ORIGINAL ARTICLE

KYKLOS WILEY

Lynching and economic opportunities: Evidence from the US South

Sotiris Kampanelis[1] | Aldo Elizalde[2]

[1]Cardiff Business School, Cardiff University, Cardiff, UK

[2]Department of Economics, Queen's University Belfast, Belfast, UK

Correspondence
Sotiris Kampanelis, Cardiff Business School, Cardiff University, Cardiff, UK.
Email: kampaneliss@cardiff.ac.uk

Abstract

This paper examines the impact of historical lynching on the economic opportunities of Black individuals today. Our results indicate that past lynchings have an adverse effect on the current economic opportunities of Black people, likely arising from persistent racial prejudice dating back to the early 20th century. We emphasize the importance of rapid urbanization, industrialization, and population mixing in the US South post-1880, which led to heightened competition among racial groups for economic, social, and political prominence, ultimately resulting in a surge of lynchings. Our findings survive a series of robustness checks.

1 | INTRODUCTION

During the latter half of the 19th century and the initial decades of the 20th century, over 3500 Black individuals experienced lynching incidents in the Southern United States (Bailey & Tolnay, 2015). This paper explores the long-term effects of lynching on the current economic opportunities of Black individuals.[1]

Given that lynching victims were predominantly Black, our study centers on understanding the repercussions of these events on the present economic prospects of the Black population. In this context, economic opportunities refer to the pathways for individuals to enhance their standard of living. To measure these opportunities, we employ intergenerational mobility rates as an indicator, reflecting the possibilities for economically disadvantaged Black individuals to ascend the income ladder.[2] Our hypothesis posits that regions with a higher incidence of historical lynching exhibit diminished economic opportunities for Black people, attributable to the lingering effects of deep-rooted prejudice.

---

[1]The terms Blacks, Whites, Hispanics, Asians, Native Americans, and races are used in this paper following international bibliography and works, such as Chetty et al. (2020).

[2]For brevity, we can refer to measurement of economic opportunities as either economic upward mobility, or economic mobility, or mobility.

Historical Lynchings
{*while Early Urbanization* → {*Persistent Interracial* → {*Persistent Prejudice,*
and Industrialization   *Competition*   *for Black People*

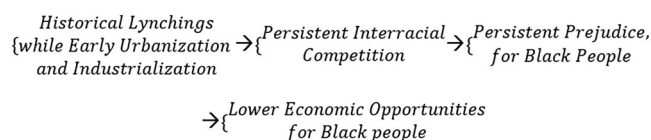→ {*Lower Economic Opportunities*
      for Black people

FIGURE 1   From historical lynchings to lower economic opportunities of blacks.

Our quantitative analysis also examines the historical hypothesis that the rapid increase in urbanization and industrialization across the US South after 1880 played a key role in reshaping local racial dynamics, ultimately fueling economic, social, and political competition among racial groups and thereby giving rise to acts of lynching. These acts of racial violence against Black individuals have left indelible imprints on their long-term economic opportunities. Figure 1 encapsulates the overarching conceptual framework of our study.

Our research focuses on counties within the Southern United States, concentrating on the 10 most active lynching states that possess well-documented, place-specific lynching data and a substantial historical Black population.[3] The primary metric for quantifying lynching activity relies on comprehensive data compiled by Bailey and Tolnay (2015), spanning from 1882 to 1930. Economic opportunity levels are assessed using county-level data on economic mobility as calculated by Chetty et al. (2018). This metric delineates household income for Black individuals whose parents belonged to the 25th percentile of the national income distribution, offering insights into the economic options available to children from low-income Black families.

These opportunities can be explored within the framework of prior research, which highlights how the financial resources of parents and grandparents profoundly influence the life paths of successive generations. This emphasizes the enduring impact across multiple generations, underscoring the pivotal role of ancestral financial status in shaping contemporary outcomes (Adermon et al., 2018; Solon, 2018). Additionally, previous research indicates that unexpected shocks to grandparents' wealth, including financial assets, social status, and health, can affect their grandchildren's outcomes. Specifically, Cook et al. (2018) trace the consequences of in utero exposure to the 1918 influenza pandemic on educational and economic outcomes across three generations. They find that individuals whose grandmothers were exposed to the flu in utero complete fewer years of schooling, with second-generation individuals completing 2.4 months less and third-generation individuals completing 1.7 months less. These findings suggest that poor outcomes due to early life health shocks can persist through socio-economic and potentially epigenetic mechanisms. Our research enhances the existing literature suggesting that economic opportunities are not solely determined by tangible factors like education and familial wealth but are also subject to intangible societal forces such as prejudice.

While we propose that lynchings represent a historical negative shock for Black individuals in the United States with lasting intergenerational implications, there may be concerns regarding how they differ from other historical events that have been found to lack such effects. For example, Clark (2015) argues that violent upheavals like World War II and the Cambodian genocide have minimal impact on intergenerational mobility. However, unlike some isolated traumatic events, lynchings were systematic tools of oppression employed against African Americans. These acts were ingrained in societal structures, laws, policies, and practices, serving to uphold White supremacy and subjugate African American communities. Lynchings were not merely singular occurrences; rather, they were persistent acts of violence that impeded the progress and prosperity of entire families, communities, and subsequent generations in the areas where they occurred.

Our empirical approach adopts several strategies to estimate the impact of historical lynching on contemporary economic mobility for Black Americans. We utilize ordinary least squares (OLS) estimators to establish the connection between current economic opportunities for Black individuals and historical lynching incidents, while controlling for an array of geographic and historical variables. Our findings consistently indicate that counties with a higher

---

[3]In particular, we use data from Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, and Tennessee. For instance, according to Gibson and Jung (2002), the Black population in Alabama in 1900 was 45.2%. This is high, considering that the corresponding percentage for the whole United States in the same period was 11.6%.

frequency of lynchings show reduced economic opportunities for the Black population. Quantitatively, our primary unconditional estimate indicates that the disparity in opportunities for Black individuals raised in a county with the highest intensity of lynching history in our sample, compared with those in a county with no such history, is similar to the opportunity gap between New Orleans and San Francisco. This holds particular significance considering that the median income in San Francisco exceeds that of New Orleans by over 170%.

Additionally, we employ an instrumental variable (IV) approach to delve into the causal relationship between historical lynching incidents and contemporary economic opportunities among Black individuals. To construct our instrument for lynching, we rely on county-level cotton suitability data from Acharya et al. (2016). Within the comprehensive framework of our paper, we consider several potential explanations for the observed phenomena. Notably, Christian (2017) proposes that Black cotton laborers faced the threat of lynching when they contributed to overpopulation on cotton farms, effectively compelling Black individuals to vacate the plantations due to heightened interracial competition for labor. Consequently, our methodology aligns with prior studies featured in Section 5, which establish cotton suitability as a significant driver of historical lynching events.

