.114)	-0.567*** (0.103)	-0.518*** (0.105)	-0.760*** (0.067)	-0.356*** (0.099)
Observations	182,561	182,561	182,561	36,431	107,024	1,486,299	454,001
Number of Clusters	35	35	1,011	35	11	295	106
Mean	9.05	9.05	9.05	10.15	8.40	4.01	8.55
City FE	✓	✓			✓		✓
Baseline Controls		✓					
ED FE			✓				
Movers				✓			
Directly Along RR					✓		✓
County FE					✓		
IC vs. non-IC						✓	

Notes: Effect of log residential proximity to a porter selling the Chicago Defender on northern migration. Migration is an indicator for whether a Black individual who lived in the South in 1910 migrated north by 1920. Proximity is measured by difference in Census enumeration order. The sample includes individuals in Illinois Central cities where porters sold the Chicago Defender, defined as within 150km (90mi) from the nearest Illinois Central track. Regressions include city FE and cluster standard errors at the city-level unless specified otherwise. Column (1) shows my preferred specification. Column (2) controls for individual characteristics in the 1910 Census. I include school enrollment, home ownership, gender, year of birth, marital status, literacy, labour force status, and occupation code. Column (3) includes enumeration district FE and clusters standard errors at the enumeration district-level. Column (4) looks at rural individuals who moved to an Illinois Central city by 1910. It includes origin county FE and clusters standard errors at the county-level. Column (5) restricts to cities within 5km (3mi) of the Illinois Central. Column (6) measures proximity to the nearest porter within a county, includes county FE, and clusters standard errors at the county-level. Column (7) includes all southern cities and reports the interaction of proximity to a porter and whether the city was along the Illinois Central.

Table 2: Spillover Effects on Northern Migration

	Reduced Form Coefficients			
	(1)	(2)	(3)	(4)
Relative of Porter	2.05*			
	(1.11)			
Relative of Subscriber		3.77***		
		(0.99)		
Relative Log Hholds from Porter			-0.16*	
			(0.09)	
Relative Log Hholds from Subscriber				-0.14**
				(0.06)
Observations	764,608	764,570	28,172	53,271
Number of Counties	1,082	1,082	801	1,085
Mean	4.42	4.42	4.45	4.69
County FE	✓	✓	✓	✓

Notes: Spillover effects of northern information on migration. To trace information diffusion across social networks, I examine the migration decisions of individuals with relatives who had access to the Chicago Defender. I define relatives as individuals who lived in the same household in 1900 but elsewhere in 1910. Migration is an indicator for whether a Black individual who lived in the South in 1910 migrated north by 1920. Predictor in Column (1) is an indicator for whether an individual's relative was a porter in an Illinois Central city, where porters sold the Chicago Defender. Predictor in Column (2) is an indicator for whether a relative was a Chicago Defender mail subscriber. I omit individuals who live in the same household as a porter or subscriber. Columns (3) and (4) look at rural individuals with a relative who moved to a city between 1900 and 1910. Predictor in Column (3) is the log number of households between an individual's relative and the nearest porter in an Illinois Central city. Predictor in Column (4) is the log number of households between a relative and the nearest Chicago Defender mail subscriber. Regressions include county FE and cluster standard errors at the county-level.

Table 3: Returns to Northern Migration

	Returns by 1930			Returns by 1910		
	Mean	Coefficients		Mean	Coefficients	
	(1)	(2)	(3)	(4)	(5)	(6)
<i>Individual Characteristics</i>						
Occup. Income (100s of dollars)	10.72	6.67*** (0.25)	6.44*** (0.25)	9.62	5.81*** (0.51)	5.08*** (0.49)
Own Radio (p.p.)	7.90	32.49*** (1.83)	32.18*** (1.86)	—	—	—
Married (p.p.)	62.65	4.85*** (1.31)	5.92*** (1.23)	48.12	1.63 (2.44)	0.44 (1.09)
In Labour Force (p.p.)	76.22	0.92 (0.99)	0.13 (0.80)	77.54	-1.99 (2.58)	-3.60 (2.51)
<i>Dwelling Characteristics</i>						
Home Owner (p.p.)	36.23	-13.86*** (2.04)	-14.23*** (2.21)	27.60	-9.76*** (2.81)	-10.01*** (3.24)
Log Rent (dollars)	2.50	0.98*** (0.06)	0.97*** (0.06)	—	—	—
Log House Value (dollars)	7.49	0.85*** (0.08)	0.87*** (0.08)	—	—	—
Observations	23,888	23,888	23,888	12,318	12,318	12,318
Number of Cities	35	35	35	24	24	24
City FE	—	✓	✓	—	✓	✓
Baseline Controls	—		✓	—		✓

Note: Returns to northern migration for individuals who lived in the same enumeration district and street as a railway porter in Illinois Central cities, where porters sold the Chicago Defender. Predictor is whether an individual migrated north. Columns (1)–(3) show migration between 1910 and 1930. Columns (4)–(6) show migration between 1900 and 1910. Columns (1) and (4) show the outcome mean for individuals who stayed in the South in 1930 and 1910. Columns (2) and (5) include origin city FE. Columns (3) and (6) additionally control for the outcome or a comparable measure at baseline. I cluster standard errors at the origin city-level.

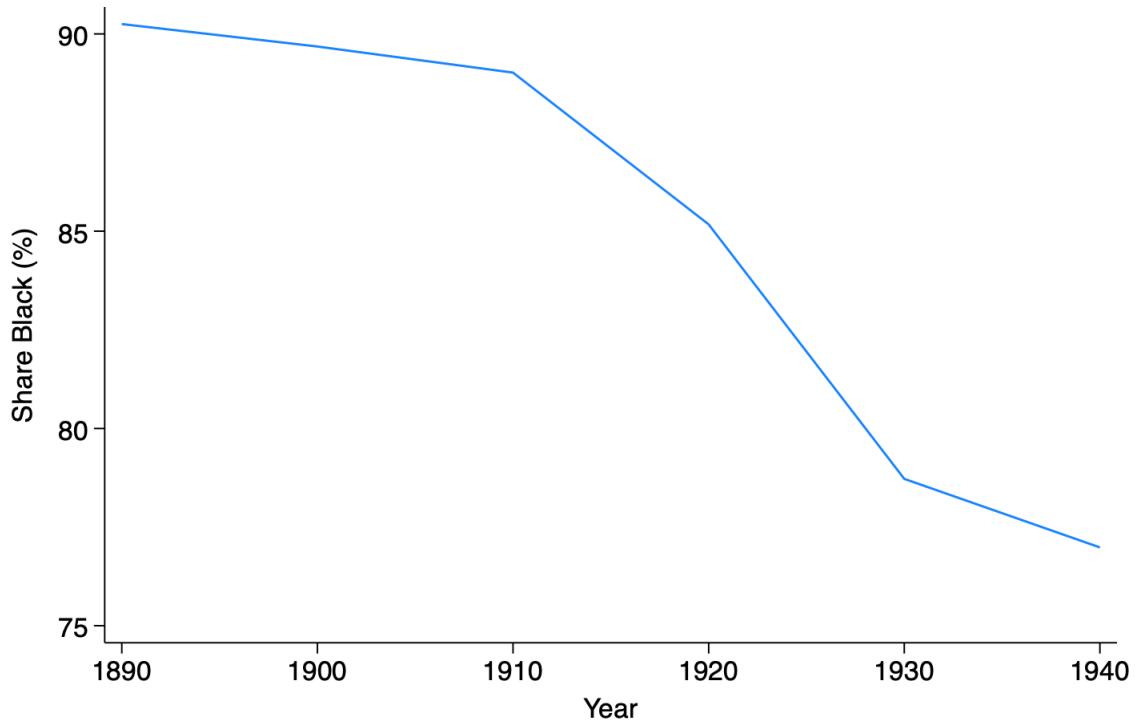
Table 4: Robustness of County-Level Results

	DD Coefficients			
	(1)	(2)	(3)	(4)
<i>Panel A: Share Black (p.p.)</i>				
Any Defender x Post-1918	-1.98*** (0.35)	-1.55*** (0.35)	-2.29*** (0.42)	-3.24*** (0.32)
Observations	8,496	8,496	8,496	8,496
Number of Counties	1,423	1,423	1,423	1,423
Mean	18.82	18.82	18.82	18.82
<i>Panel B: Presence of NAACP Branch (p.p.)</i>				
Any Defender x Post-1918	15.15*** (1.70)	15.11*** (1.70)	15.59*** (1.92)	17.04*** (1.60)
Observations	25,614	25,614	25,614	25,614
Number of Counties	1,423	1,423	1,423	1,423
Mean	11.32	11.32	11.32	11.32
<i>Panel C: Lynching (freq.)</i>				
Any Defender x Post-1918	-0.054*** (0.012)	-0.035*** (0.012)	-0.078*** (0.014)	-0.096*** (0.013)
Observations	24,191	24,191	24,191	24,191
Number of Counties	1,423	1,423	1,423	1,423
Mean	0.098	0.098	0.098	0.136
County FE	✓	✓	✓	✓
Year FE	✓			
Year x Baseline Covariates		✓		
Year x Black Population			✓	
Year x Log Distance to IC				✓

Notes: Outcome in Panel A is the county Black population share in a given decade. Outcome in Panel B is whether a county had an NAACP branch in a given three-year interval. Outcome in Panel C is the number of lynchings in a county in a three-year interval. Predictor is an indicator for whether the county had access to the Chicago Defender in 1918, and whether the year is greater than or equal to 1918. Regressions include county FE and standard errors are clustered at the county-level. Column (1) shows my preferred specification with year FE. Column (2) interacts year FE with baseline covariates: farm share, home ownership rate, literacy rate, and labour force participation rate (Panel B). Column (3) includes year by initial county Black population FE. Column (4) includes year by log distance to the Illinois Central railroad FE.

A Additional Figures

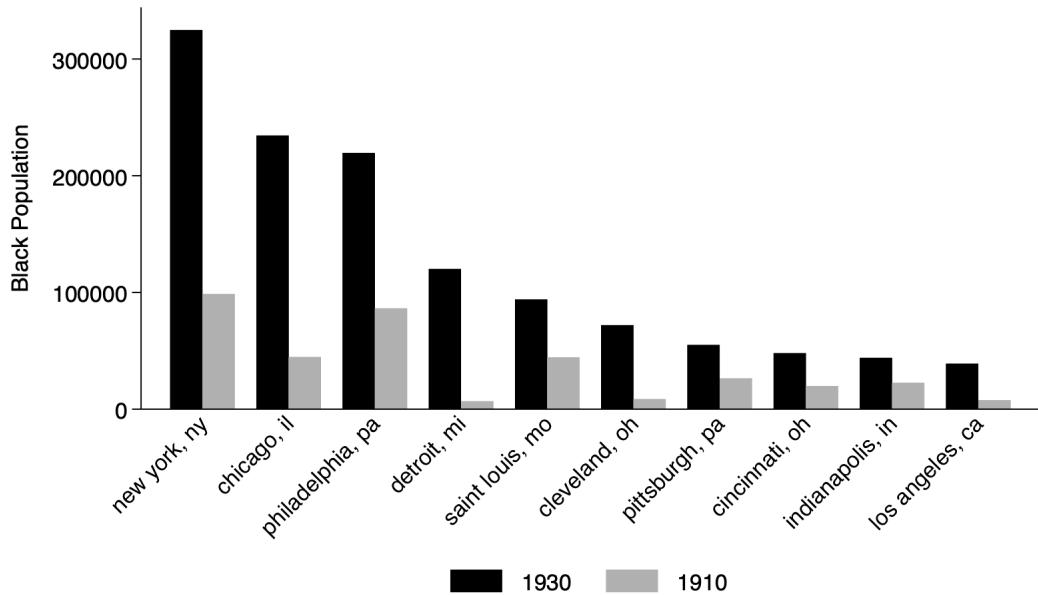
Figure A.1: First Great Migration



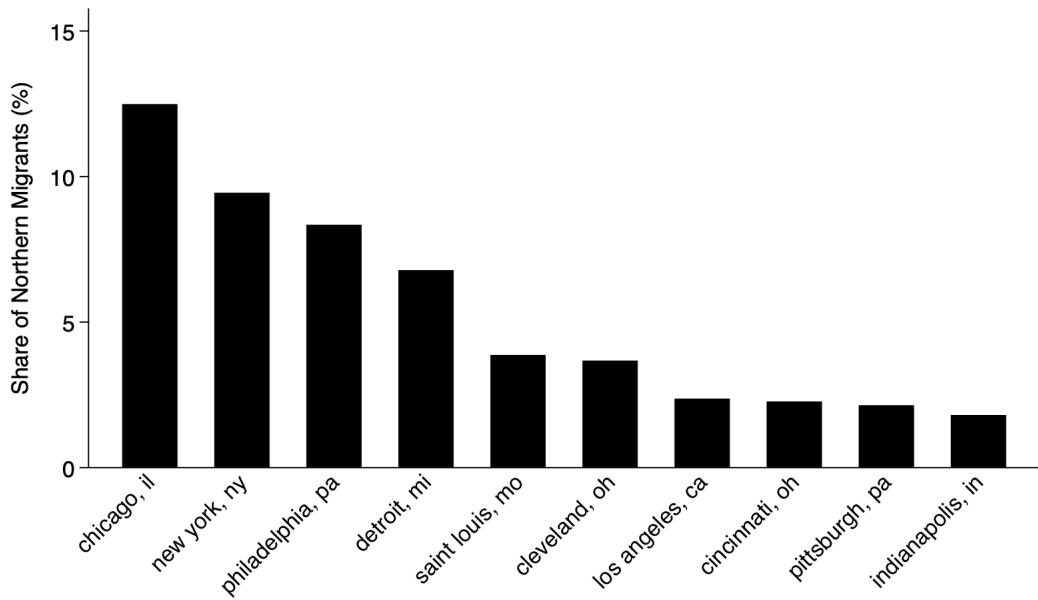
Note: Share of the U.S. Black population living in the South from 1890 to 1940.

Figure A.2: First Great Migration and Northern Cities

(a) Black Population by City: 1910–1930



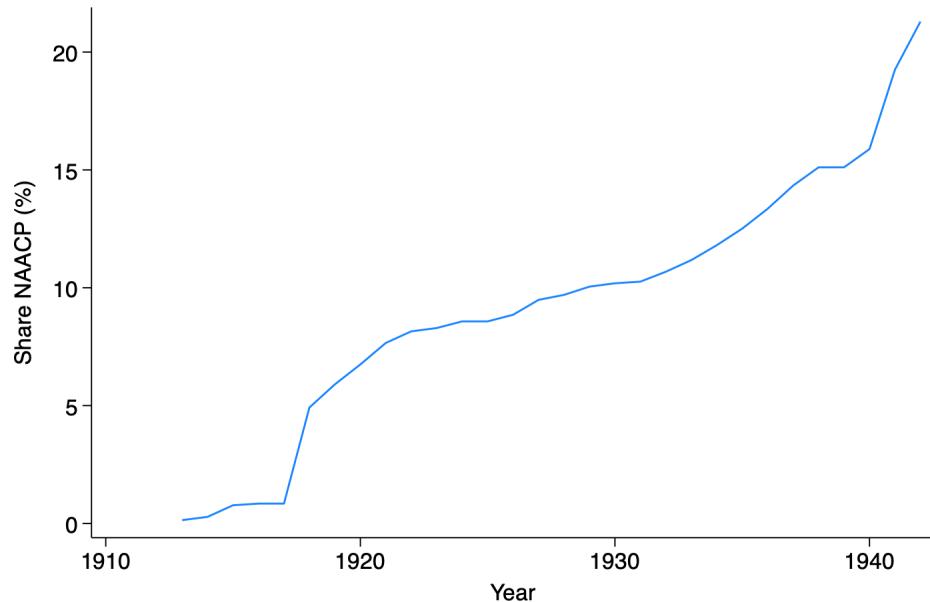
(b) Share of Migrants by City: 1910–1930



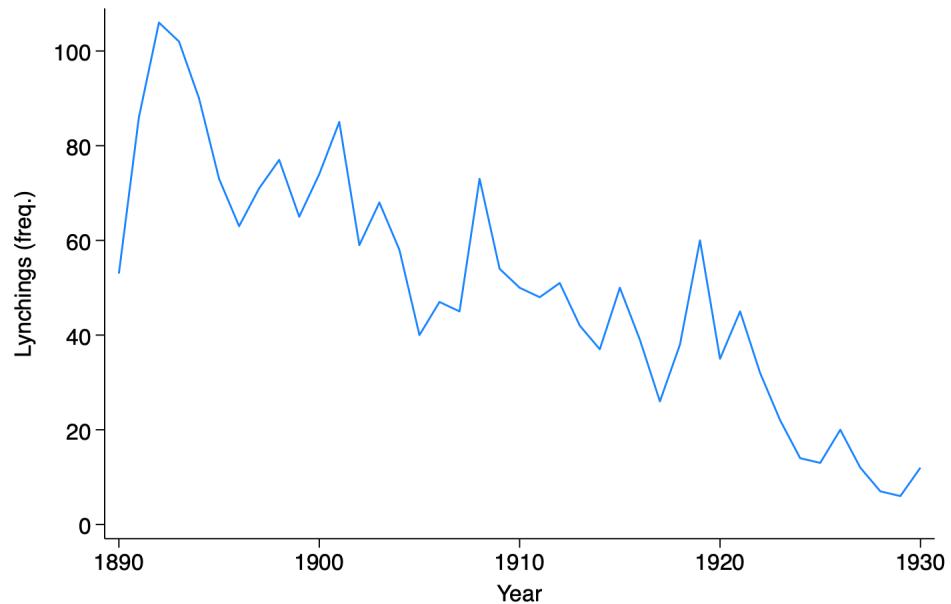
Note: Panel (a) shows the Black population of northern cities in 1910 and 1930. Panel (b) shows the share of northern migrants between 1910 and 1930 by destination city.