Our IV identification relies on the assumption that local-level environmental conditions for cotton cultivation were exogenous to post-19th-century factors influencing economic opportunities for Black people. Central to our argument is that landowners during the lynching era were predominantly White, thereby minimizing the likelihood of local-level variations in cotton cultivation conditions that significantly impacted the range of economic opportunities for the Black population. Our IV analysis supports the trends observed in our OLS findings.

Furthermore, to address concerns associated with omitted variable bias, we incorporate the methodology introduced by Oster (2019). This method provides estimates of the impact of historical lynching incidents on contemporary economic opportunities for Black individuals, operating under the assumption that all unobservable variables are included within our most conservative specification.

Consistent with our framework illustrated in Figure 1, we proceed to explore the hypothesis that regions experiencing accelerated urbanization and industrialization after 1880 gave way to a surge in interracial competition, which may have led to an increase in lynching incidents and, subsequently, reduced long-term economic opportunities for the Black population. We construct a county-level measure of the evolution of banking and railways expansion from 1880 to 1920 and from 1876 to 1921, accordingly. The first index represents the pace of early urbanization, while the second the pace of early industrialization. This analysis unfolds in two dimensions. First, we develop a panel data analysis to exploit the cross-sectional association between our urbanization/industrialization indexes and lynching and the changes in this relationship during the lynching period. Our results demonstrate a positive correlation between lynching and these two indexes. Second, we provide evidence that urbanization and industrialization have played a key role in the concentration of Black residents at the county level from the lynching period until present-day. Our results support the conclusion that counties experiencing swifter early urbanization and industrialization witnessed a higher prevalence of lynching incidents and a greater proportion of Black residents throughout the 20th century.

The final part of our empirical strategy investigates whether regions with a higher history of lynching incidents exhibit elevated levels of persistent racial prejudice. We tackle this question by examining county-level data drawn from various historical and contemporary databases, offering suggestive evidence in favor of our hypothesis. It is important to note that available measures of racial prejudice at the local level often represent crude indices or are subject to respondent selection bias, serving as imperfect proxies for our analysis.[4] In any case, this research represents a novel exploration of the roots of economic inequality among different racial groups due to persistent racism in the US South. Moreover, this is the first quantitative analysis that corroborates the findings of related theoretical research from different academic fields such as anthropology and political science.[5]

Our findings contribute to various strands of existing literature. First, this research augments recent studies examining the repercussions of historical lynching by underlying its economic implications. While the legacy of

---

[4]For instance, Chetty and Hendren (2018a) use IAT racial bias scores from participants who respond online voluntarily. Therefore, his rough measure suffers from selection sample bias.
[5]In the subsequent section, we cite significant qualitative research on intergenerational economic effects of lynchings.

lynching may have received less attention in the economic literature, its impact cannot be underestimated. For instance, Cook (2014) observes that historical racially motivated violent crimes, including lynching, have substantially suppressed innovation rates among Black people. Jones et al. (2017) and Williams (2022) establish the adverse effects of lynching on Black voter turnout and registration, while Christian (2017) delves into the influence of historical lynching on the migration and labor markets of the Black population in the United States. Recent research by Williams et al. (2021) unveils a significant connection between lynching and a variety of contemporary political and economic outcomes encompassing segregation, voter turnout, economic security, unemployment, and poverty. Our contribution lies in the assessment of mobility as an indicator reflecting not only economic outcomes and public policy inefficiencies but also cultural attitudes and social norms pertaining to Black individuals. Overall, our evidence underscores the significance of historical lynching within the sphere of intergenerational impact.

Second, this study aligns with the recent literature on regional determinants of economic mobility rates. A burgeoning body of recent research revisits the "exposure effect" within the context of neighborhoods. According to this theoretical framework, children raised in neighborhoods characterized by more favorable economic and social attributes tend to exhibit heightened rates of upward mobility (Chetty & Hendren, 2018a, 2018b). While a substantial volume of literature delves into the examination of contemporary regional parameters, this study distinguishes itself as one of the few works to investigate a relationship with a historical variable (Andrews et al., 2017).

Third, our research contributes to the economics of crime literature. Contemporary crime rates have been linked to income (Bignon et al., 2017), inequality (Alesina et al., 2016; Kelly, 2000), poverty (Mehlum et al., 2005), intergenerational mobility (Sharkey & Torrats-Espinosa, 2017), and more. Historical crimes, such as organized crime in Italy, have been associated with GDP per capita (Pinotti, 2015) and institutions (Daniele & Geys, 2015). Yet, to our knowledge, there is no research linking historical lynchings to current levels of economic opportunities.

The remainder of the paper proceeds as follows. Section 2 underlines our conceptual framework and presents cases studies that highlight the intergenerational effects of lynching. Section 3 provides a concise historical context, shedding light on the underlying motives that drove lynchings in the Southern United States. Section 4 describes our dataset and presents the empirical methodology. Section 5 presents our main empirical results. Section 6 delves into the interplay between urbanization and industrialization trends, historical lynching incidents, and the enduring demographic composition of the Black population. Section 7 explores potential mechanisms linking historical lynchings to contemporary economic opportunities for Black individuals. Section 8 develops rigorous robustness tests. Finally, Section 9 concludes the study.

2 | CONCEPTUAL FRAMEWORK AND CASE STUDIES

The level of economic opportunities, reflected through intergenerational mobility measures (income, wealth, occupation, etc.), has been extensively investigated by the economic literature over the last decades. In this literature, a major question scholars have addressed is what helps people climb the income or social ladder and what are the main drivers behind people's economic opportunities?

Among several explanations, the role of parents and their previous generations in the economic opportunities of their descendants is a dominant theory. Children who grow up in families with lower economic opportunities (due to education, racism, social status, etc.) tend to also experience lower economic opportunities as adults. This is a process that may last for two, three, or more generations. For instance, recent research by Adermon et al. (2018) suggests that grandparents' wealth is strongly associated with grandchildren's wealth. Therefore, it seems that the economic opportunities of descendants have deep roots several decades before they are even born.

In this context, someone might wonder whether aggregate local violent practices against minorities in the long past have shaped "antiminority" economic and social conditions with intergenerational persistence. Given that historical lynchings occurred around 1900, an era belonging only to three or four generations before today, it is plausible to assume that the economic opportunities of children who grow up in places where their grandparents

(or people of the same race) experienced significant racism, which undermined their social and economic status, will also experience lower economic opportunities.

Indeed, the persistent effects of culture, attitudes, and beliefs among generations are highlighted in the cultural economics literature. For instance, Mocan and Raschke (2016) delve into the question of whether racist and xenophobic sentiments endured in Germany after World War II had persistent effects in the long term. They show that individuals residing in areas with high support for the Nazi Party during the 1928 elections are more likely to exhibit heightened antisemitic feelings in the present-day. Therefore, it seems important to investigate any persistent effects of historical lynching activity as an extreme expression of racism on the economic opportunities of Black individuals today.

In this same line of scholarly enquiry, Gaston (2021) conducts qualitative research investigating the persistent consequences of historical racial lynchings on families with a "lynched" ancestor, employing interviews conducted between 2019 and 2020. The research encompasses 22 descendants spanning up to four generations, revealing a poignant narrative of individuals lynched between 1883 and 1972 in the US South. Importantly, these qualitative findings provide relevant evidence suggesting that lynchings have had profound negative impacts on subsequent generations. Specifically, the study's interviews unveil three distinct yet interrelated domains of harm: psychological, familial, and economic. Regarding the economic implications of lynchings on Black people, surviving members of "lynched" families were compelled to abandon their communities, leaving behind not only social capital and support networks but also tangible assets. This forced migration emerged as a significant contributing factor to the enduring racial wealth gap, as whites claimed the vacated assets of Black people.

Moreover, Gaston (2021)'s study demonstrates the pervasive and enduring negative impact on education and career advancement within affected families. Descendants, constrained by the traumatic events, recount instances where opportunities for educational and vocational progress were restricted. This study reveals a tapestry of historical trauma, economic disparity, and educational setbacks, underscoring the profound and enduring implications of historical racial lynchings on generational well-being within affected families. For instance, a descendant who was included in the study named Linda (age 77) summarized her experience:

"... as being complete devastation for my family. We went from prosperity to poverty overnight. All the resources my father had owned, the white man just came and took them away and there was nothing we could do about it. My brothers had to stop school so it affected us economically, it affected us educationally, and two years after my father's lynching my grandfather was threatened, so we moved and ran from the area to another county. So it affected us emotionally, economically, educationally, and every way that you can imagine. ... We have not had the economic gains that we would have had had the finances been passed from generation to generation. As the old saying goes, "come up by your bootstraps," so nobody gave us anything and everything that my father had acquired was taken. So that is the main effect. We've just had to make do with what we could accomplish on our own."

Overall, recent research suggests that historical lynching activity had persistent effects on subsequent generations of Black people who are either connected with a "lynched" ancestor or affected by society due to persistent racial stigma. This evidence significantly supports the findings of this paper.

3 | HOW DID HISTORICAL LYNCHINGS OCCUR?

3.1 | Forces towards lynchings

Lynching in the Southern United States had deep-rooted causes. One key factor was the economic competition between Black and White populations. After the end of Reconstruction in 1877, the arrival of more Black people increased the supply of low-wage workers in the cotton industry. This had consequences for the wages and wealth of White individuals. Lynching became more common as White individuals tried to maintain their dominance in areas like jobs, housing, and farming.

From 1900 to around 1920, cotton prices rose, leading White landowners to demand more Black workers. They used force to prevent Black workers from forming groups or unions that could challenge their power (Olzak, 1990). This economic backdrop could explain why lynching occurred, either to keep Black labor oppressed or to prevent it from becoming too powerful.

Beyond economic competition, the social and political environment of the time exacerbated racial tensions (Glaeser, 2005). In the late 19th century, political parties and hate movements fueled divisions. For instance, the Conservative Party clashed with the Populist Party, which attracted Black voters. False stories of Black people posing threats to White communities were used to justify anti-Black movements and speeches by politicians. For example, Benjamin Ryan Tillman, who was governor of South Carolina from 1890 to 1894, declared in his convention speech, "*We of the South have never recognized the right of the negro to govern white man, and we never will. We have never believed him to be the equal of the white man, and we will not submit to his gratifying his lust on our wives and daughters without lynching him.*" (Ayers et al., 2011).

Around the same time, legislators in the Southern United States passed the "Jim Crow" laws. These laws enforced different rules based on individuals' race, leading to segregation in schools, jobs, public facilities, and more. This segregation heightened racial tensions.

The work of Beck and Tolnay (1990) delves into the psychological underpinnings of lynching. It suggests that the influx of financially stable Black cotton workers and farmers into rural areas challenged the prevailing White perception of economic superiority. This cognitive dissonance, coupled with a range of inner sentiments such as jealousy, created a volatile psychological landscape that could contribute to violent actions. Furthermore, from the perspective of the White elite, inter-racial tensions served to uphold their economic dominance by preempting potential coalitions between impoverished Black and White individuals that might threaten their entrenched power structures.

Overall, lynching should be understood as a response by White individuals who faced economic, social, and political changes that challenged their established position in the Southern United States.

3.2 | Forces against lynchings

While lynchings often stemmed from socio-economic competition between Black and White communities, other social and political factors prevented them. First, as noted by Page (1904), the extreme nature of such crimes frequently elicited strong emotional reactions from communities, generating a demand for immediate and severe punishment for those responsible. Additionally, according to Guzman and Hughes (1941), many communities were reluctant to the negative criticism they faced following a lynching within their jurisdiction. For instance, in an issue dated October 5, 1946, the *Saturday Evening Post* corrected a previous error that wrongly placed the lynching of four Black individuals on July 25, 1946, in Monroe County, Georgia, instead of Walton County, Georgia. Numerous individuals from Georgia contacted the *Post* to ensure this correction, as they were seeking to disassociate their region from such a brutal act. Therefore, many communities felt the collective responsibility to stop these crimes.

Second, there was a recognition of the need for both Black and White communities to take responsibility for raising awareness about the harsh nature of lynchings. Leadership within the Black community, exemplified by figures like Booker Washington and William Hannibal Thomas, played a crucial role in shaping public opinion and attitudes against lynching.

Third, there was a demand for a more proactive legal strategy to tackle crimes within the Black community, seeking to deter "self-justice" punishments such as lynchings. For example, law enforcement officials faced criticism if they were believed to have made no effort to stop lynchings, participated in them, or conspired with those intent on carrying them out (Guzman & Hughes, 1941).

In conclusion, while local interracial socio-economic competition fuelled hate crimes between the Black and White communities, there were also socio-political obstacles preventing these events.
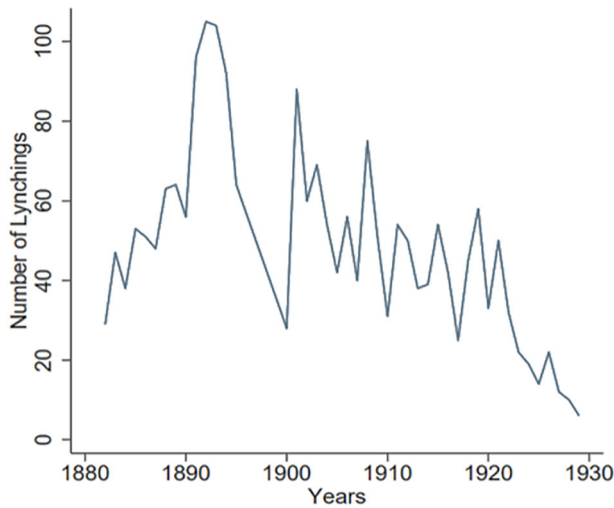
FIGURE 2   Number of lynchings per year.