Figure A.3: Southern Growth of NAACP and Decline of Lynchings

(a) Share of Southern Counties with an NAACP Branch

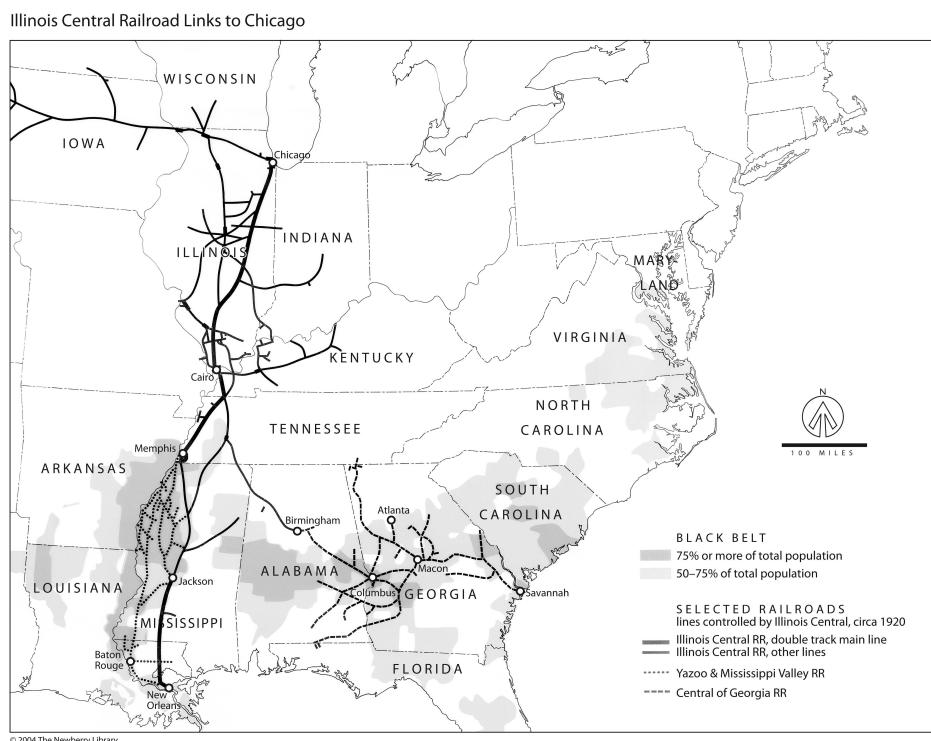


(b) Lynchings over Time



Note: Panel (a) shows the share of southern counties with an NAACP branch by year. Panel (b) shows the number of lynchings in southern states by year.

Figure A.4: Illinois Central Railroad



Note: Illinois Central railroad including its subsidiaries, the Yazoo & Mississippi RR and the Central of Georgia RR. Source: Grossman (2004).

Figure A.5: Chicago Defender Article on Pullman Porters

RAILROAD MEN GREAT HELP TO CHICAGO DEFENDER

Porters and Waiters Among the
Most Active in Extending Its
Circulation—They Circle the
Globe and the Paper Goes with
Them.

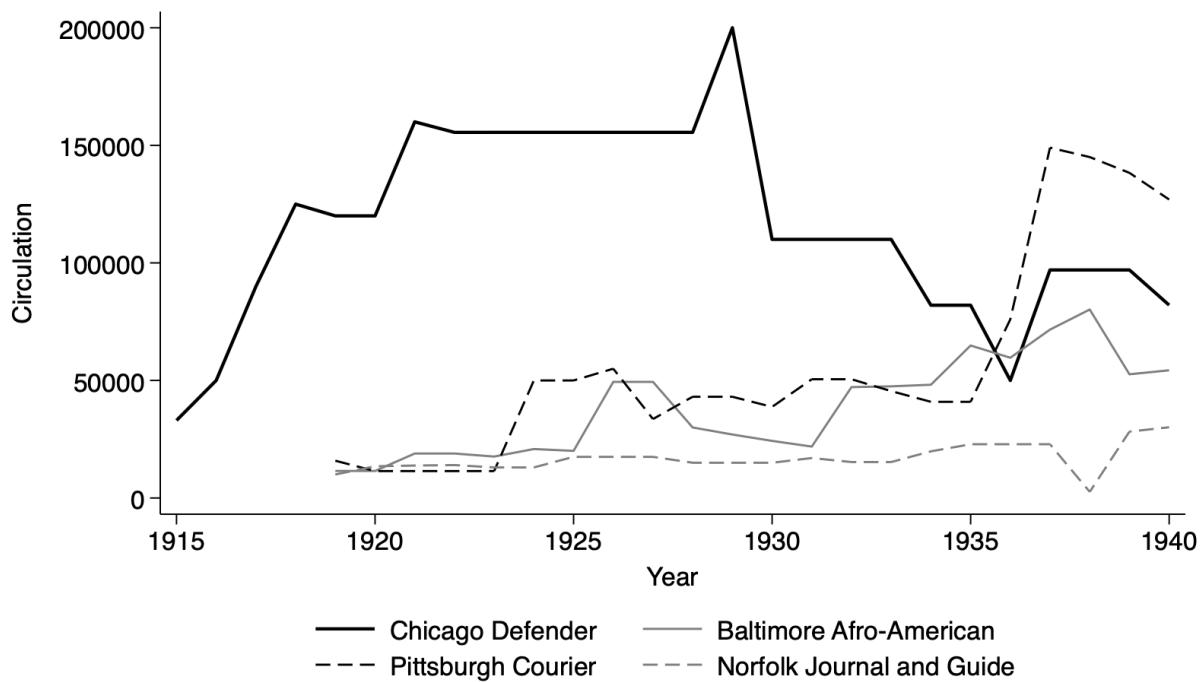
STAGE FOLK HELP, TOO.

Singers, Dancers and Footlight Artists
of All Kinds Advertise the World's
Greatest Weekly Wherever They Go
—People Are Proud of Paper.

The Chicago Defender goes everywhere. Railroad porters and waiters, and men traveling on private cars, going to all parts of the country from Chicago, take a Chicago Defender with them, leave one in every town or city, and urge someone to become a subscriber, agent or representative. By fixture in the most important centers of the United States. The railroad men circle the globe, and the Chicago Defender goes with them. Stage folk help circulate the paper also, for no artist, be he dancer, singer or musician, ever forgets to advertise the Defender when he is away from home.

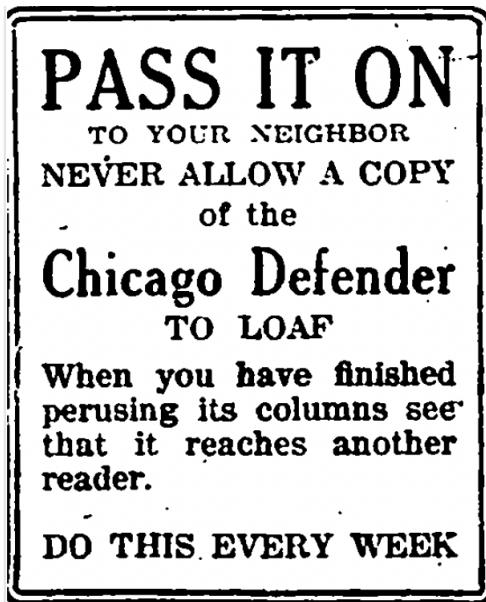
Note: February 13, 1915 issue of Chicago Defender. From ProQuest Historical Newspapers: Chicago Defender database.

Figure A.6: Circulation of Chicago Defender and Competitors



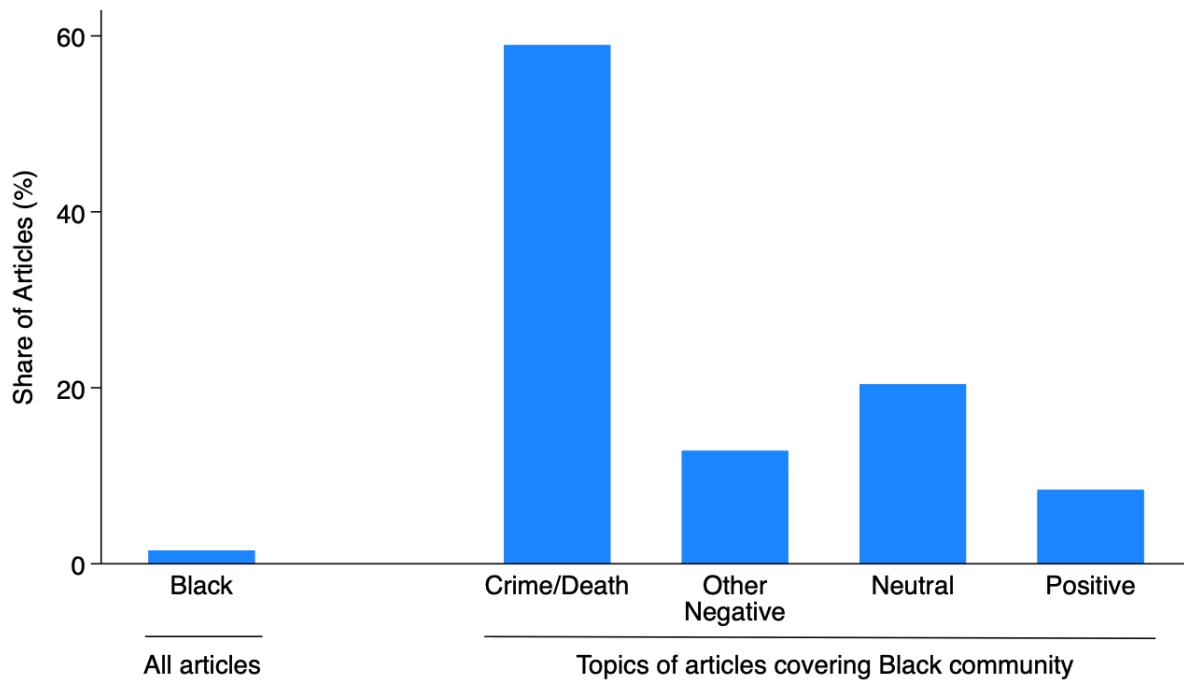
Note: Circulation from 1915 to 1940 for the Chicago Defender and its competitors: the Pittsburgh Courier, Baltimore Afro-American, and Norfolk Journal and Guide. Circulation data from 1919 to 1940 are from N.W. Ayer & Son's American newspaper annual and directory, which first admitted Black newspapers in 1919. Chicago Defender circulation estimates from 1915 to 1918 are from Grossman (1985). I exclude the Amsterdam News, a New York newspaper that concentrated on New York readership, and the NAACP's monthly Crisis magazine, which targeted highly-educated Black and sympathetic White readers, for display purposes (Jordan, 2001; Haywood, 2018). Amsterdam News and Crisis averaged 34,000 and 21,000 subscribers from 1919 to 1940.

Figure A.7: Chicago Defender Promotion of Shared Copies



Note: March 18, 1922 issue of Chicago Defender. From ProQuest Historical Newspapers: Chicago Defender database.

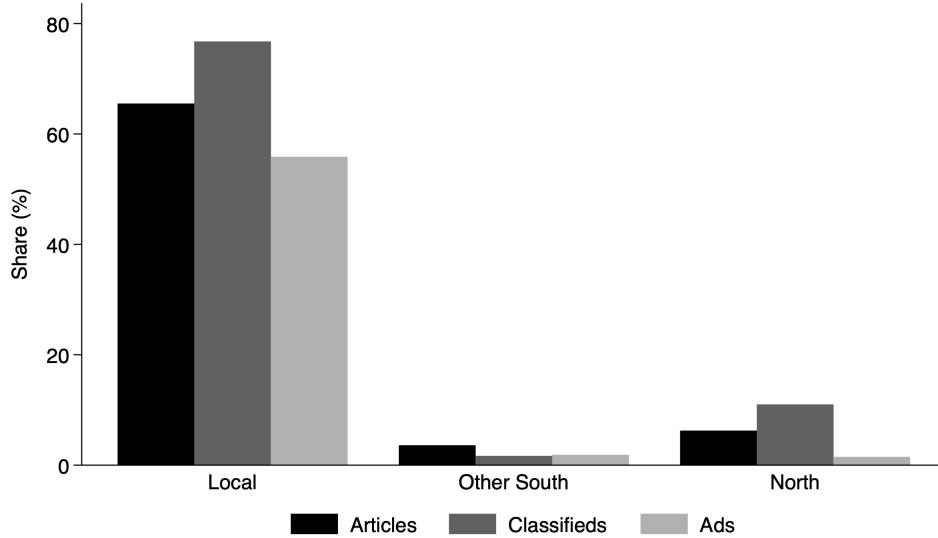
Figure A.8: Coverage of Black Community in Southern White Newspapers



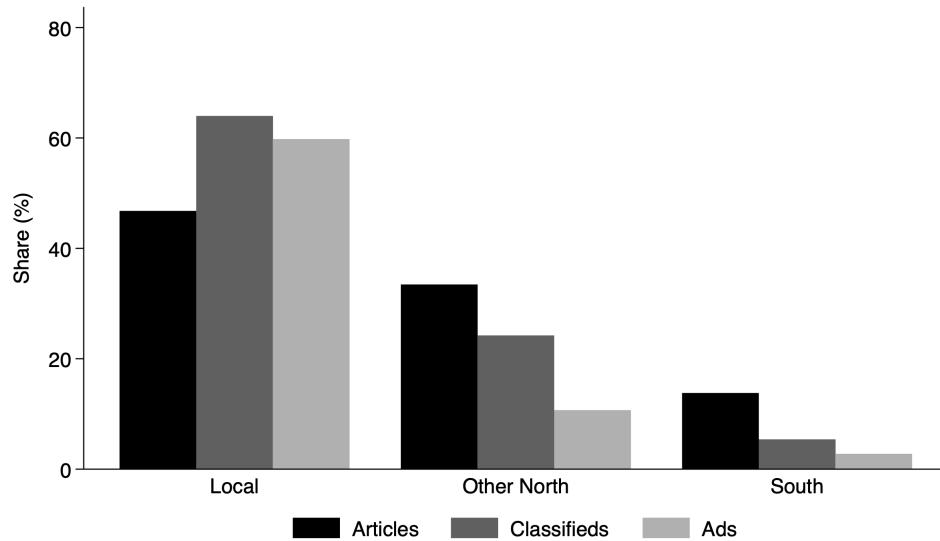
Note: Column (1) reports the share of articles that covered the Black community. Columns (2)–(5) report the topics of articles on the Black community. Southern White newspapers are from the Library of Congress' Chronicling America collection. I examine 3,448 issues from 1910 to 1919. Articles on the Black community are identified through a keyword search. Topics are classified for a 1% sample of articles using Claude's Sonnet 4 large language model.