4 | DATA AND EMPIRICAL ANALYSIS

4.1 | Unit of analysis

To assess the impact of historical lynching on contemporary economic opportunities, our primary analysis is conducted at the county level, encompassing a total of 875 (out of 3,243) counties across the United States. These counties are situated within 12 southern American states: Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, and Tennessee. In 534 of these counties, at least one, but no more than 25 instances of lynching directed at Black individuals, was recorded. Figure 2 provides a visual representation of the annual frequency of these lynching events.

4.2 | Main independent variable: Lynching

We construct a lynching measure by collecting our data from the CSDE Lynching Database (2015), which is based on the work of Bailey and Tolnay (2015). This dataset contains information of about 2129 lynchings of Black individuals in the Southern United States that occurred between 1882 and 1929. To better understand the extent of lynching in each county, we count the total number of lynchings. Figure 3 provides a visual representation of where these lynchings occurred in the US South.

It is important to define what we mean by "lynching." According to the National Association for the Advancement of Colored People (NAACP) in 1940, lynching is defined as a severe form of unauthorized racial violence in public. To differentiate it from other violent acts, we specify that a lynching involves four key elements: a person's death, an unlawful act, the involvement of three or more individuals (referred to as a "mob"), and a belief that the lynching is justified by values like justice and honor.[6]

---

[6]Other forms of collective violence include riots, gang violence, coups, rebellions, revolutions, wars, and terrorism, which cannot be characterized as lynchings.
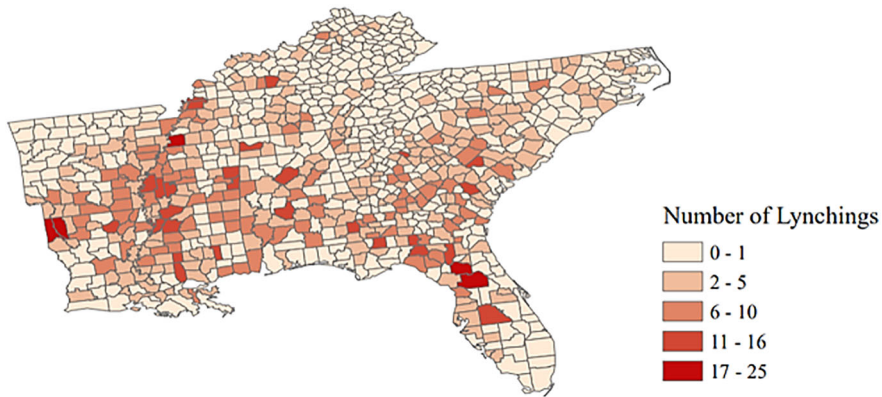
FIGURE 3 Number of lynchings in the US South. [Colour figure can be viewed at wileyonlinelibrary.com]

4.3 | Main outcome variable: Economic mobility

We measure local economic opportunities using data from Chetty et al. (2018). Specifically, we measure economic mobility using the average ranking of household income achieved by children who grew up in a particular county, with parents positioned at the 25th percentile of the national income distribution. This ranking-based approach, often referred to as "upward" economic mobility, is then used as our preferred indicator.

This methodology aligns with prior research, including studies conducted by Feigenbaum (2018) and Markussen and Røed (2020), which have adopted a similar ranking-based framework. Our analysis encompasses measures of upward economic mobility categorized by race, comprising Black, White, Hispanic, and Native American populations. Our main focus is on the upward economic mobility measure pertaining to Black individuals, as disparities in mobility scores capture a comprehensive spectrum of opportunities available for individuals from lower-income backgrounds to ascend the income ladder.

4.4 | Control variables

Indeed, our findings may be affected by potential confounding factors that might exert influence on our estimates. Specifically, the prelynching period in the United States was characterized by pervasive discrimination against Black individuals, who were forcibly brought to the country as part of the African slave trade. This historical context created a social environment characterized by profound racial inequality. Therefore, it is conceivable that factors predating the era of lynching may have left lasting imprints on the contemporary economic opportunities of Black individuals.

For instance, research conducted by Bertocchi and Dimico (2014) has established a persistent impact of slavery in the United States in 1860 on educational disparities between racial groups. Additionally, Acharya et al. (2016) have linked the legacy of slavery to the enactment of Jim Crow laws and disparities in access to public resources. Consequently, the extent of early slavery emerges as a historical confounding variable that merits consideration.

To address these potential confounders, we collect data pertaining to various factors, including the per capita count of slaves and slaveholders in 1860, the proportion of Black households in 1880, levels of segregation

experienced by Black individuals in 1880, and the proportion of small farms in 1860.[7] The latter variable potentially reflects the prevalence of small-scale farmers and historical disparities in landownership at the county level. Furthermore, it may provide insights into the concentration of economic and political influence, along with shedding light on the historical bargaining power of small-scale farmers.

Furthermore, we also include geographical coordinates for each county, a standard practice in the field of economic geography. Notably, research by Spolaore and Wacziarg (2013) has demonstrated the significant impact of latitude on logarithmic per capita income. Given that our measures of intergenerational mobility hinge on the income of both children and parents, it is imperative to account for these geographical coordinates as potential confounding factors in our analysis.[8]

4.5 | Empirical approach

To examine the relationship between historical lynchings and the economic opportunities for Black individuals, we first use OLS estimation, with standard errors clustered at the county level:

$$Y_i = \alpha LynchingActivity_i + \beta N_i + Z'_s + \epsilon_i. \tag{1}$$

In Equation (1), we regress our measure of economic opportunities for the Black population (Y) in county i against the historical lynching index (lynching activity). We include a robust set of control variables (N) at the county level. Additionally, our model incorporates state-fixed effects, Z'_s, to account for unobservable state-specific characteristics, including institutional factors. The stochastic error term, ϵ_i, is denoted to capture random variations. The main coefficient of interest, α, signifies the impact of historical lynchings on the economic opportunities for Black individuals.

5 | MAIN RESULTS

5.1 | The effect of historical lynching on economic mobility of Blacks: OLS estimation

Table 1 presents the results of our OLS regressions, examining the relationship between historical lynchings and economic opportunities for the Black population. In column 1, we provide less conservative estimates, controlling only for state-fixed effects. Notably, the coefficient associated with the lynching activity variable is both negative and statistically significant at the 1% level. This finding implies that regions with a higher incidence of historical lynchings exhibit lower economic opportunities for Black individuals today. To put this into perspective, a one standard deviation increase in our lynching variable corresponds to a 0.26 percentile decrease in the economic mobility index. This suggests that in areas characterized by a significant history of lynchings (e.g., 25 lynchings), upward economic mobility may be diminished by up to 2 percentiles. This is a substantial effect, considering that each percentile may signify thousands of dollars (Chetty & Hendren, 2018a).

---

[7]There is a significant lack of historical data at the local level. Therefore, throughout the text, we either do not present the results when we lose more than 30% of our observations or we interpret them with caution.