Figure A.9: Geographic Coverage of Southern Black Newspapers and Chicago Defender

(a) Southern Black Newspapers

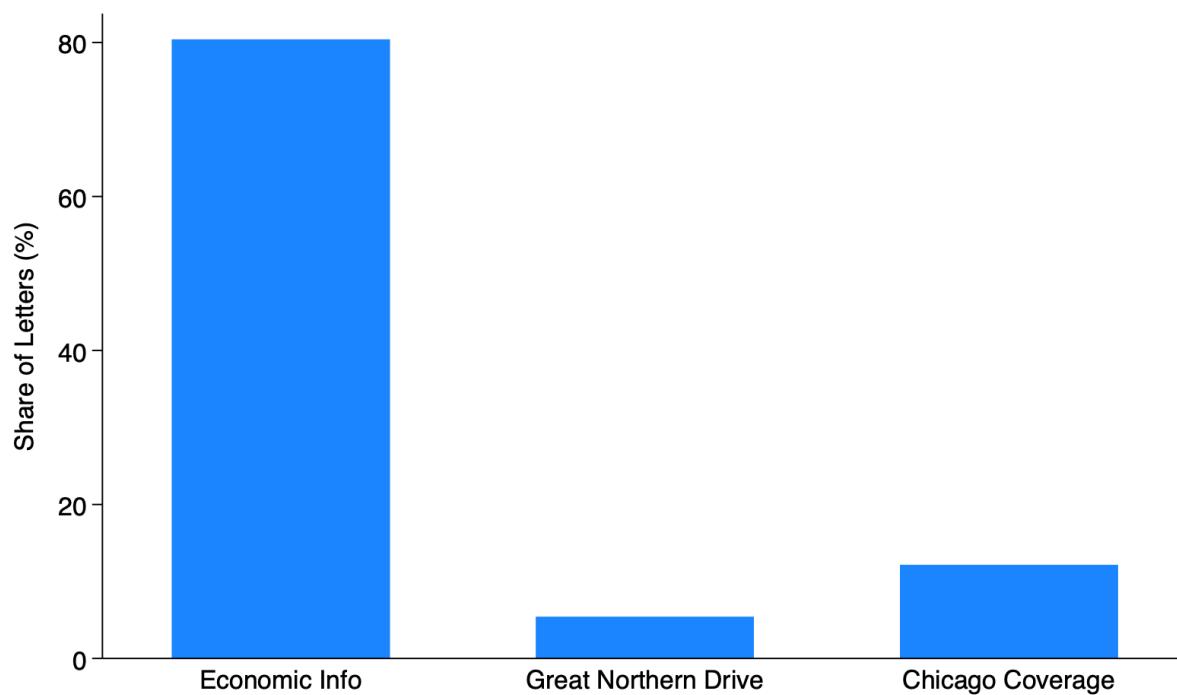


(b) Chicago Defender



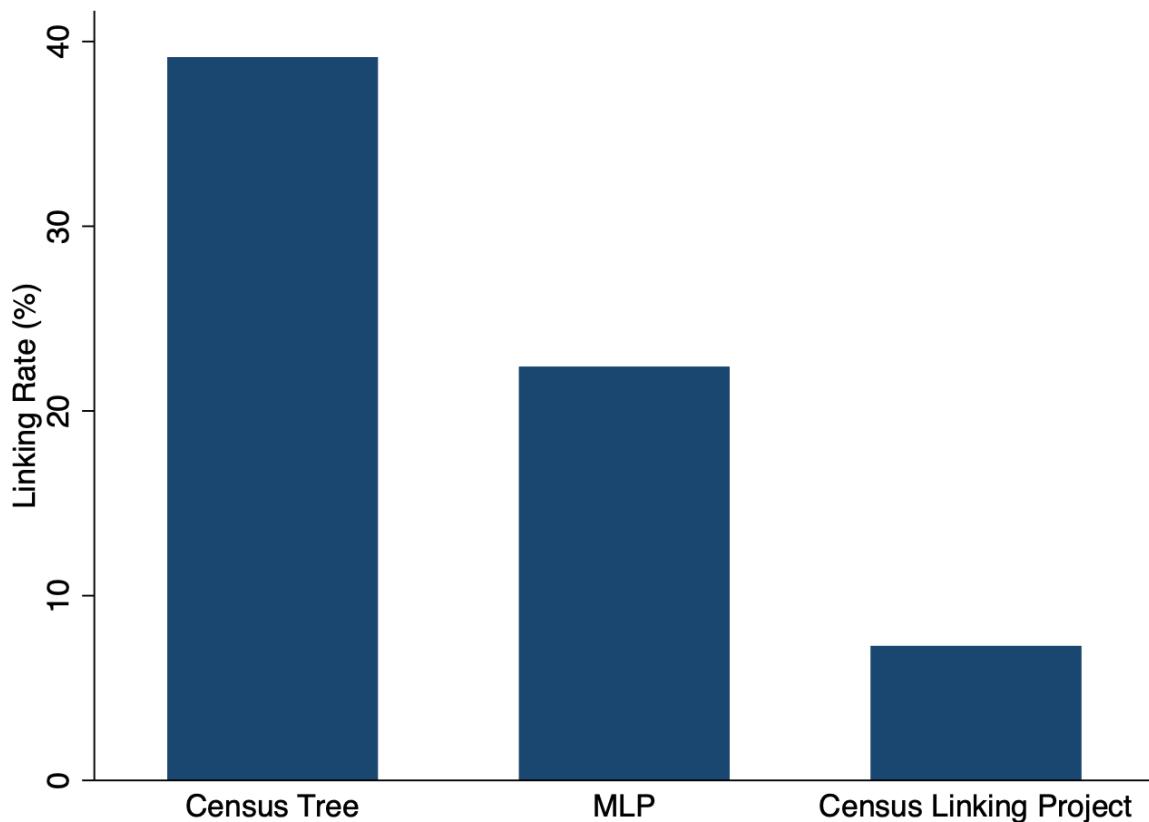
Note: Panel (a) shows the share of articles, classified ads for jobs and housing, and product ads in southern Black newspapers that cover the newspaper's local state, the rest of the South, and the North. Panel (b) shows the share of articles, classifieds, and ads in the Chicago Defender that cover Illinois, the rest of the North, and the South. Southern newspapers are from the Library of Congress' Chronicling America collection. Chicago Defender issues are from ProQuest. I examine 150 southern Black newspaper issues and 48 Chicago Defender issues in 1918. Topics are classified using Claude's Sonnet 4 large language model.

Figure A.10: Mechanisms in Letters of Chicago Defender Readers



Note: I examine the text of 148 letters of southern Chicago Defender readers collected by Emmett Scott, Special Assistant to the Secretary of War, from 1916 to 1918 (Scott, 1919a,b). Letters were primarily sent to the Chicago Defender and Chicago Urban League. I report the share of letters that reference (1) Chicago Defender wanted ads, partnership with the Urban League, and other economic information, (2) the Great Northern Drive mass migration event organized by the Chicago Defender, and (3) Chicago Defender coverage of Chicago in connection with northern migration.

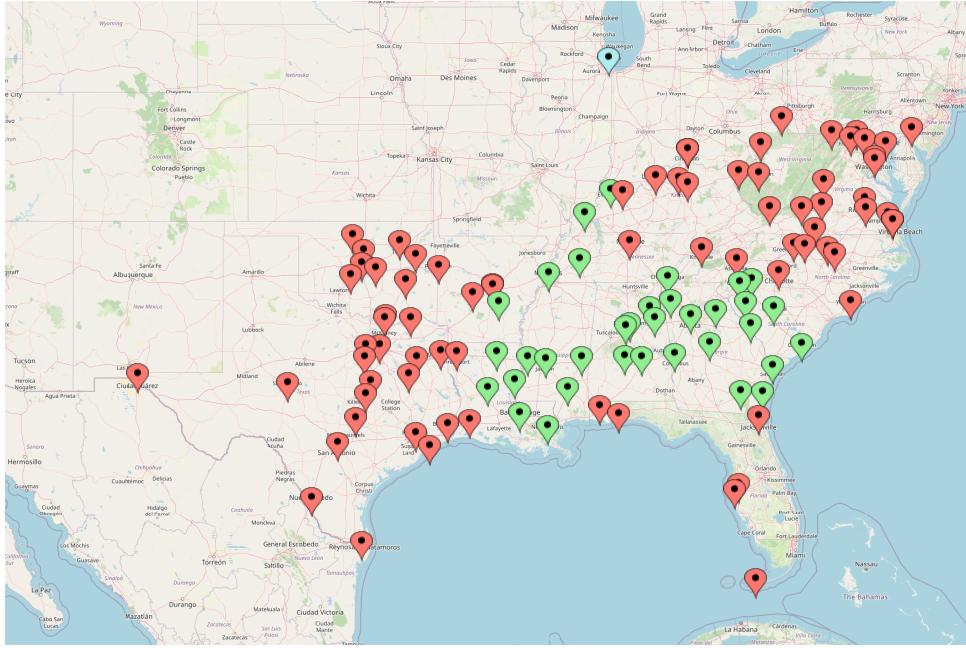
Figure A.11: Linking Rate by Method



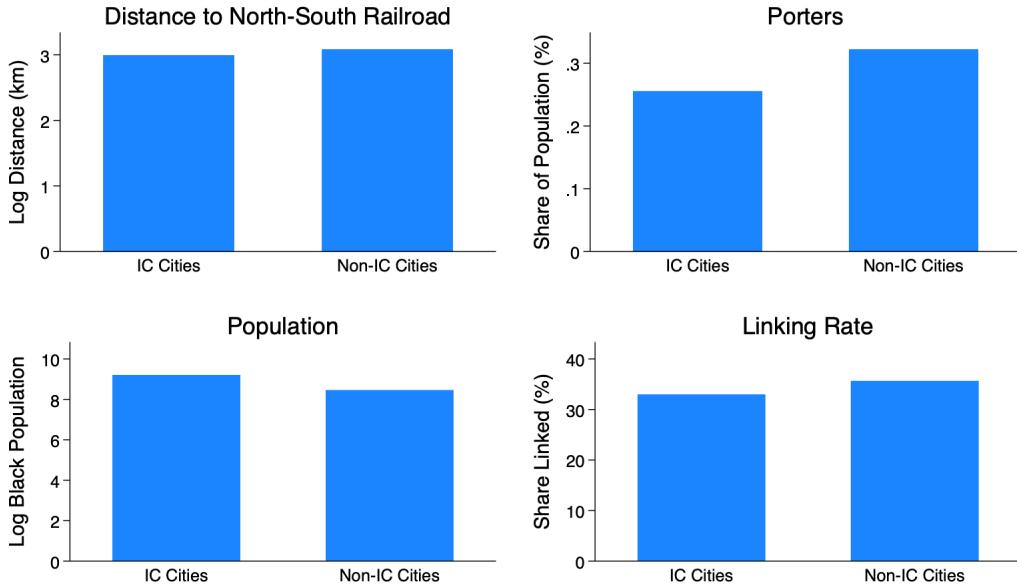
Note: Census linking rates for Black southerners from 1910 to 1920 using Census Tree, Multigenerational Longitudinal Panel (MLP), and Census Linking Project crosswalks (Buckles et al., 2023; Price et al., 2021; Helgertz et al., 2022; Abramitzky et al., 2022). Census Linking Project only links men. Census Tree and MLP link both men and women.

Figure A.12: Illinois Central Cities

(a) Map of Illinois Central Cities

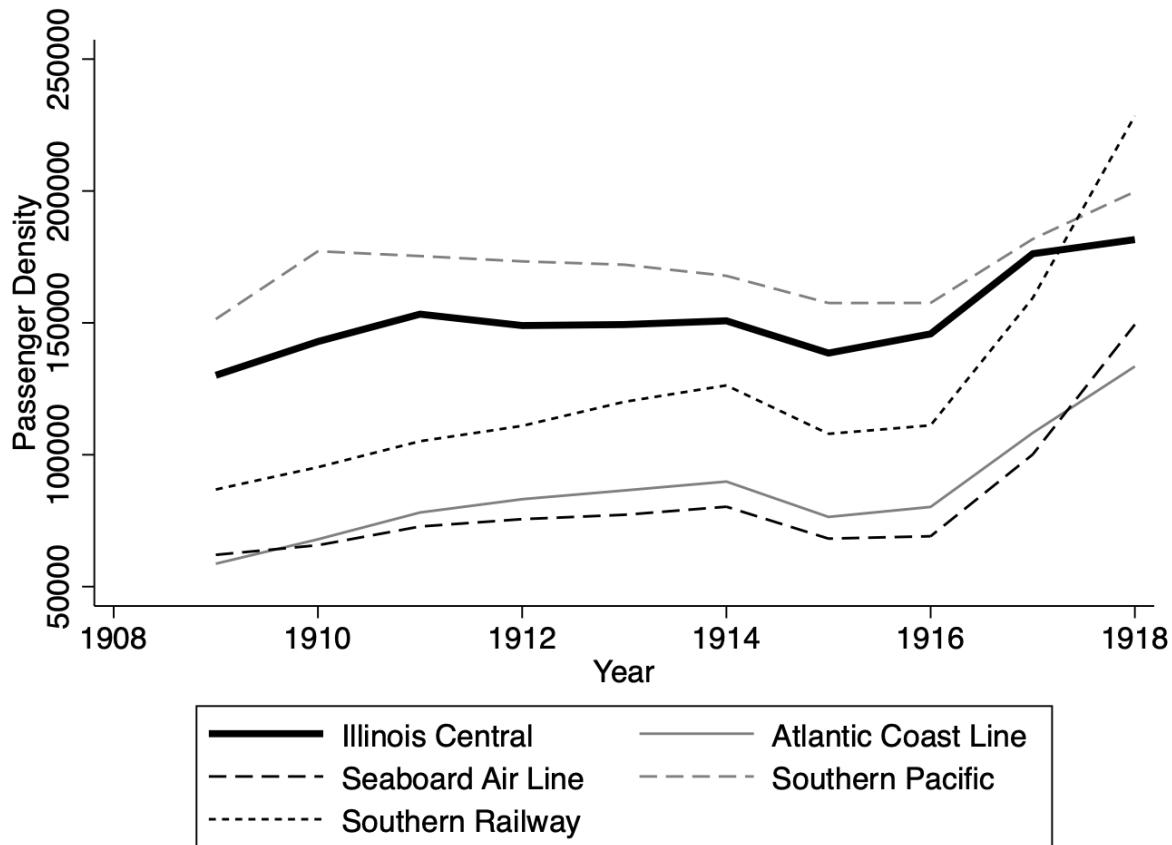


(b) City Characteristics



Note: Panel (a) maps Illinois Central cities in green (light), defined as within 150km (90mi) from the nearest Illinois Central track. Other southern cities are in red (dark). Panel (b) compares the characteristics of Illinois Central and other southern cities: log distance to a north-south railroad, share of the city's population that were railway porters, log Black population, and Census linking rate. For Illinois Central cities, I measure distance in kilometres to the nearest Illinois Central track. For other cities, I measure distance to the nearest track of the Pennsylvania Railroad, Southern Railway, Southern Pacific Railroad, Atlantic Coast Line, or Seaboard Air Line. All cities were directly along at least a minor railroad.

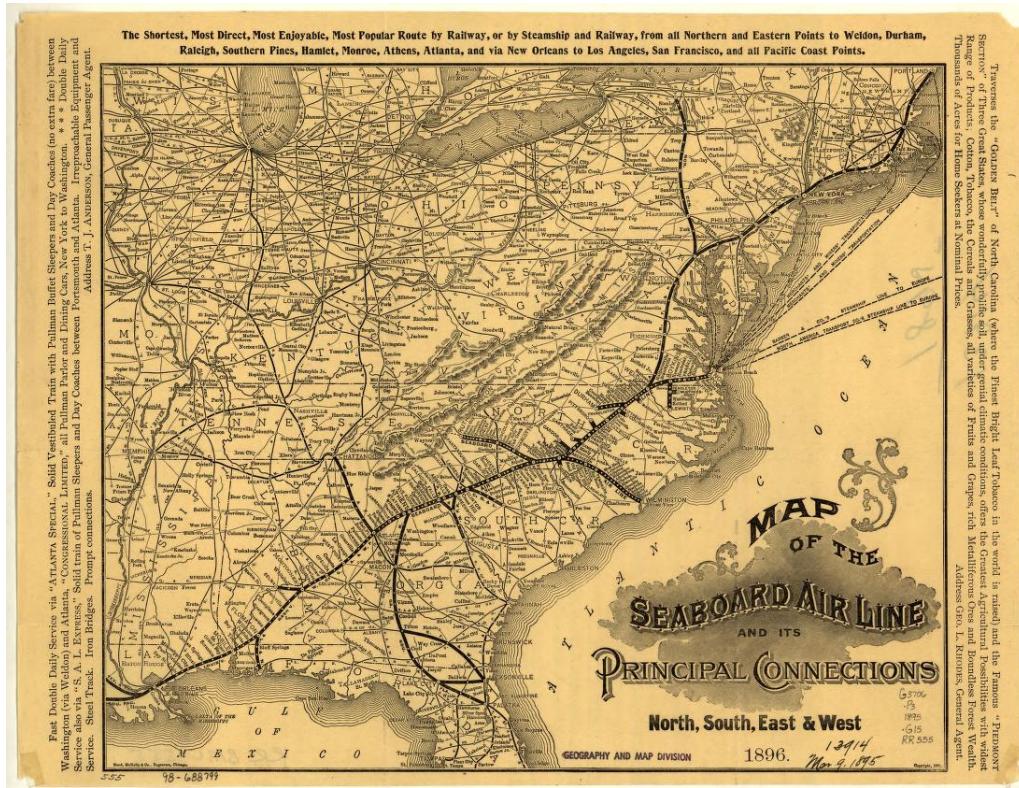
Figure A.13: Passenger Density by Railroad



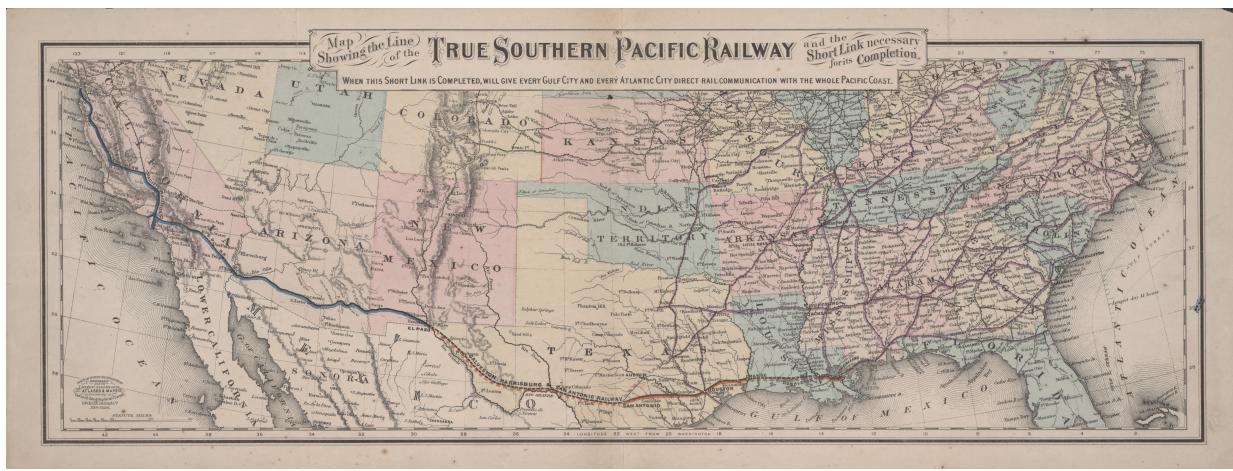
Note: Passenger density by railroad for the Illinois Central and competitor north-south railroads. Passenger density is defined as the number of passengers carried one mile per mile of road per the 1919 Moody's Manual of Investments Part I: Steam Railroads, made available by Hathi Trust. For display purposes, I omit the Pennsylvania Railroad, which had more than double the passenger density of the next highest railroad, the Southern Pacific.

Figure A.14: Competitor North-South Railroads

(a) Seaboard Air Line

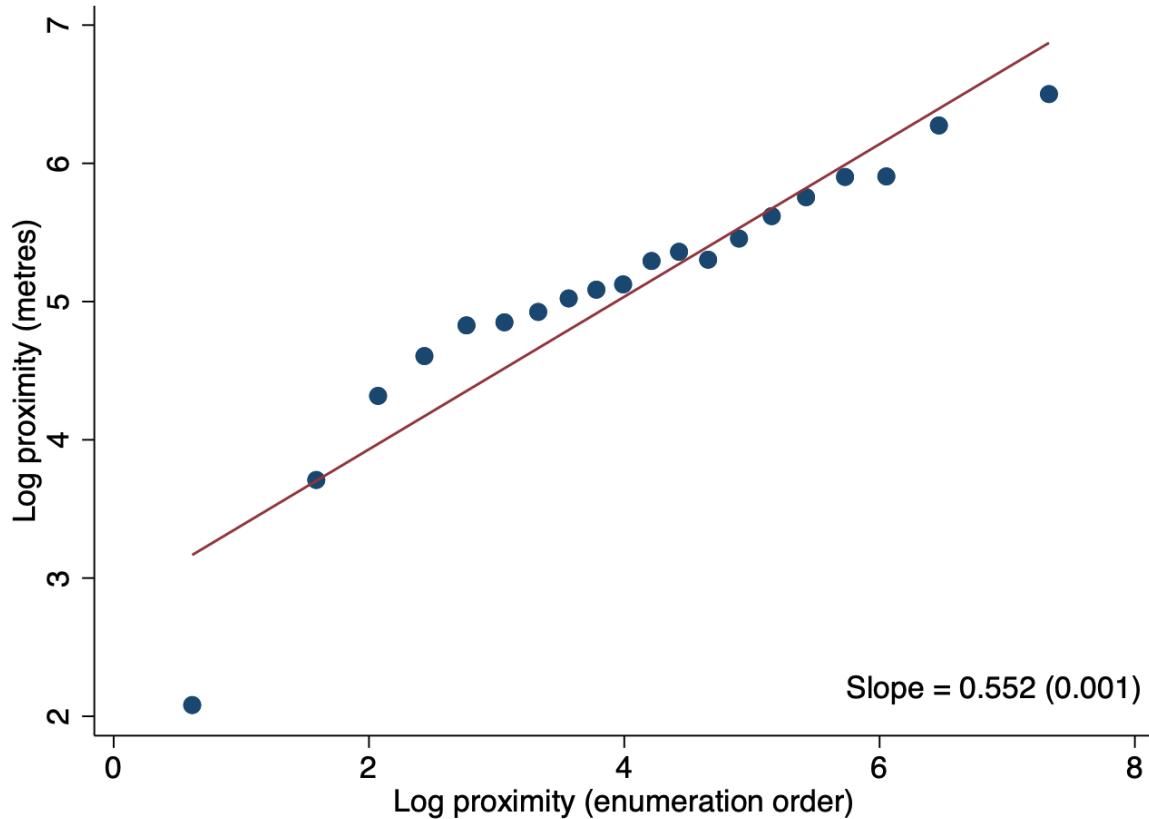


(b) Southern Pacific



Note: Maps of the Seaboard Air Line in 1896 and Southern Pacific Railroad in 1881. From the Library of Congress and University of Texas at Arlington Libraries Special Collections.

Figure A.15: Correlation of Proximity Measures



Note: Correlation between log proximity to a railway porter in enumeration order (x-axis) and metres (y-axis). I geocode processed addresses from Logan et al. (2024) for southern cities with a total population exceeding 30,000 and a Black population of at least 1,000. I am able to geocode roughly 50% of addresses. Geocoding rates are likely to be much lower in small cities.

Figure A.16: Chicago Defender 1918 Shipping Manifest

12-DEFENDER

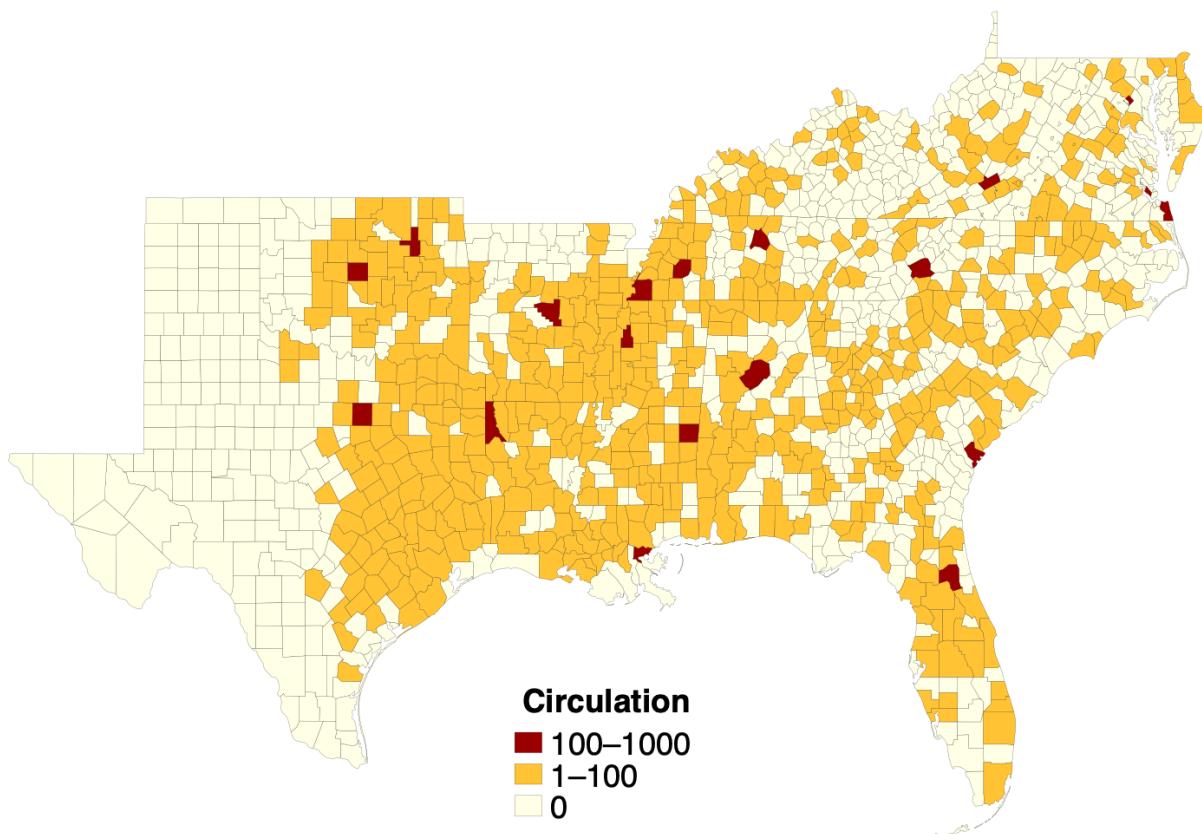
B1

C

A	B1—CHI & KAN CITY	C—CHI & LOUISV'LE
	TR 17 LV 10:30 PM	TR 3 LV 9:00 PM
A—ATLANTA & SAVANNAH TR 4 GA LV 9:05PM	Morton Mrs John 414 Rosewood av 3-8-28	G W Waters 9-22-19 Staple & Fancy Gro Eurell Muin 8-8-10
Ward Mrs S A 3-8-20	George Slater 3-9-19	R F D 2
Mrs Sallie A Ward College St 10-14-18	672 Fifth Av AURORA ILL	Bible J A RFD 3-15-20 R F D 1,
Mary E Comer 12-7-19	AURORA ILL	Allensville Ky
135 Brooklyn Ave FORSYTHE GA	Mis Josephine Callon 758 S Holton st 7-6-19	ALLENSVILLE KY
FORSYTH GA	Rev JH Harrison 2-1-20	Mary A Wright
Hoard J R 6-15-19 R C Box 91	893 W Thomplins St H E Smith 7-11-19	Box 35 10-19-19 Mis Francis Cooper
James Evans 2-15-20 R B Box 24	218 S Whitesboro St GALESBURG ILL	4-12-20 Kildav Ky
Miss Hattie L Ogletree RB Box 209 2-15-20	GALESBURG ILL GALESBURG ILL	KILDAV KY
RGMurphy 7-15-19 R G Murphy 6-15-19 P O Box 268	Mre Lela Talliferro 6-9-19 104 N Adams St	Ophelia M Wilson 1506 Adam St 12-22-19

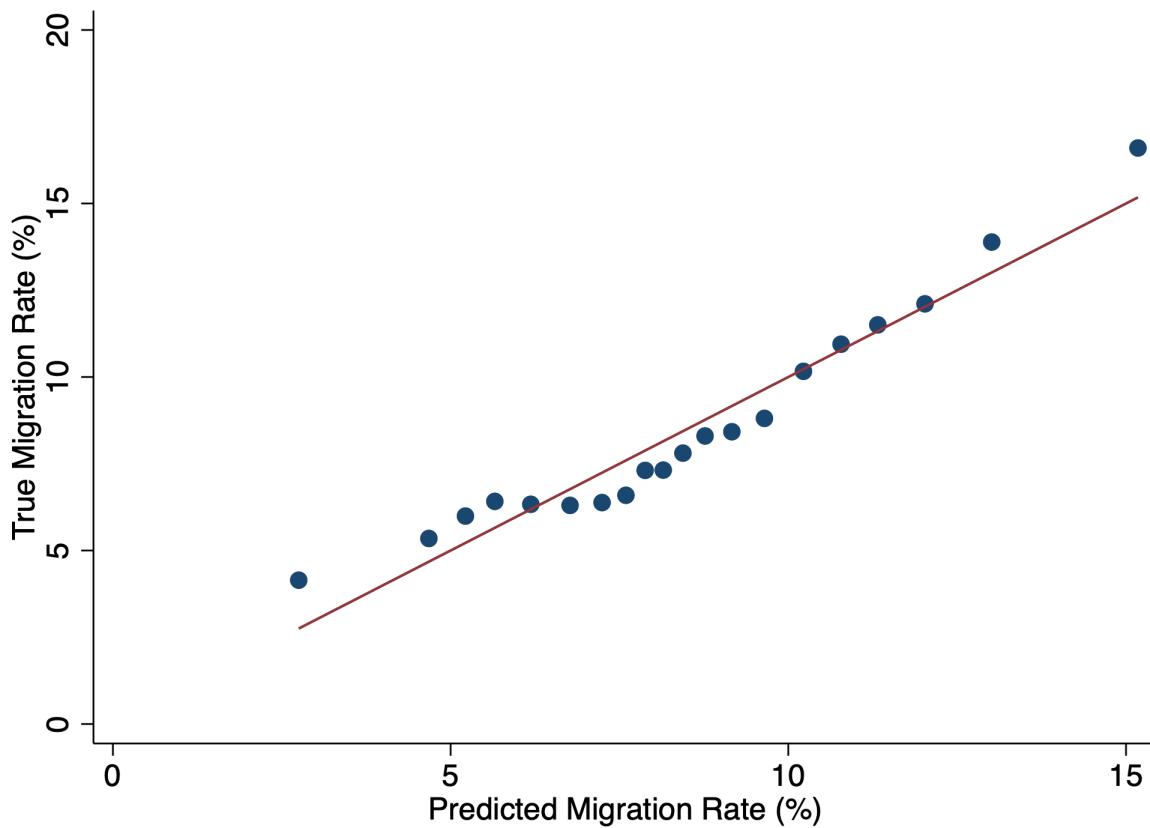
Note: Excerpt from 96-page shipping manifest listing Chicago Defender mail subscribers in 1918. From 1919 Department Intelligence Report (Kornweibel Jr., 1986).

Figure A.17: Chicago Defender Southern Circulation by County



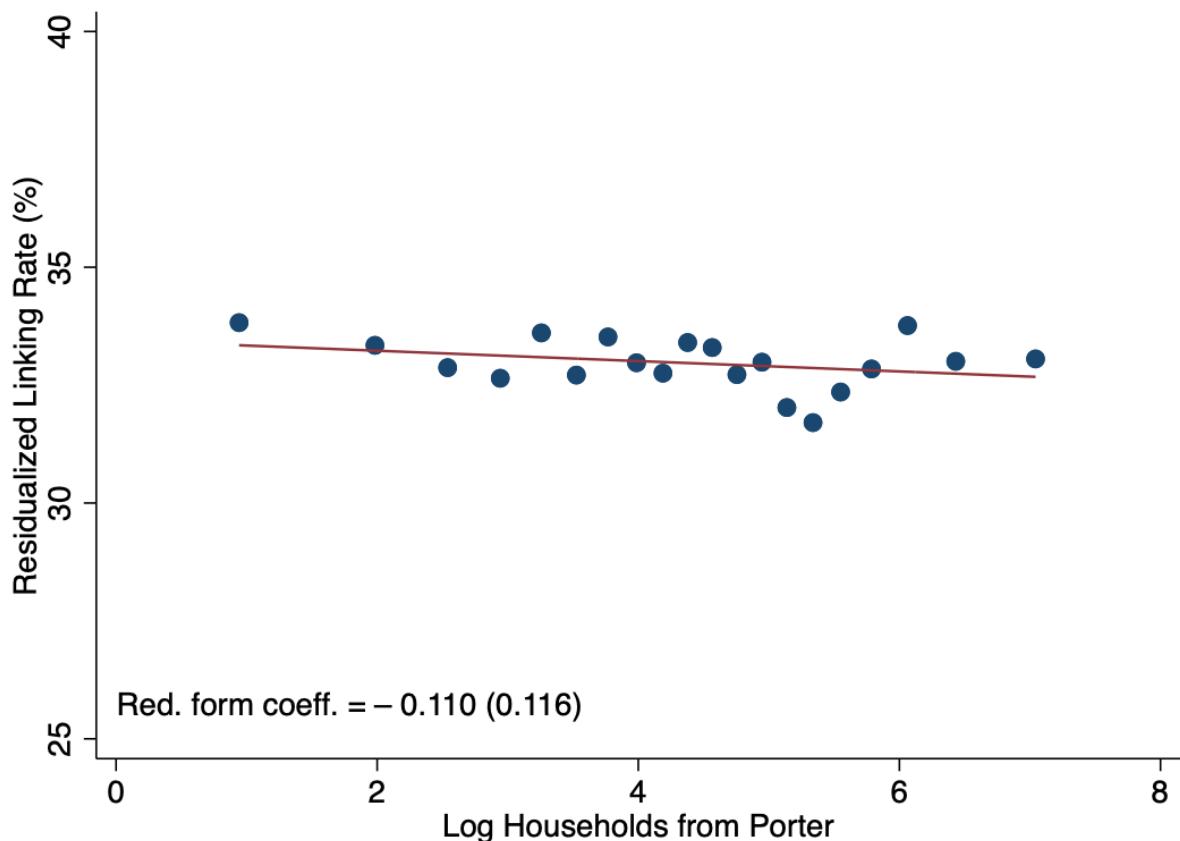
Note: Chicago Defender mail subscriber circulation in the 1918 shipping manifest across southern counties.