[8]Throughout the paper, most of our data have been calculated using the county boundaries in 1990. For historical data assigned in historical counties, we use publicly available data and algorithm by Eckert et al. (2020) for consistent county-level crosswalks since 1790. Their algorithm connects more recent county borders with historical county borders based on weights. For instance, if the county A (in 1990) consists of the whole county B (in 1800) plus 10% of the county C (in 1800), they assign a weight of 0.9 mapping to county B (1800) and a weight of 0.1 mapping to county C (1800). Then, our historical variable value in the contemporary county A consists of 0.9 times the value of the historical variable in the county B and 0.1 times the value of the historical variable in the county A. The dataset can be found online (https://fpeckert.me/eglp/).

TABLE 1 Historical lynching and intergenerational mobility: OLS estimates.

The dependent variable is intergenerational mobility for Blacks			
	(1)	(2)	(3)
Lynching activity	−0.075***	−0.072***	−0.062***
	(0.021)	(0.022)	(0.023)
Latitude		−0.164	−0.223*
		(0.101)	(0.119)
Longitude		0.068	0.098
		(0.078)	(0.087)
Slaves per capita 1860			−0.110
			(0.319)
Slaveholders per capita 1860			0.225
			(0.523)
Fraction of black HH 1880			−1.312*
			(0.708)
Segregation 1880			0.631
			(1.496)
Proportion of small farms 1860			−0.509
			(0.650)
State FE	✓	✓	✓
R^2	0.067	0.071	0.060
N	760	760	633

Note: The units of analysis are US counties. Variables descriptions are provided in the supporting information Table B.1. The estimations include a constant term and a full set of State dummies, which are omitted for space considerations. Standard errors clustered at the county level are in parentheses.
Abbreviation: OLS, ordinary least squares.
***$p < 0.01$ mean that the coefficient is statistically significant at 1%.
**$p < 0.05$ mean that the coefficient is statistically significant at 5%.
*$p < 0.1$ mean that the coefficient is statistically significant at 10%.

In the subsequent two columns, we introduce a set of county-specific characteristics that could have potentially influenced the economic opportunities of Black individuals. The inclusion of these variables addresses concerns related to omitted variable bias. Column 2 introduces location variables, wherein both latitude and longitude feature with nonsignificant coefficients. In column 3, we further augment the specification with prelynching controls. As anticipated, counties with a higher proportion of Black residents before 1880 display lower levels of economic opportunities. The remaining historical controls do not show statistical significance.

It is noteworthy that across these three columns, including column 3 where observations are reduced due to a lack of historical data, the coefficient pertaining to lynching activity remains statistically significant at the 1% level, and its magnitude remains stable. The coefficient in our full sample unconditional model indicates that, on average, a single additional lynching event is associated with a 0.1 standard deviation reduction in our economic opportunity measure (i.e., 0.25). This implies that an individual relocating from a county with no incidents of lynching to one with the highest historical occurrences would experience a decline of 6.25 percentiles in our economic opportunity measure. To provide context, this magnitude of change aligns with the disparity in economic opportunities observed between the cities of San Francisco and New Orleans, as highlighted by Chetty et al. (2014). Utilizing median income as a key metric for gauging economic opportunities, particularly in the years 2018–2022 and adjusted to 2022

dollars, data from the US Census Bureau reveals a notable disparity between San Francisco and New Orleans. In San Francisco, the median income stands at $136,689, significantly higher than the corresponding value in New Orleans, which is only $51,116.

However, it is imperative to acknowledge the potential presence of various biases stemming from potential endogeneity issues. Consequently, we explore this matter further by employing a 2SLS approach in subsection 5.2.

5.2 | Causality

In our analysis, we have taken care not to draw causal conclusions regarding the negative impact of historical lynchings on the present-day economic opportunities for Black individuals. In this section, we aim to establish a causal relationship between lynchings and long-term economic opportunities. Our assumption about causality is based on the idea that extreme interracial violence, such as lynchings, may be linked to a significant increase in prejudice over time. In other words, the question is whether this extreme violence can lead to enduring prejudice.

To address potential omitted variable bias, we consider whether historical lynchings affected other local factors that could explain the impact on current economic opportunities. Prior studies have suggested that past lynchings influenced various political and economic variables that contributed to the ongoing exclusion of Black people, potentially affecting mobility measures (Williams et al., 2021). This implies that historical lynchings might have a spurious effect on present-day economic opportunities for Black individuals.

We address the above concern by adopting an IV strategy using cotton suitability data, which has been used in prior research (Williams, 2021). This approach minimizes bias from measurement error or omitted variables. Specifically, we use the cotton suitability data collected by Acharya et al. (2016), who construct their measure using data from the Food and Agriculture Organization (FAO).[9] Previous studies have indicated that cotton prices may have influenced lynching activity, as lower cotton prices could lead to White workers displacing Black workers from the cotton labor market through lynching. Another hypothesis is that during economic difficulties, lynchings could be used to force Black workers off their land.[10]

Our identification assumption is that cotton suitability only affects current economic opportunities for Black individuals through historical lynchings. Two key features support this assumption. First, while the cotton industry held a prominent position in terms of value added and total employment until the end of the 19th century, the Southern United States underwent a shift from an agrarian to an industrial economy during the 20th century (Browne, 1972). Consequently, the relevance of cotton suitability as a determining factor in the distinct economic opportunities for Black individuals declined, as they increasingly contributed to the labor force in sectors such as railroads, railways, and industrial construction.

Second, even if cotton suitability once played a role in shaping economic prospects, this may not have been the case for Black individuals. Our measure of economic opportunities is based on the likelihood of upward mobility on the national income scale. However, in the 19th century, Black land ownership was relatively minimal, except for certain exemptions. Consequently, improved conditions for cotton cultivation would have had limited bearing on the early prospects of Black individuals in terms of income or occupational advancement with intergenerational consequences. Supporting this view, Bodenhorn and Ruebeck (2007) note that in the 19th century, Black individuals ranked lowest in terms of wealth compared to Mulattos and Whites.[11] Therefore, it is unlikely that variations in cotton suitability would have significantly impacted their wealth or social standing.

---

[9]Our cotton suitability measure is the maximum potential cotton yield based on soil, climate, and growing conditions based on climate averages from 1961 to 1990.

[10]Christian (2017) also finds weak evidence that lynchings prevented Black men and White women from engaging in romantic or sexual liaisons.

[11]According to Gannett (1903), of the 4,767,179 farms in the country, only 120,738 were owned by Black people. This is 2.53% of the total land, thus suggesting that differences in the suitability of cotton could not affect economic opportunities of Black people.