Figure A.18: Correlation between Predicted and Observed Migration



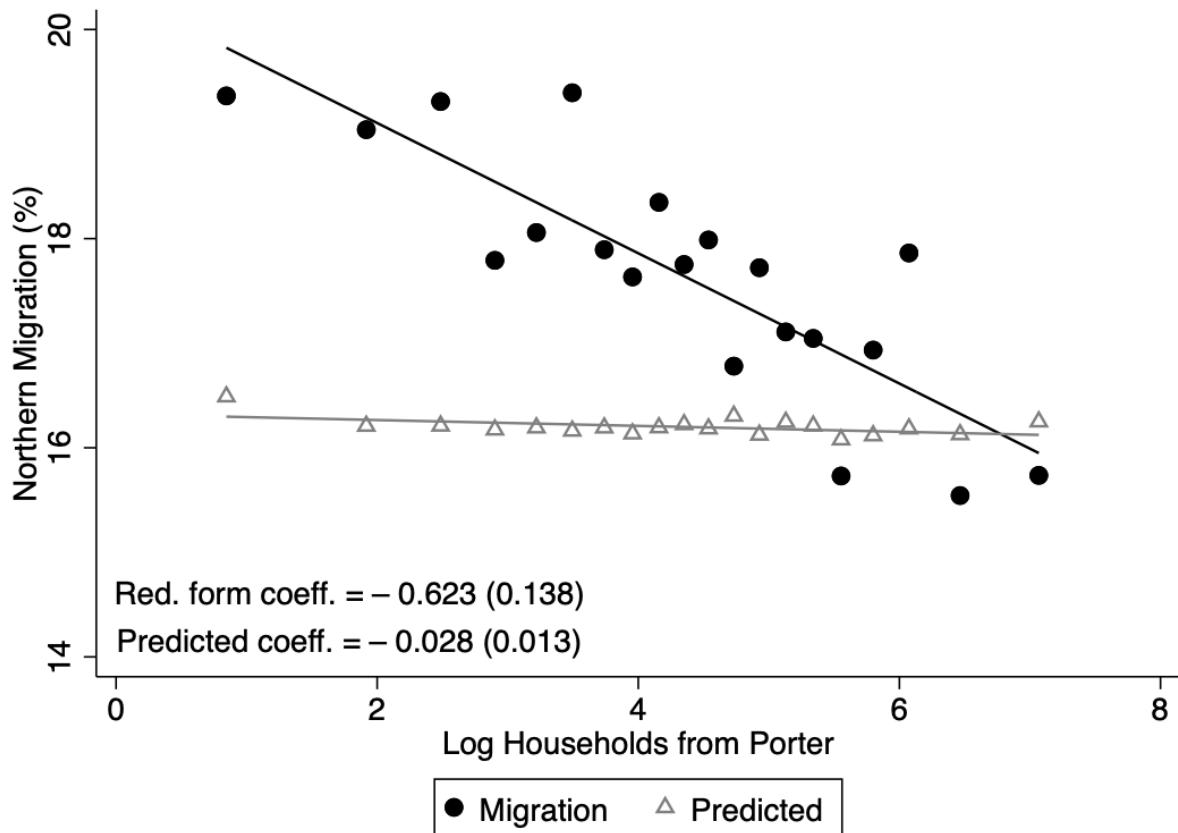
Note: Binned scatter plot of the relationship between observed northern migration and individuals' predicted likelihood of migrating based on 1910 Census characteristics. Observed migration is an indicator for whether a Black individual who lived in the South in 1910 migrated north by 1920. Predicted measure predicts migration using school enrollment, home ownership, gender, year of birth, marital status, literacy, labour force status, occupation, and city FE.

Figure A.19: Effect of Proximity to Porter on Census Linking Rate



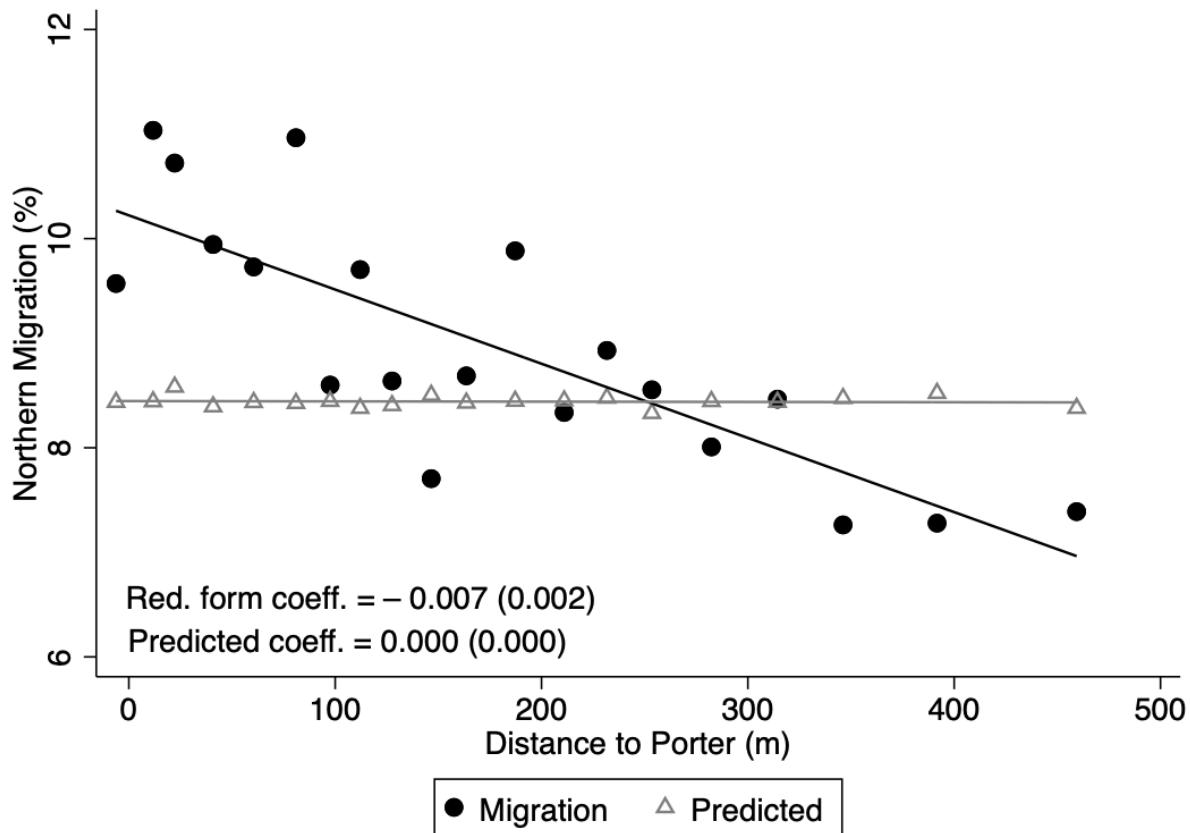
Note: Binned scatter plot of the relationship between the Census linking rate and log residential proximity to the nearest railway porter in Illinois Central cities, where porters sold the Chicago Defender. Outcome is an indicator for whether a Black individual who lived in the South in 1910 was linked to the 1920 Census. I control for 1910 Census characteristics and include city FE. Controls include school enrollment, home ownership, gender, year of birth, marital status, literacy, labour force status, and occupation. Proximity is measured by difference in Census enumeration order.

Figure A.20: Effect of Proximity to Porter on Northern Migration by 1930



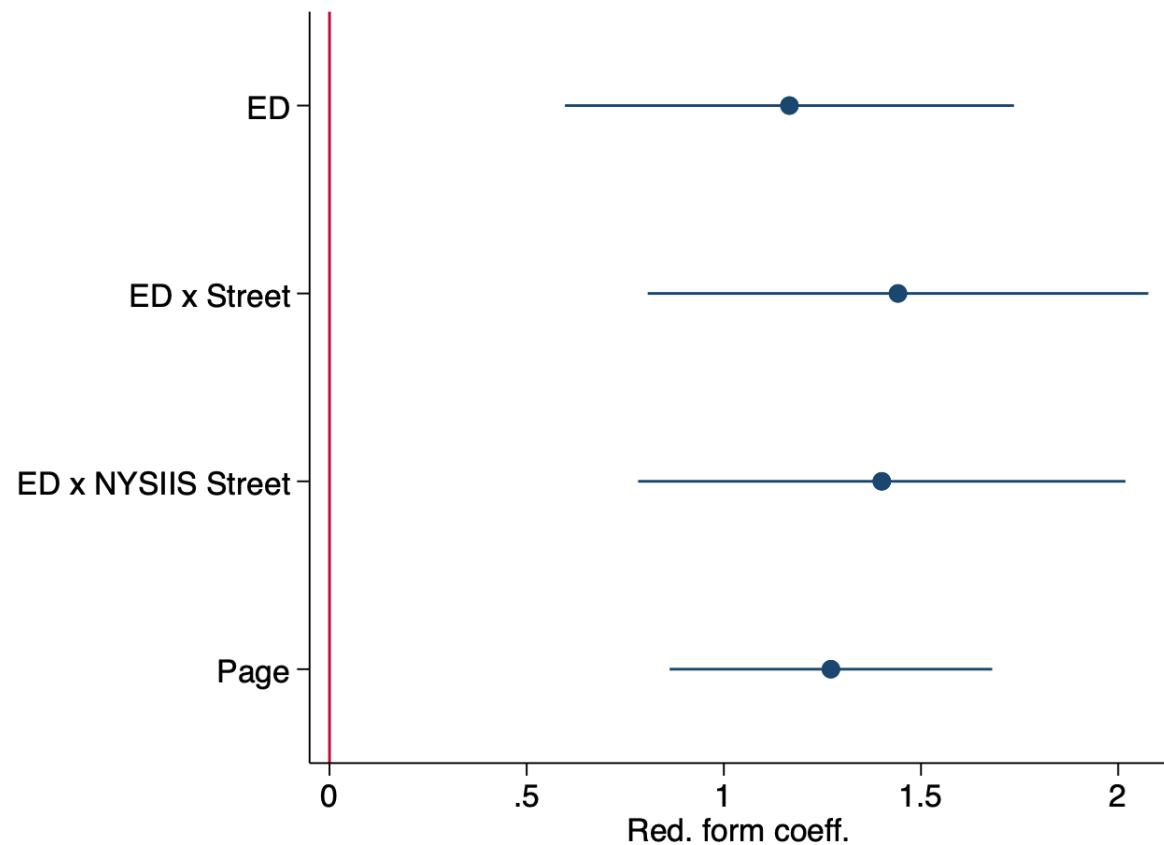
Notes: Binned scatter plot of the relationship between northern migration by 1930 and log residential proximity to the nearest railway porter in Illinois Central cities in 1910, where porters sold the Chicago Defender. Observed series (black) defines migration as an indicator for whether a Black individual who lived in the South in 1910 migrated north by 1930. Predicted series (grey) predicts migration using 1910 Census characteristics and city FE. I include school enrollment, home ownership, gender, year of birth, marital status, literacy, labour force status, and occupation. Proximity is measured by difference in Census enumeration order. Regressions include city FE.

Figure A.21: Effect of Proximity to Porter in Metres on Northern Migration



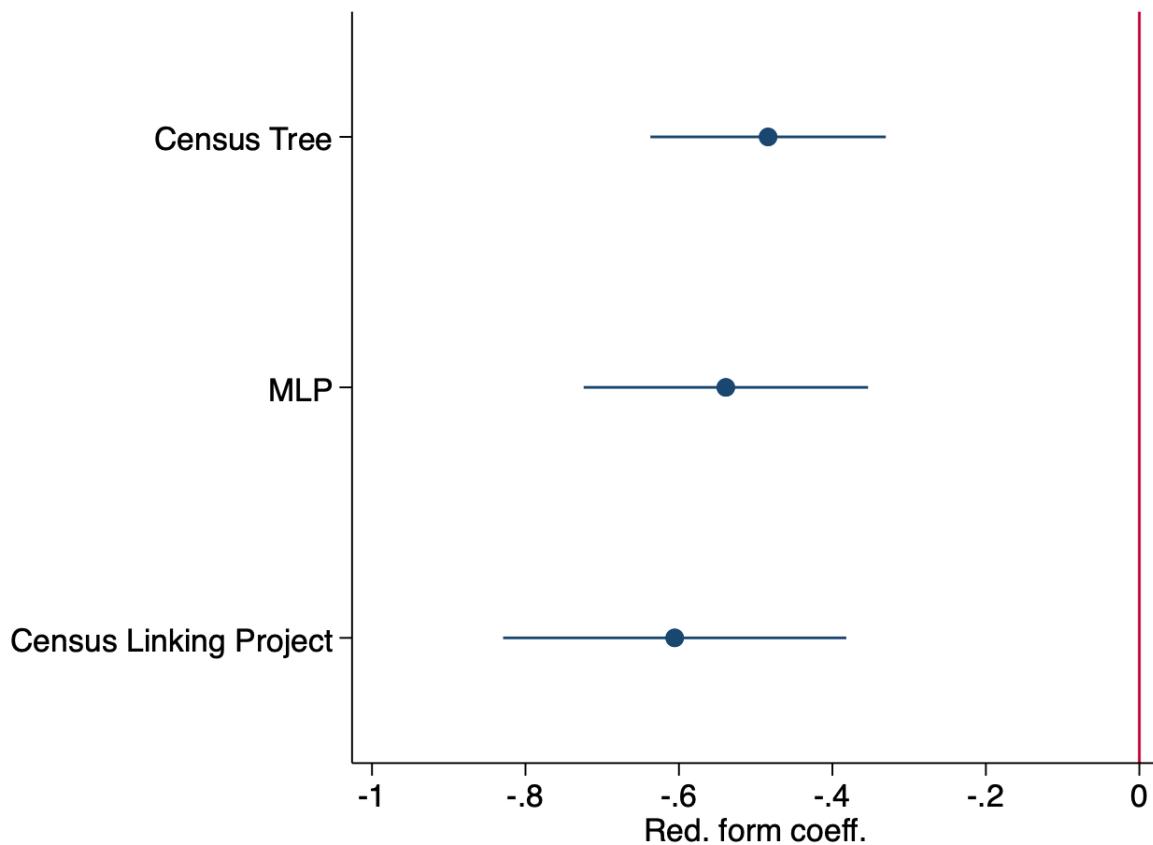
Note: Binned scatter plot of the relationship between northern migration and distance in metres to the nearest railway porter in Illinois Central cities, where porters sold the Chicago Defender. I restrict to individuals within 500m (0.3mi) from a porter. Observed series (black) defines migration as an indicator for whether a Black individual who lived in the South in 1910 migrated north by 1920. Predicted series (grey) predicts migration using 1910 Census characteristics and city FE. I include school enrollment, home ownership, gender, year of birth, marital status, literacy, labour force status, and occupation. I geocode processed addresses from Logan et al. (2024) for southern cities with a total population exceeding 30,000 and a Black population of at least 1,000. I am able to geocode roughly 50% of addresses. Regressions include city FE.

Figure A.22: Effect of Alternate Measures of Proximity to Porter on Northern Migration



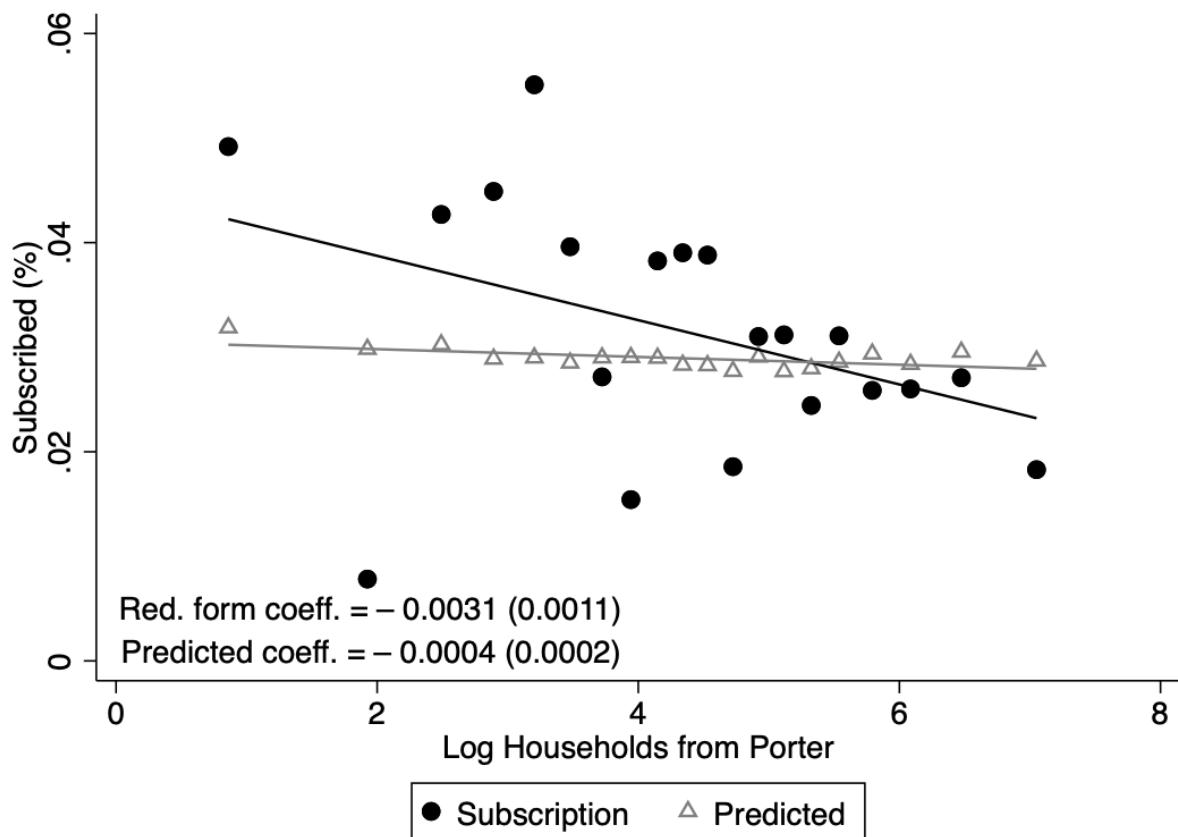
Note: Effect of binary measures of proximity to a porter selling the Chicago Defender on northern migration. Migration is an indicator for whether a Black individual who lived in the South in 1910 migrated north by 1920. Rows are indicators for whether an individual lived in the same enumeration district, same enumeration district and street, same enumeration district and street using NYSIIS phonetic codes, or was recorded on the same microfilm page as a porter. The sample includes individuals in Illinois Central cities where porters sold the Chicago Defender. Regressions include city FE and cluster standard errors at the city-level.