To address concerns of reverse causality, we utilize a historical map by geographer Gannett (1903), which illustrates the illiteracy rate among Black voters in 1900 (see Figure A.2 in the supporting information). By geo-referencing this map, we construct a variable representing the historical illiteracy of Black individuals, ranging from 1 to 6, corresponding to less than 1%, 5%, 10%, 25%, 50%, and more than 50% of Black individuals being illiterate, respectively. We then conduct a regression analysis, regressing this variable on cotton suitability along with all controls outlined in equation (1) to explore any potential relationship. The coefficient associated with cotton suitability did not exhibit statistical significance (*t*-stat 0.98), implying that in 1900, improved conditions for cotton cultivation did not translate into enhanced educational opportunities for Black individuals. While access to education is a vital factor in capturing historical economic opportunities for the Black population, historical data from around 1900 regarding access to banking, entrepreneurship, and other economic aspects are limited.

Indeed, while we can offer consistent and quantitative support for the validity of our IV in satisfying the exclusion restriction, we acknowledge the inherent impossibility of completely dispelling all doubts.

Table 2 presents the impact of historical lynchings on the contemporary economic opportunities of the Black population. The coefficients associated with lynchings consistently exhibit negative significance at the 5% confidence level, while the cotton suitability coefficients are positively and statistically significant at the 1% confidence level. Furthermore, the first-stage results yield a substantially higher *F*-statistic than the commonly accepted threshold of 10, as recommended by Staiger and Stock (1997) for weak instruments. The IV estimates surpass the corresponding OLS estimates in Table 1, suggesting a potential downward bias in the latter due to measurement errors or omitted variables. For example, while the coefficient on lynching activity in column 3 is nearly six times greater than the corresponding fully saturated OLS coefficient, it remains lower than the estimates found in numerous studies, some reporting up to nine times higher IV estimates compared with their OLS counterparts (Jiang, 2017). These results indicate that our OLS estimates are not significantly affected by endogeneity issues.

Furthermore, we employ a technique proposed by Oster (2019), which relies on the assumption that selection on observed controls is proportionate to selection on unobserved controls. This method provides upper and lower

TABLE 2 Historical lynching and intergenerational mobility: 2SLS estimates.

The dependent variable is intergenerational mobility for Blacks			
	(1)	**(2)**	**(3)**
	First-stage estimates: Panel A		
Cotton suitability	6.80***	7.03***	5.44***
	(1.237)	(1.253)	(1.404)
	2SLS estimates: Panel B		
Lynching activity	−0.393**	−0.419**	−0.467**
	(0.174)	(0.167)	(0.237)
Geographical controls		✓	✓
Historical controls			✓
State FE	✓	✓	✓
Kleibergen–Paap *F*-statistic	30.24	31.50	15.04
N	755	755	629

Note: The units of analysis are US counties. Variables descriptions are provided in the supporting information Table B.1. The estimations include a constant term and a full set of State dummies, which are omitted for space considerations. Standard errors clustered at the county level are in parentheses.
***$p < 0.01$ mean that the coefficient is statistically significant at 1%.
**$p < 0.05$ mean that the coefficient is statistically significant at 5%.
*$p < 0.1$ mean that the coefficient is statistically significant at 10%.

bounds on the lynching coefficient, assuming the inclusion of all relevant observed and unobserved variables in the model. Thus, the lower bound represented by b corresponds to the coefficient on lynchings when a complete set of controls, both observable and unobservable, is considered in equation (1). Oster's (2019) technique involves estimating Equation (1) while technically enhancing the R^2 of the most comprehensive model by 30% ($R\max = 1.3 * R^2$). If the interval between the coefficient in the most saturated estimation (b) and b' excludes zero, it indicates that the model is robust against omitted variable bias. Additionally, this method provides a parameter (δ) that elucidates the relationship between observable and unobservable variables. When the absolute value of δ exceeds 1, it suggests that omitted variable bias is highly unlikely. The coefficient in column 2 of Table 3 confirms that the zero value falls outside the interval between b and b'. Furthermore, the absolute value of the parameter δ in column 4 is significantly greater than 1. Therefore, Oster's (2019) technique allays concerns regarding the influence of omitted variables on the effect of lynchings on the economic opportunities of Black individuals.

6 | EARLY URBANIZATION AND INDUSTRIALIZATION

6.1 | Urbanization, industrialization, and lynching

The seminal work of Olzak (1990) sheds light on the pivotal role played by urbanization and industrialization in shaping the dynamics of lynching in the Southern United States, given the extensive immigration and infrastructure development at the dawn of the 19th century. Recent historical findings by Wood (2011) further corroborate the significance of these forces as driving factors behind lynching incidents. The author contends that the blending of individuals from diverse racial and ethnic backgrounds within urban centers fueled collective criminal activities at the local level, such as "mobbing". Furthermore, he posits that regions staggering on the brink of urbanization experienced heightened anxieties about social disorder, which manifested in mass lynchings.

Subsequent work by Wood (2018) reaffirms that the lynching of Black individuals was a direct outcome of the urbanization and industrialization that took place from 1880 onwards. He postulates that the expansion of urban populations disrupted the established racial hierarchy, fostering turbulence, racial competition, and an uptick in criminal behavior. Pfeifer (2004) similarly suggests that urbanization and industrialization exerted pressure on the

TABLE 3 Historical lynching and intergenerational mobility: Omitted variable bias.

	The dependent variable is intergenerational mobility for Blacks			
	(1)	(2)	(3)	(4)
	Baseline specification coefficient b	Identified Set (b,b'(Rmax, delta=1),b)	Exclude zero	Absolute delta (δ)
Lynching activity	−0.062***	[−0.062,−0.055]	✓	4.5>1
Geo. and hist. controls	✓	✓		
State FE	✓	✓		
N	633	633		

Note: Coefficients for the baseline specifications are obtained from OLS results illustrated in Table B.1. Results in columns 2 and 4 are calculated using Stata code PSACALC, thus correcting baseline estimations for omitted variables bias. The estimations include a constant term, which is omitted for space considerations. Variables descriptions are provided in the supporting information Table B.1.

***$p < 0.01$ mean that the coefficient is statistically significant at 1%.

**$p < 0.05$ mean that the coefficient is statistically significant at 5%.

*$p < 0.1$ mean that the coefficient is statistically significant at 10%.

prevailing racial order, encouraging the formation of White working-class mobs. In a more recent study, Dahis et al. (2019) propose that even within urban areas, racial segregation persisted, with observable divisions within the same building across multiple floors. Consequently, the transformation of the population structure in the Southern United States around 1880 appears to have catalyzed social conflict, intensified racial competition, and consequently led to lynching incidents. To the best of our knowledge, this research presents a novel perspective into the role of urbanization and industrialization as a catalyst for lynching. This is an important exploration given the historical link-ages between lynching and contemporary economic, social, and political outcomes.

To empirically examine our hypothesis that lynching activity was dynamically influenced by urbanization and industrialization, we construct two distinct historical indexes reflecting the evolution of these two forces during the lynching period.

Regarding urbanization, we employ data from Jaremski and Fishback (2018), who provide the number of banks per thousand people for all US South counties in our sample for each decade from 1880 to 1920. Banking activity in the 19th century was intertwined with urbanization in the United States. Banks and financial institutions provided financial assistance for urban development projects (such as roads, bridges, public buildings, water supply systems, and public transportation), supported businesses and industrial financing, provided loans for real estate development, facilitated trade and commerce, attracted new immigrants (such as Black people) seeking new opportunities, and supported innovation, education, and entrepreneurship. Therefore, the expansion of banks could be considered a valid index for urbanization at the county level around 1900. Our urbanization rate index is the difference in banking activity (banks per thousand people) between census years at the county level.

Our measure of industrialization relies on data on the evolution of railways in the 19th century in the United States. Railways provided a more efficient means of transporting raw materials, such as coal, iron ore, and timber, from resource-rich areas to industrial centers. They also helped the distribution of finished goods from facto-ries to markets across the country as well as labor mobility, leading to increased economic integration and a more interconnected national economy. Railways drove technological innovations in areas such as locomotive design, track construction, and signaling systems, contributing to overall technological progress and urban development (Wood, 2018).

Therefore, we construct an industrialization index using recent geo-spatial data on the rate of railways expansion at the county level drawn from Sequeira et al. (2020). This index is calculated as the total kilometers of railways in each county across the years 1876, 1883, 1890, 1893, 1898, 1912, and 1921. Specifically, we find the additional kilometers of railways for each county during this period dividing by the corresponding number of years since the previous one.[12] We then use the lynching data for the same years, that is from 1876 to 1921, to construct our corresponding lynching measure.

With the above additional data at our disposal, we utilize the following equation to regress lynching activity on banking activity and railway construction, which proxy for urbanization and industrialization expansion, respectively:

$$LynchingActivity_{it} = \alpha \mathbf{UI}_{it} + \beta GeoHistContr_i + \zeta_t + \eta_s + \theta_{st} + \epsilon_i. \tag{2}$$

In Equation (2), i indexes counties, t indexes years (1880, 1890, 1900, 1910, and 1920 for banking activity and 1883, 1890, 1893, 1898, 1912, and 1921 for railway expansion), and s indexes states. α is the coefficient for either our index for urbanization or industrialization. We also keep our related geographic and historical controls that remain consistent across all years. Additionally, ζ_t signifies decade fixed effects, η_s captures state fixed effects reflecting time-invariant determinants, and θ_{st}' represents state x year fixed effects. The inclusion of these fixed effects eliminates any latent time-varying heterogeneities across states, encompassing variations in regional eco-nomic cycles, divergent regional trends, or aggregate shocks arising from institutional changes.

---

[12]For instance, in our rate of industrialization for the year 1890, we find the difference of kilometers between 1883 and 1890 dividing by 7 (the number of years between 1883 and 1890).

Table 4 presents the results. All regressions in panels A and B include state and year fixed effects. Similarly, in both panels, we add geographic and historical controls in column 2, and in column 3, we include state x year fixed effects. panel A shows the coefficients associated with the urbanization index, as measured by banking activity. The effects are positive and statistically significant, suggesting that as counties became more urbanized, lynching incidents increased. In panel B, we show the estimates on our industrialization index, which also yield a positive impact on lynching activity, yet their statistical significance is mainly at the 10% level.

In sum, the Black population played a key role in urbanization and industrialization that arose after 1880 (Browne, 1972). Conversely, their economic and social integration at the local level emerged as a key factor triggering lynching incidents. This phenomenon can be attributed to the fact that the economic and racial hierarchy underwent more pronounced transformations in rapidly urbanized regions, unsettling established racial norms. According to Wood (2018), one's social standing became less defined and established within this new and unfamiliar environment, challenging White supremacy and consequently creating interracial conflicts that culminated in lynching.

TABLE 4 Historical urbanization/industrialization and lynching.

The dependent variable is lynching activity			
	(1)	(2)	(3)
		Panel A: Urbanization	
Urbanization index	0.316*	0.428***	0.321**
	(0.170)	(0.112)	(0.125)
Geo. and hist. controls		✓	✓
State FE	✓	✓	✓
Year FE	✓	✓	✓
State year FE			✓
R^2	0.052	0.098	0.106
N	4375	3910	3910
The dependent variable is lynching activity			
	(1)	(2)	(3)
		Panel B: Industrialization	
Industrialization index	0.017*	0.016**	0.017*
	(0.007)	(0.007)	(0.008)
Geo. and hist. controls		✓	✓
State FE	✓	✓	✓
Year FE	✓	✓	✓
State year FE			✓
R^2	0.074	0.107	0.119
N	5250	4692	4692

Notes: The units of analysis are US counties. Variables descriptions are provided in the supporting information Table B.1. The estimations include a constant term and a full set of State dummies, which are omitted for space considerations. Standard errors clustered at the county level are in parentheses.
***$p < 0.01$ mean that the coefficient is statistically significant at 1%.
**$p < 0.05$ mean that the coefficient is statistically significant at 5%.
*$p < 0.1$ mean that the coefficient is statistically significant at 10%.

6.2 | Early urbanization and black percentage

To support our argument that urbanization and industrialization serve as key forces for a higher concentration of the Black population that led to an increase in interracial competition, we investigate whether the proportion of Black residents can be attributed to these two drivers since the lynching period. While early urbanization in the Southern United States does not imply an increase in the Black population's concentration, historical records by Olzak (1990) reveal that the percentage of Black residents in urban areas surged from 12% in 1880 to 34% in 1920. Furthermore, Browne (1972) demonstrates the role played by Black individuals in the transformation of the United States from an agrarian to an industrial economy post-1860. Similarly, Arnesen (1994) underscores that African Americans were indispensable as laborers in the construction of Southern railways during the post-bellum era.

To empirically investigate this issue, we employ data on the local (county) proportion of Black residents since 1870, as sourced from Acharya et al. (2016). Figures 4 and 5 show the main results. The figures plot the estimates (with their corresponding confidence intervals) that were obtained from individual regressions in the years 1870, 1920, 1940, 1970, 2000, and 2010. This allows us to observe the effects of early urbanization and industrialization on the proportion of Black residents at the county level across various time points throughout the whole 20th century. The results demonstrate a persistent influence of these two forces on the concentration of the Black population in the Southern United States since the lynching period until the present-day. These trends support our argument.