Figure A.23: Effect of Proximity to Porter on Northern Migration, by Linking Method



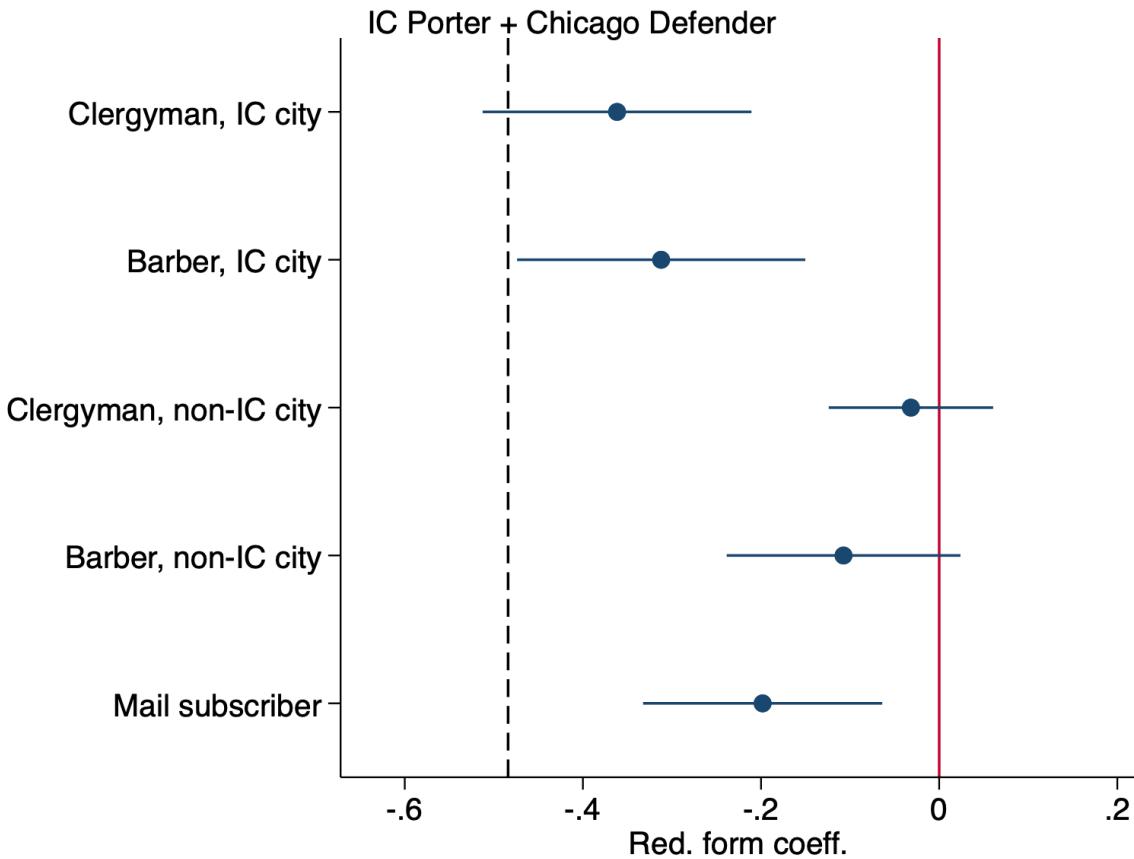
Note: Effect of log proximity to a porter selling the Chicago Defender on northern migration across linking methods. Migration is an indicator for whether a Black individual who lived in the South in 1910 migrated north by 1920. I link individuals in the 1910 Census to the 1920 Census using crosswalks from Census Tree, Multigenerational Longitudinal Panel (MLP), and Census Linking Project. Census Linking Project only links men. Census Tree and MLP link men and women. The sample includes individuals in Illinois Central cities where porters sold the Chicago Defender. Proximity is measured by difference in Census enumeration order. Regressions include city FE and cluster standard errors at the city-level.

Figure A.24: Effect of Proximity to Porter on Chicago Defender Mail Subscription



Note: Binned scatter plot of the relationship between Chicago Defender mail subscription and log residential proximity to the nearest railway porter in Illinois Central cities, where porters sold the Chicago Defender. Observed series (black) defines subscription as an indicator for whether a Black individual who lived in the South in 1910 subscribed by mail in 1918. Predicted series (grey) predicts subscription using 1910 Census characteristics and city FE. I include school enrollment, home ownership, gender, year of birth, marital status, literacy, labour force status, and occupation. Proximity is measured by difference in Census enumeration order. Regressions include city FE.

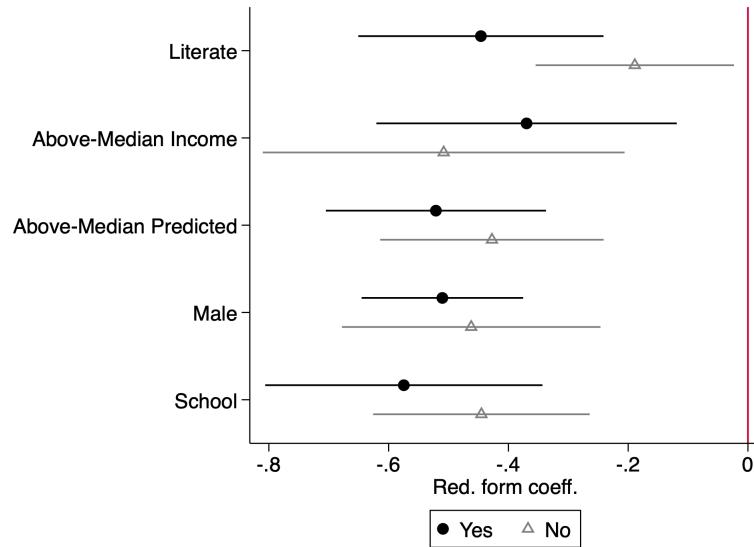
Figure A.25: Effect of Alternate Sources of Chicago Defender on Northern Migration



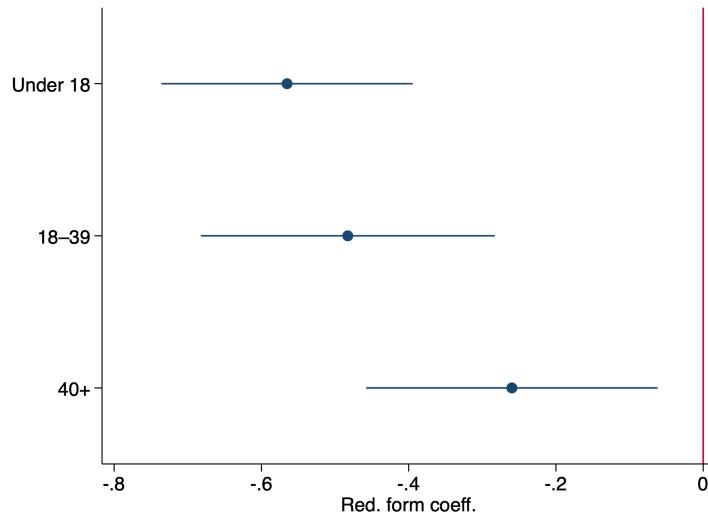
Note: Effect of log proximity to alternate sources of the Chicago Defender on northern migration. Rows (1)–(2) show clergymen and barbers in Illinois Central cities, where they had access to the Chicago Defender. Rows (3)–(4) show them in other southern cities for comparison. Row (5) shows Chicago Defender mail subscribers in all southern cities. Migration is an indicator for whether a Black individual who lived in the South in 1910 migrated north by 1920. Proximity is measured by difference in Census enumeration order. Regressions include city FE and cluster standard errors at the city-level. Dashed line represents the effect of proximity to a porter selling the Chicago Defender.

Figure A.26: Effect of Proximity to Porter by Individual Characteristics

(a) By Individual Characteristics

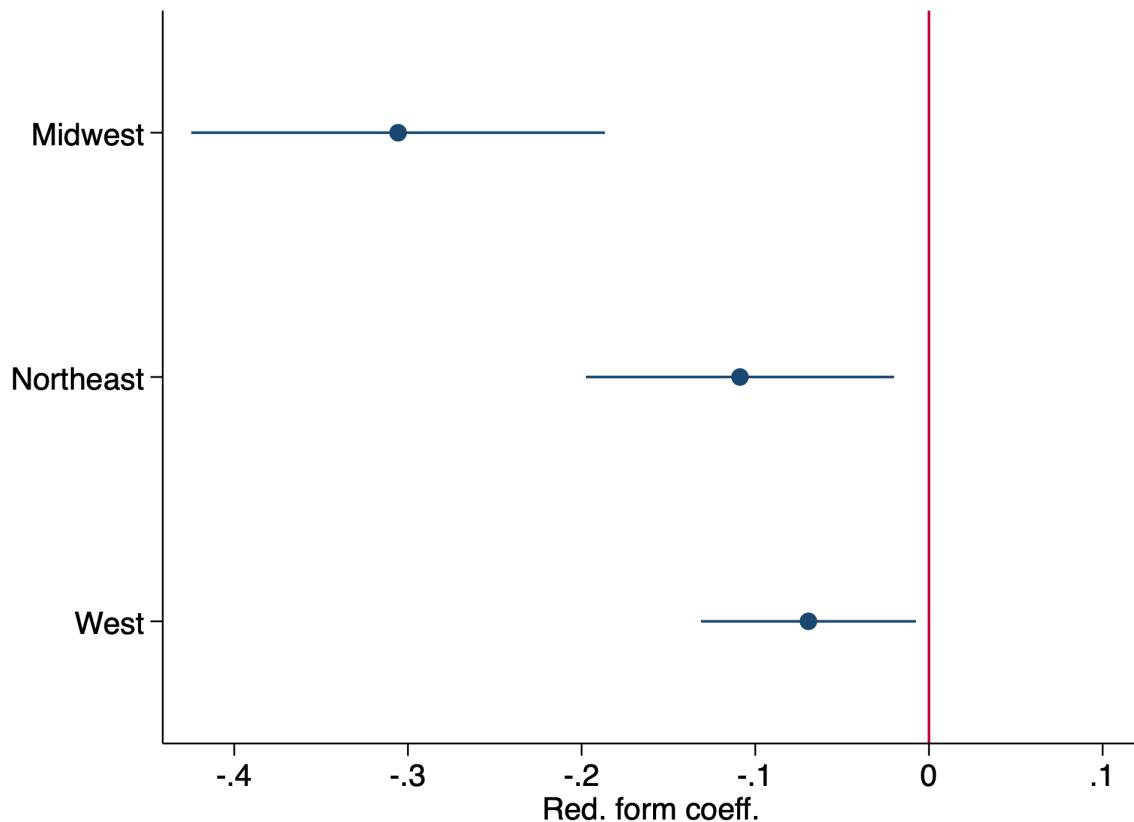


(b) By Age



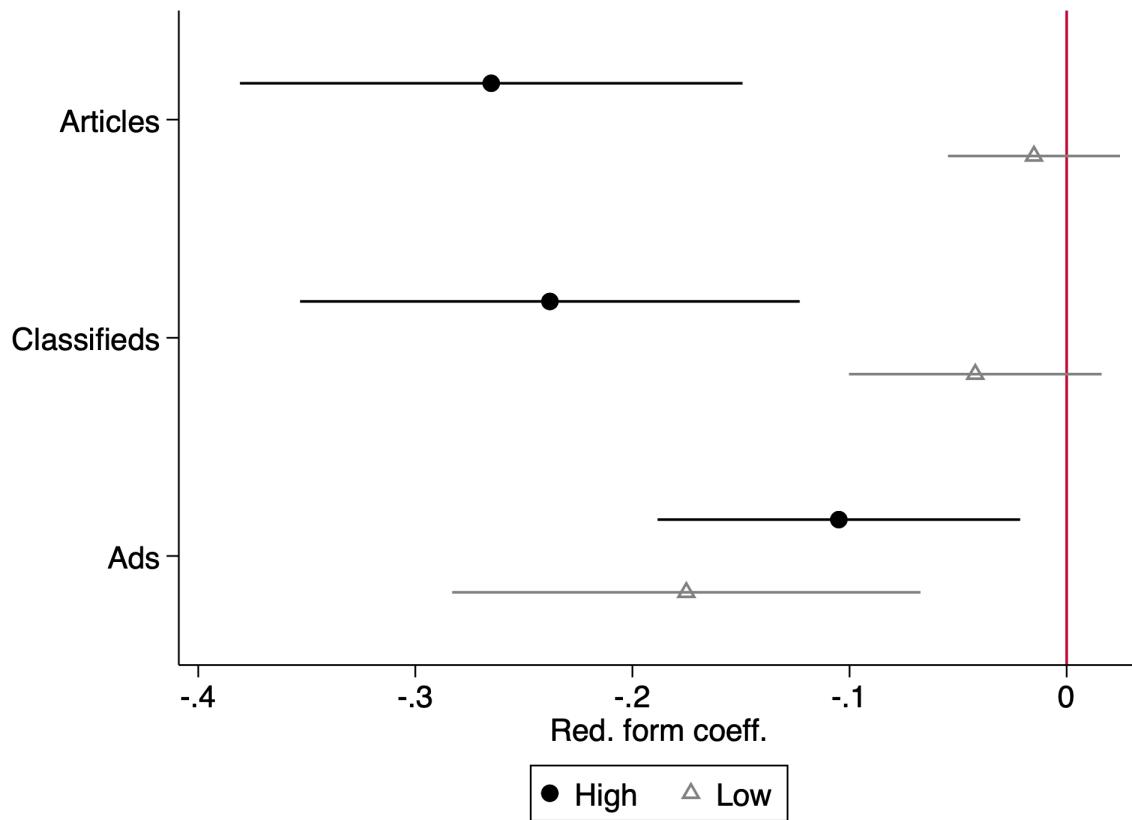
Note: Panel (a) shows the effect of proximity to a porter selling the Chicago Defender on northern migration, splitting the sample by individual characteristics. Row (1) splits by whether an individual reported being able to read and write in the 1910 Census. Row (2) splits by whether an individual had above- or below-median occupational income. Row (3) splits by whether an individual had above- or below-median predicted likelihood of migrating based on 1910 Census characteristics. Row (4) splits by gender. Row (5) splits by whether an individual was in school. Panel (b) splits the sample by age: under 18, 18-39, and over 40. Migration is an indicator for whether a Black individual who lived in the South in 1910 migrated north by 1920. The sample includes individuals in Illinois Central cities where porters sold the Chicago Defender. Proximity is measured by difference in Census enumeration order. Regressions include city FE and cluster standard errors at the city-level.

Figure A.27: Effect of Proximity to Porter on Northern Migration, by Region



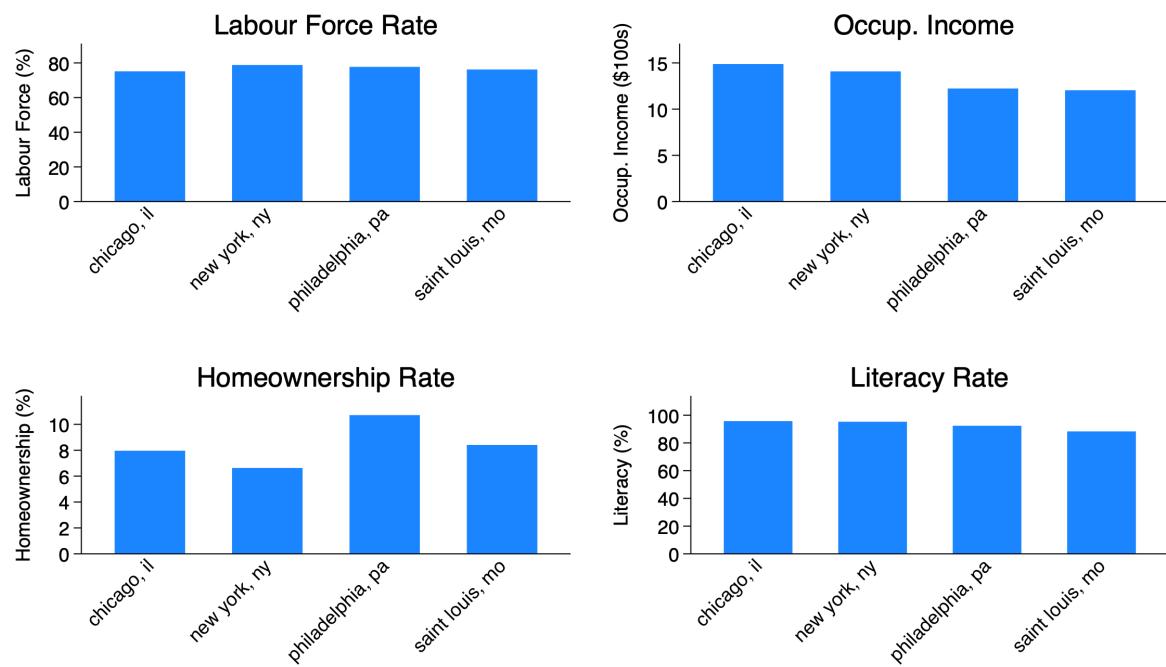
Note: Effect of log residential proximity to a porter selling the Chicago Defender on northern migration by region. Outcome is an indicator for whether a Black individual who lived in the South in 1910 lived in a non-southern region in 1920. The sample includes individuals in Illinois Central cities where porters sold the Chicago Defender. Proximity is measured by difference in Census enumeration order. Regressions include origin city FE and cluster standard errors at the origin city-level.

Figure A.28: Effect of Proximity to Porter by Mentions in Chicago Defender, Residualized



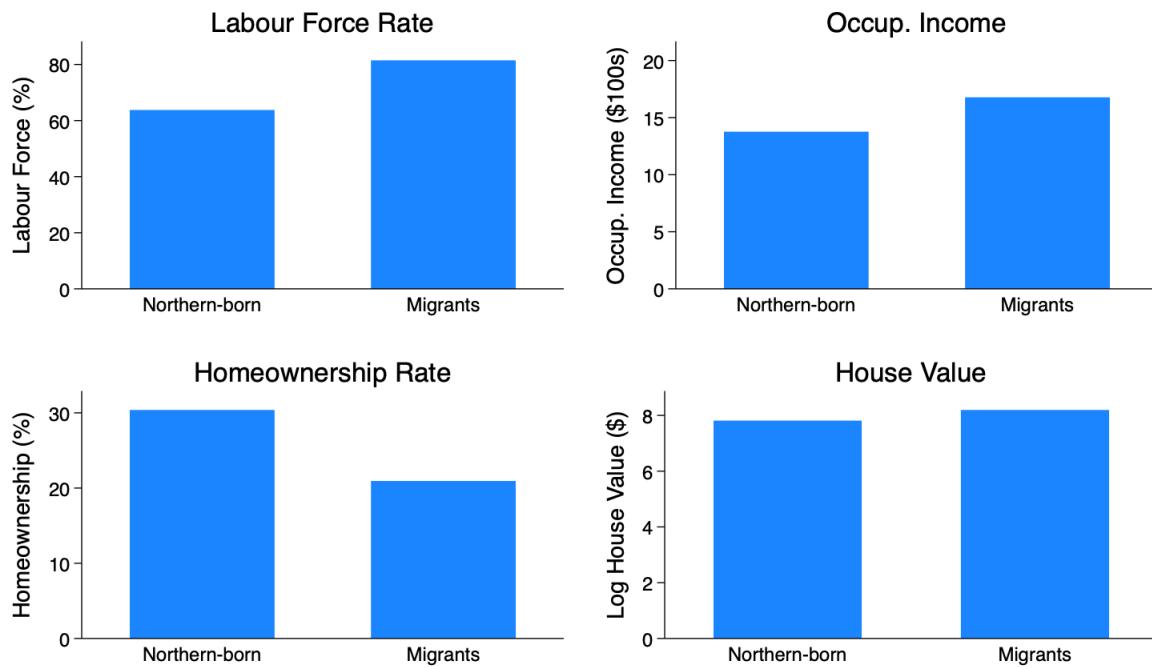
Note: Effect of log proximity to a porter selling the Chicago Defender on migration to destinations with more or less coverage in the Chicago Defender. Because larger cities received more coverage, I residualize the log number of mentions for each city on its 1910 log Black population. Outcome is an indicator for whether individuals moved to a northern city that received above- or below-median residualized mentions in Chicago Defender articles, classified ads for jobs and housing, and product ads. I exclude Chicago, which received the most migrants and mentions. Proximity is measured by difference in Census enumeration order. Regressions include origin city FE and cluster standard errors at the origin city-level.

Figure A.29: Demographics of Chicago vs. Northern Cities Pre-Great Migration



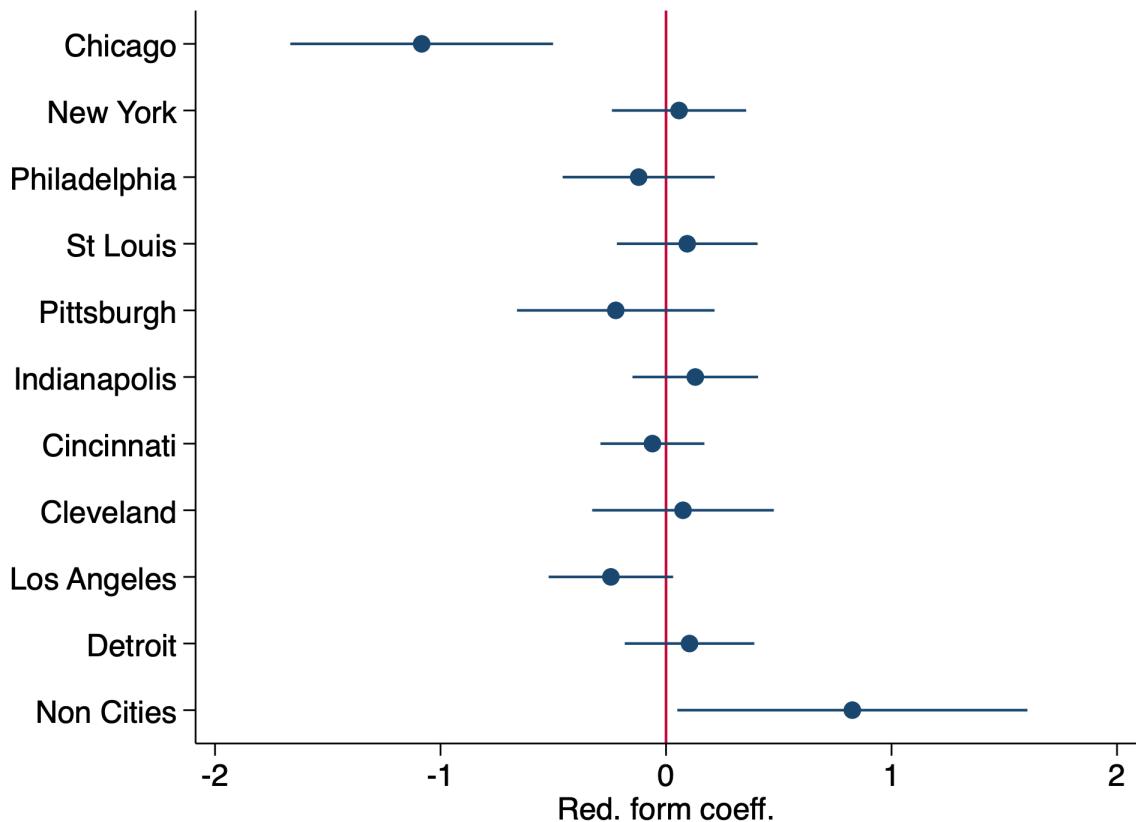
Note: Demographics of Chicago compared to the other three largest northern cities in 1910: New York, Philadelphia, and St. Louis.

Figure A.30: Northern Economic Outcomes for Migrants vs. Northern-Born



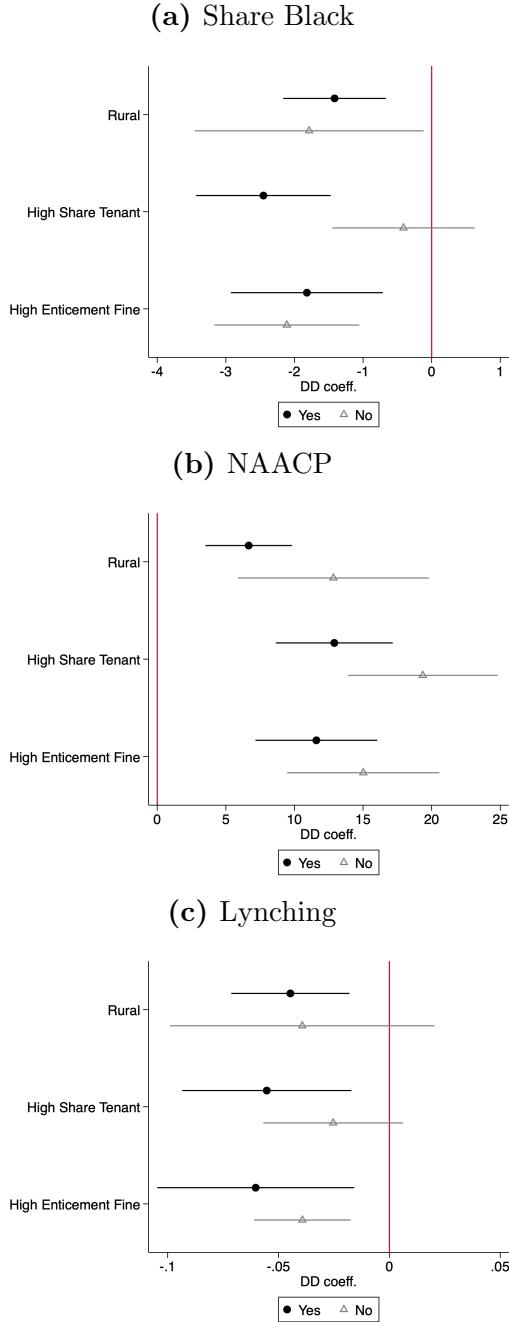
Note: Economic outcomes of migrants compared to the northern-born Black population in cities in 1930.

Figure A.31: Effect of Proximity to Porter on Destination City, Conditional on Migrating



Note: Effect of log residential proximity to a porter selling the Chicago Defender on the destination of northern migrants. Outcome is an indicator for whether a Black migrant between 1910 and 1920 lived in a particular northern city. The sample includes migrants from Illinois Central cities where porters sold the Chicago Defender. Proximity is measured by difference in Census enumeration order. Regressions include origin city FE and cluster standard errors at the origin city-level.

Figure A.32: Effect of Chicago Defender by County Characteristics



Note: DD results splitting the sample by county characteristics. Outcome in Panel (a) is the county Black population share in a given decade. Outcome in Panel (b) is whether a county had an NAACP branch in a given 3-year interval. Outcome in Panel (c) is the number of lynchings in a county in a three-year interval. Predictor is an indicator for whether the county had access to the Chicago Defender in 1918, and whether the year is greater than or equal to 1918. Row (1) shows urban and rural counties. I define urban counties as having an urban Black population of at least 2,500, following the 1910 Census definition for urban areas. Row (2) shows counties with above- and below-median share of Black farms that used tenant farming. Row (3) shows counties in states with above- and below-median contract enticement fines in 1900, using data from Naidu (2010). Regressions include county and year FE, and cluster standard errors at the county-level.

Table A.1: Summary Statistics

	All (1)	Mail Subscribers (2)	Letter Writers (3)
<i>Demographics</i>			
Age	35.67	36.23	30.29
Male	0.50	0.73	0.88
Married	0.60	0.67	0.85
Any Children	0.71	0.70	0.67
Literate	0.61	0.78	—
In Labour Force	0.78	0.86	—
Occup. Income	6.91	8.64	—
Owns Home	0.27	0.37	—
<i>Occupation</i>			
Farmer	0.23	0.38	—
Farm Labourer	0.30	0.21	—
Labourer	0.13	0.15	0.10
Observations	4,799,542	2,395	148

Notes: Summary statistics of Chicago Defender readers. Column (1) describes the southern adult Black population in the 1910 Census. Column (2) describes the linked sample of 1918 Chicago Defender mail subscribers. I omit subscribers who were less than 18 years old as of the 1910 census. Column (3) describes self-identified Chicago Defender readers from letters collected by Emmett Scott from 1916 to 1918. Age and occupational income are averages. Other statistics are shares. Occupational income is in hundreds of 1950 dollars.

Table A.2: Predictors of Migration

	Northern Migration
In School	1.21*** (0.18)
Home Owner	-0.12 (0.26)
Female	-2.57*** (0.15)
Age	-0.15*** (0.01)
Married, Spouse Present	-0.74** (0.29)
Married, Spouse Absent	0.02 (0.26)
Divorced	2.68*** (0.65)
Widowed	0.54** (0.25)
Cannot Read, Can Write	-9.92*** (0.58)
Can Read, Cannot Write	0.16 (0.31)
Literate (Reads and Writes)	1.75*** (0.20)
In Labour Force	-1.23*** (0.37)
Observations	459,567
Number of Cities	112
Mean	0.09
City FE	✓
Occupation FE	✓

Standard errors in parentheses

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

Note: Linear probability model coefficients where the outcome is an indicator for whether an individual migrated north by 1920. The sample includes all southern Black individuals living in cities. Predictors are individual and household characteristics in the 1910 Census, including city and occupation FE. I cluster standard errors at the city-level.

Table A.3: Effect of Proximity to Porter on Predicted Migration

	Reduced Form Coefficients				
	LPM			Logit	Probit
	(1)	(2)	(3)	(4)	(5)
Log Hholds from Porter	-0.024** (0.010)	-0.021** (0.009)	-0.014 (0.008)	-0.020** (0.008)	-0.021** (0.008)
Observations	182,561	182,561	182,561	182,452	182,452
Number of Clusters	35	1,011	35	35	35
Mean	8.46	8.48	8.99	9.12	9.06
City FE	✓		✓	✓	✓
ED FE		✓			
Lasso Selected Covariates			✓		

Notes: Effect of log residential proximity to a porter selling the Chicago Defender on predicted migration based on 1910 Census characteristics. Outcome is individuals' predicted likelihood of migrating north between 1910 and 1920. Proximity is measured by difference in Census enumeration order. The sample includes individuals in Illinois Central cities where porters sold the Chicago Defender. Regressions include city FE and cluster standard errors at the city-level unless specified otherwise. I use the following characteristics to predict migration: school enrollment, home ownership, gender, year of birth, marital status, literacy, labour force status, and occupation. Column (1) shows my preferred specification predicting migration using a linear probability model. Column (2) includes enumeration district FE and clusters standard errors at the enumeration district-level. Column (3) selects predictors of migration using a Lasso regression. Column (4) predicts migration using a logit functional form. Column (5) uses a probit functional form.

Table A.4: Effect of Proximity to Porter in Metres on Northern Migration

	Reduced Form Coefficients		
	(1)	(2)	(3)
Distance to Porter (m)	-0.007*** (0.002)	-0.007** (0.002)	-0.007** (0.002)
Distance to Railway Junction (m)		-0.001 (0.212)	
Distance to Railway Junction or Depot (m)			0.041 (0.204)
Observations	50,975	44,076	45,734
Number of Cities	9	7	8
Mean	8.97	8.45	8.49
City FE	✓	✓	✓

Notes: Effect of distance in metres to a porter selling the Chicago Defender on northern migration. Migration is an indicator for whether a Black individual who lived in the South in 1910 migrated north by 1920. The sample includes individuals in Illinois Central cities where porters sold the Chicago Defender. I restrict to individuals within 500 metres from a porter. Regressions include city FE and cluster standard errors at the city-level. Column (1) shows the baseline specification. Column (2) controls for individuals' distance to the nearest major railway junction in a city. Column (3) controls for distance to either a major junction or minor railway depot. I geocode processed addresses from Logan et al. (2024) for southern cities with a total population exceeding 30,000 and a Black population of at least 1,000. I am able to geocode roughly 50% of addresses. Railway junction and depot shapefiles are from Thomas et al. (2006).

Table A.5: Effect of Proximity to Porter on Northern Outcomes

	Mean	Red. form coeffs.	
	(1)	(2)	(3)
<i>Individual Characteristics</i>			
Occup. Income (100s of dollars)	17.13	-0.05*	-0.01
		(0.03)	(0.03)
Own Radio (p.p.)	39.18	-0.94**	-0.94**
		(0.41)	(0.40)
Married (p.p.)	66.95	0.25	0.35
		(0.30)	(0.24)
In Labour Force (p.p.)	77.89	-0.09	-0.07
		(0.16)	(0.14)
Return South (p.p.)	24.08	0.59	0.59*
		(0.36)	(0.35)
<i>Dwelling Characteristics</i>			
Home Owner (p.p.)	22.65	-0.40*	-0.29
		(0.23)	(0.21)
Log Rent (dollars)	3.39	-0.02***	-0.01**
		(0.01)	(0.01)
Log House Value (dollars)	8.39	-0.03**	-0.03**
		(0.01)	(0.01)
<i>Occupation</i>			
Labourer (p.p.)	26.34	0.74**	0.48**
		(0.29)	(0.23)
Household Worker (p.p.)	8.62	0.02	-0.01
		(0.14)	(0.14)
Operative Worker (p.p.)	5.66	-0.13	-0.17
		(0.11)	(0.11)
Porter (p.p.)	7.52	-0.24	-0.13
		(0.17)	(0.18)
Janitor (p.p.)	3.88	-0.14*	-0.14*
		(0.07)	(0.07)
Observations	22,098	22,098	22,098
Number of Cities	35	35	35
City FE	—	✓	✓
Baseline Controls	—	—	✓

Note: Effect of log residential proximity to a porter selling the Chicago Defender on outcomes for northern migrants. The sample includes migrants from Illinois Central cities where porters sold the Chicago Defender. Each row represents an outcome in the 1930 Census. Column (1) shows the outcome mean for northern migrants in 1930. Column (2) includes origin city FE. Column (3) additionally controls for the outcome or a comparable measure in 1910. I cluster standard errors at the origin city-level. Proximity is measured by difference in Census enumeration order. Return south is an indicator for if an individual who moved north by 1920 lived in the South in 1930.

Table A.6: Effect of Proximity to Porter on NAACP Membership

	Overall (1)	By Literacy		By Migration	
		Literate (2)	Illiterate (3)	Migrant (4)	Stayer (5)
Log Hholds from Porter	-0.182** (0.079)	-0.192** (0.080)	0.008 (0.070)	-0.272** (0.116)	-0.149** (0.072)
Observations	74,676	46,577	8,898	15,083	59,593
Number of Cities	35	35	35	35	35
Mean	2.01	2.48	0.72	3.43	1.64
City FE	✓	✓	✓	✓	✓

Notes: Effect of log residential proximity to a porter selling the Chicago Defender on NAACP membership, by literacy and migration status. Membership is an indicator for whether a Black man who lived in the South in 1910 joined the NAACP between 1912 and 1940, using data on members linked to the 1930 Census by Ang and Chinoy (2024). The sample includes men from Illinois Central cities where porters sold the Chicago Defender. Column (1) shows the overall effect. Columns (2)–(3) split the sample by whether an individual reports being able to read and write in the 1910 Census. I omit individuals with unknown literacy. Columns (4)–(5) split the sample by whether an individual migrated north between 1910 and 1930. Proximity is measured by difference in Census enumeration order. Regressions include city FE and cluster standard errors at the city-level.

B Data Appendix

First, I describe how I classify the coverage of southern newspapers and the Chicago Defender. Second, I describe linking Chicago Defender mail subscribers to the 1910 Census.

B.1 Classifying Newspaper Articles

To classify the coverage of southern White and Black newspapers, I use full article text from the American Stories dataset, which digitizes nearly 20 million scans from the Library of Congress’ Chronicling America collection (Dell et al., 2023). I consider all articles from 1910 to 1919, the period when the Chicago Defender reached the South. I contrast their coverage with the coverage of the Chicago Defender using full article text from the ProQuest Historical Newspapers: Chicago Defender database.

Table B.1 describes the data. Southern White newspaper coverage consists of 3,052,5801 articles from 3,448 issues. They span 374 unique newspapers from all 17 southern states (including District of Columbia). I subset to 561,758 articles that cover the Black community using a keyword search for terms historically used to refer to Black male or female individuals.

Table B.1: Newspaper Characteristics

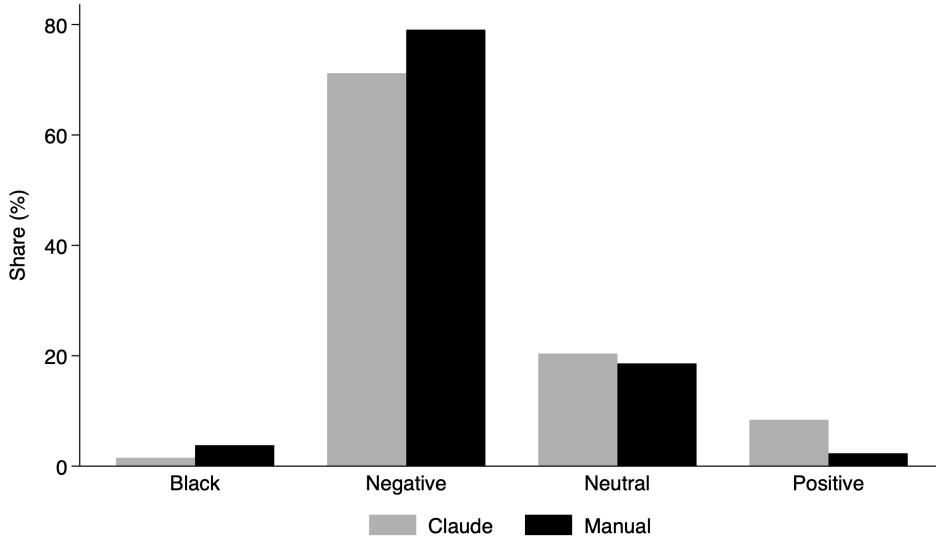
Type	Total Articles	Total Issues	Unique Newspapers	States
Southern White Newspapers	3,052,5801	3,448	374	17
Southern Black Newspapers	175,247	1,698	14	10
Chicago Defender	95,460	515	1	1

Note: Characteristics of newspaper articles from 1910 to 1919. Southern White and Black newspaper articles are from Library of Congress’ Chronicling America collection. Chicago Defender articles are from the ProQuest Historical Newspapers: Chicago Defender database.

For a random 1% sample of White newspaper articles on the Black community, I use Claude’s Sonnet 4 large language model (LLM) to classify: 1) the topic of the article, for instance, if it covers crime or death, 2) the sentiment of the article (positive, negative or neutral), 3) whether the article was an ad for a product or service, or 4) a classified ad for housing or jobs. I flag articles that were mistakenly coded as mentioning the Black community, for instance, the use of the term “coloured” in the context of clothing. Roughly 17% of articles were flagged as false classifications.

To benchmark the performance of the keyword search and LLM classification, I read a random sample of 13 southern White newspaper issues. Figure B.1 shows that the keyword search under-estimates the share of articles covering the Black community relative to manual reading. LLM classifications were largely accurate. The LLM under-estimates the prevalence of “negative” sentiment in articles and over-estimates “neutral” and “positive” articles. It missed articles where attribution of blame toward a Black individual was implied. Alternative LLMs such as ChatGPT 4-o and Llama 4 perform noticeably worse.

Figure B.1: Benchmarking Southern White Newspaper Classification

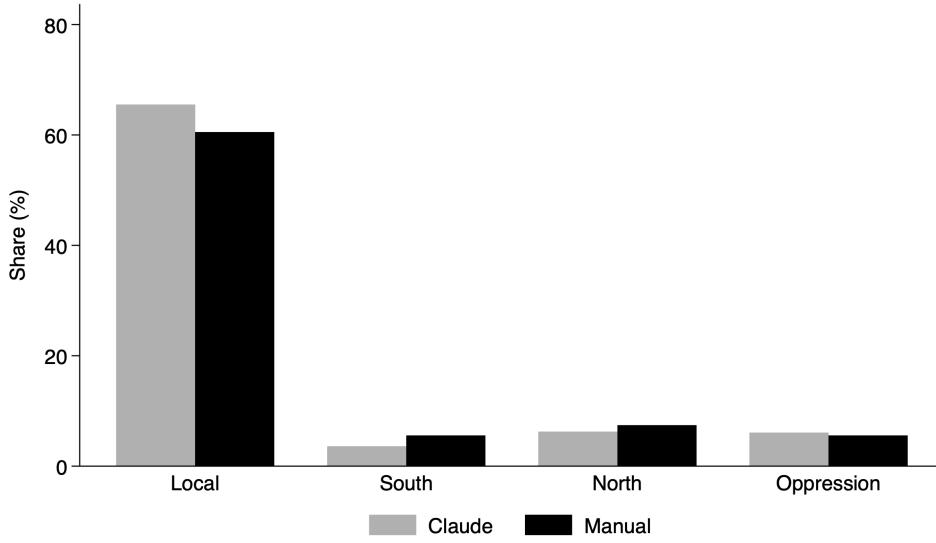


Note: Comparison of keyword search and LLM classification with manual reading of southern White newspapers. Column (1) reports the share of articles that covered the Black community. Columns (2)–(4) classify the sentiment of articles on the Black community. Automated approach uses a keyword search of all available southern White newspapers from Library of Congress’ Chronicling America collection between 1910 and 1919 to identify articles on the Black community. I use Claude’s Sonnet 4 LLM to classify topics of a random 1% sample of articles on Black individuals. Manual approach randomly samples 13 newspaper issues.

Southern Black newspaper coverage includes 175,247 articles from 1,698 issues. They span 14 unique newspapers and 10 states. I use Claude’s Sonnet 4 LLM to classify articles along the following dimensions. First, I classify geographic coverage into local news from the newspaper’s state, news from rest of the South, northern, or international news. Second, I classify whether an article mentions the following themes: 1) criticism of White individuals, 2) criticism of the South, 3) coverage of oppression, 4) positive coverage of the North, 5) coverage of northern migration, 6) coverage of the Urban League or NAACP. Third, I flag whether an article was an ad for a product or service, or a classified ad for jobs or housing.

I benchmark the LLM’s performance by reading 12 randomly selected southern Black newspaper issues. Figure B.2 shows that LLM classifications were largely accurate. The LLM performed better when asked to identify specific topics such as mentions of oppression. It performed worse at classifying locations, especially at identifying the main location in cases where multiple places are mentioned. It overestimates the share of local articles and underestimates the share about the rest of the South or the North.

Figure B.2: Benchmarking Southern Black Newspaper Classification

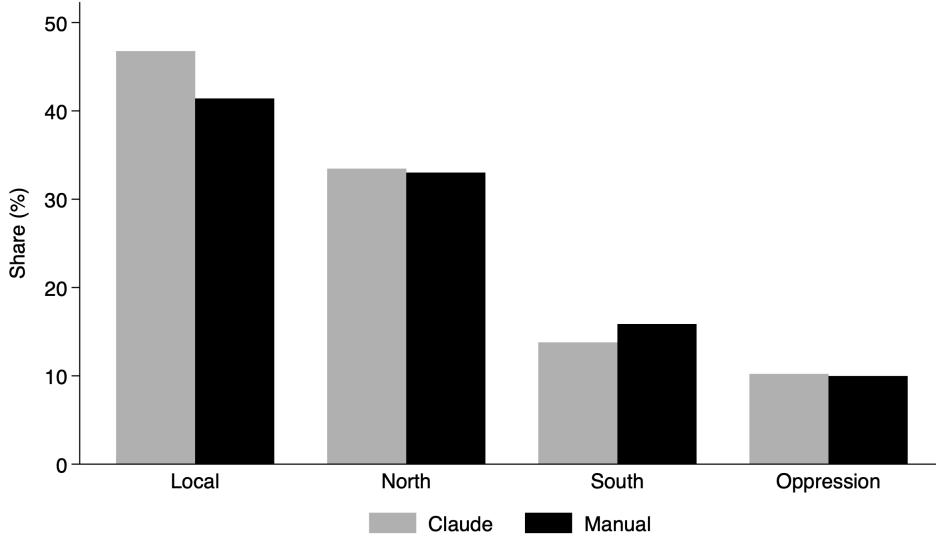


Note: Comparison of LLM classification with manual reading of southern Black newspapers. Automated approach uses all available southern Black newspapers from Library of Congress' Chronicling America collection between 1910 and 1919 and Claude's Sonnet 4 LLM. Manual approach randomly sampled 12 issues. Column (1)–(3) reports the share of articles by geographic coverage. Column (4) report the share of articles on oppression.

Chicago Defender coverage includes 95,460 articles from 515 issues. I classify articles along the following dimensions. First, I classify geographic coverage into local news from Illinois, news from rest of the North, southern, or international news. I record the main city mentioned to test whether mentions in the Chicago Defender guided migrants toward specific destinations. Second, I classify whether an article included: 1) criticism of White individuals, 2) criticism of the southern White community, 3) coverage of oppression, 4) positive coverage of the North, 5) coverage of northern migration, 6) coverage of the Urban League or NAACP. Third, I flag ads and classifieds.

I benchmark the LLM's performance by reading 12 randomly selected Chicago Defender issues. Figure B.3 shows that LLM classifications were largely accurate. The LLM performed better when asked to identify topics such as oppression. It performed worse at classifying locations, overestimating the local share and underestimating the southern share.

Figure B.3: Benchmarking Chicago Defender Classification



Note: Comparison of LLM classification with manual reading of the Chicago Defender. Automated approach uses all available issues of the Chicago Defender from ProQuest between 1910 and 1919 and Claude's Sonnet 4 LLM. Manual approach randomly sampled 12 issues. Column (1)–(3) reports the share of articles by geographic coverage. Column (4) report the share of articles on oppression.

B.2 Linking Subscribers to Census

To document Chicago Defender readership, I digitize a 96-page shipping manifest from the ProQuest History Vault. The manifest was obtained through a 1919 Military Intelligence Division investigation into the Chicago Defender as part of a post-war effort to monitor Black leaders and organizations (Kornweibel Jr., 1986). Figure A.16 shows an excerpt of the manifest, which lists the names, cities, and addresses of individuals who subscribed by mail to the Chicago Defender in 1918. I match historical cities to present-day counties, dropping cities that cannot be located present-day, as well as subscribers in Alaska or outside the U.S.

The manifest lists 6,178 mail subscribers with non-missing names and counties. I omit observations corresponding to businesses or clubs, which leaves 5,961 individuals. I separate first names into a first name and middle initial, standardize both first and last names using a list of nicknames and common misspellings, and remove prefixes related to an individual's title or occupation. Of the 5,961 individuals, 44% have nonmissing addresses. Missing addresses were concentrated in rural counties, by contrast, only 4% of subscribers in Chicago reported missing addresses. I classify PO box addresses as missing.

I link subscribers to the 1910 Census using the following approach, summarized in Table B.2. First, I perform a fuzzy match using Stata's *reclink* blocking on county of residence. I consider subscribers' cleaned first name, first initial, cleaned last name, middle initial, and address. I classify links with a match score of at least 0.9 as matches, coding ties as un-

matched. Visual inspection reveals that the quality of matches worsens below 0.9. Doing so produces 3,448 matches, a linking rate of 58%.

Second, for unmatched individuals, I perform a fuzzy match blocking on county but using raw first and last names in addition to address. I review each potential match by hand to identify likely false positives or negatives. Step two generates an additional 76 matches.

Third, I repeat Step 1 restricting to individuals in the 1910 Census who report being able to read. I classify links with a match score of at least 0.9 and no ties as matches, however, I review each match by hand to rule out false positives. Due to the number of potential matches in Step 3, I am unable to check for false negatives. Step 3 produces 88 new matches. In total, I link 3,612 or 61% of mail subscribers directly to the 1910 Census.

While 1910 is the relevant base period for my empirical framework, individuals could have moved between 1910 and the 1918 shipping manifest. Thus, I repeat Steps 1–3 linking unmatched subscribers to the 1920 Census, referred to below as Steps 4–6. In Step 4, I classify links with a match score of at least 0.9 as a match and check matches by hand for false positives. Step 4 produces 954 new matches. In Steps 5 and 6, I examine all potential links and classify matches by visual inspection. They generate 51 and 49 new matches.

Finally, using the 1910–1920 Census crosswalk from the Census Tree database, I link individuals in the 1920 Census back to the 1910 Census (Price et al., 2021; Buckles et al., 2023). I am able to link 4,666 or 78% of mail subscribers to either the 1910 or 1920 Census, and 4,103 or 69% to the 1910 Census. Links correspond to 3,979 unique Chicago Defender subscribers. Of the linked subscribers, 2,450 lived in the South in 1910.

Table B.2: Linking Mail Subscribers to 1910 Census

Step	Total Links	1910 Links
(1) 1910 Census: Clean Names	3,448	3,448
(2) 1910 Census: Raw Names	76	76
(3) 1910 Census: Clean Names, Literate	88	88
(4) 1920 Census: Clean Names	954	448
(5) 1920 Census: Raw Names	51	20
(6) 1920 Census: Clean Names, Literate	49	23
Total Matches	4,666	4,103
Unique Matches	—	3,979

Note: Sequential linking of Chicago Defender mail subscribers to the 1910 and 1920 full-count censuses.