7 | MECHANISMS: PREJUDICE AND ECONOMIC OPPORTUNITIES

While we have already presented evidence establishing a link between urbanization, lynching incidents, and the enduring dynamics of racial competition, we now turn our attention to an examination of whether regions characterized by higher lynching activity also exhibit higher levels of interracial prejudice. Our argument relies on the work by Dessi (2008), who finds that collective memory, even at the local level, transmitted through oral tradition,
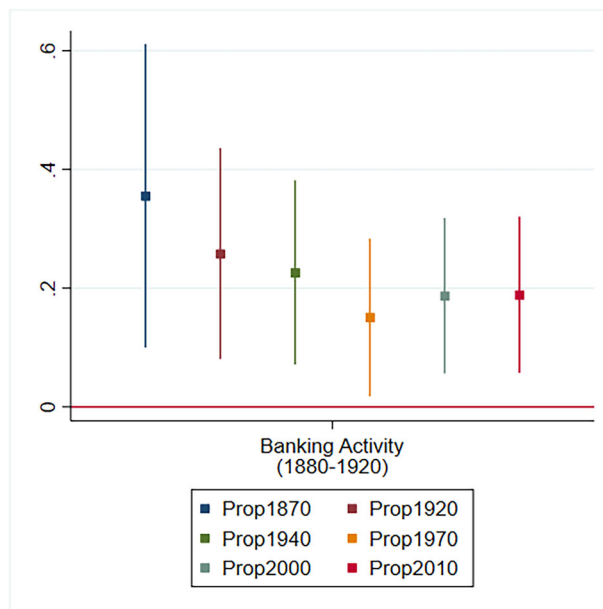

FIGURE 4 Historical banking activity and proportion of black people over decades. [Colour figure can be viewed at wileyonlinelibrary.com]
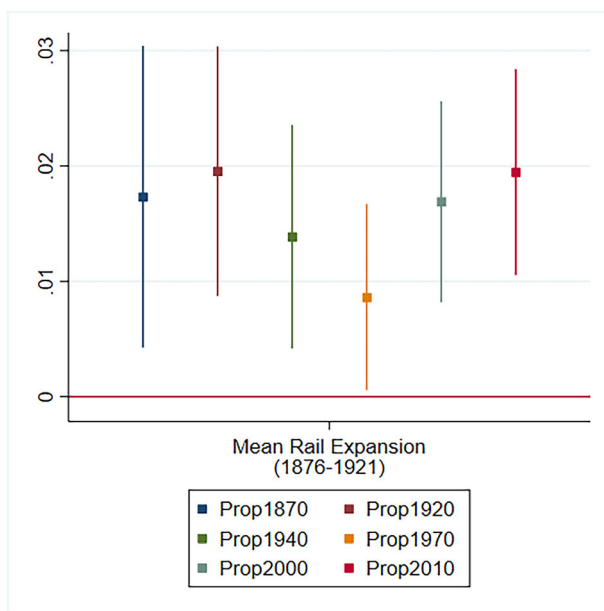
FIGURE 5 Historical railways expansion and proportion of black people over decades. [Colour figure can be viewed at wileyonlinelibrary.com]

educational materials, media, and so on, significantly influences economic values. We thus posit that Black individuals raised in counties with a history of prevalent lynchings are likely to have been exposed to narratives of lynching as a form of historical trauma. This exposure may have eroded their goodwill towards Whites, consequently intensifying interracial tensions.

To test this hypothesis, we follow Chetty and Hendren (2018a) and employ Harvard University's Implicit Association Test (IAT) scores for racial prejudice, which ranges from −2 to 2. Negative scores indicate pro-Black/anti-White attitudes, while positive scores denote an anti-Black/pro-White orientation. We compute standardized county-level means scores for the years 2010 to 2020, weighting them by the proportion of Black residents in 2010 to reflect contemporary racial attitudes.[13] In column 1 of Table 5, we regress these scores on our lynching measure, while also controlling for state fixed effects.[14] The positive and statistically significant coefficient associated with our main variable of interest suggests that counties with a more profound historical trauma stemming from lynchings tend to exhibit more strained racial relations, leading to social isolation or exclusion, and consequently, diminished economic opportunities for Black individuals.

As an alternative measure of prejudice, we consider a binary variable indicating the presence of at least one historically "Black" college or university at the county level, as per Chetty and Hendren (2018b). The existence of such institutions implies a tendency for students attending them to learn and reside in a racially isolated and segregated environment, potentially impacting their access to economic opportunities either as workers or socially. The results

---

[13]Chetty and Hendren (2018a) propose that Implicit Association Test (IAT) scores can serve as a crude indicator of average racial bias at the local level. It is worth noting that IAT participants are volunteers, introducing a potential source of selection bias into the estimates. We are also aware of other limitations of IAT scores including factors such as testing conditions, participant mood, and other contextual variables, which may affect their reliability. Nonetheless, Chetty and colleagues contend that the participation rate does not exhibit a significant correlation with the intergenerational gap between Black and White individuals, which offers some confidence in utilizing IAT measures. Given the random nature of respondent participation across years, the number of counties in our sample also fluctuates annually. Consequently, when computing the mean values of our metric, we base our calculations on the years for which data are available.

[14]We avoid using our control variables since the sample decreases significantly, and the results are unreliable.

TABLE 5 Historical lynching and racial bias variables: OLS estimates.

The dependent variable is as follows:			
	IAT scores	Hist. univ./college	Isolation 1940
	(1)	(2)	(3)
Lynching activity	−0.018***	0.008**	0.006***
	(0.005)	(0.003)	(0.001)
State FE	✓	✓	✓
R^2	0.219	0.021	0.081
N	635	875	874

Note: The units of analysis are US counties. Variables descriptions are provided in the supporting information Table B.1. The estimations include a constant term and a full set of state dummies, which are omitted for space considerations. Standard errors clustered at the county level are in parentheses.
Abbreviation: OLS, ordinary least squares.
***$p < 0.01$ mean that the coefficient is statistically significant at 1%.
**$p < 0.05$ mean that the coefficient is statistically significant at 5%.
*$p < 0.1$ mean that the coefficient is statistically significant at 10%.

in column 2 of Table 5 indicate that areas with a higher historical incidence of lynchings also tend to host universities or colleges principally attended by Black students.

In addition to these measures connecting counties with a history of lynchings and contemporary racial prejudice, we further explore this relationship within a historical context. We utilize data from Logan and Parman (2017), which offers a measure of Black isolation as an indicator of their exposure to other racial groups in 1940, marking the end of the era characterized by extensive lynching of Black individuals. In column 3 of Table 5, we observe a positive and statistically significant coefficient associated with our main variable of interest at the 99% confidence level, signifying a lasting impact of lynching on Black isolation and segregation. The utilization of the same isolation index for 1880 yields nonsignificant results, which might suggest that the segregation of Black individuals in the US South persisted after the era of lynching, influencing their long-term economic prospects.[15]

It is essential to acknowledge that our findings diverge from those of Williams (2022), who found no correlation between lynching incidents and Black education or income. This divergence challenges the hypothesis that historical lynching directly affects current discrimination at the local level. Nevertheless, our focus extends beyond income levels and education to consider whether Black individuals encounter intangible barriers of prejudice that may impact their labor market entry, such as early entry (due to missed educational opportunities) or delayed entry (due to loss of years of experience). Additionally, there may exist other channels through which past lynchings could affect the economic opportunities of Black individuals, including discrimination within the financial environment they grow up in and the psychological traumas endured. For example, Célerier and Matray (2019) have noted that Black households in the US encounter limited access to banking services, potentially excluding them from opportunities such as student loans or conventional credit, which could improve their financial circumstances. In this context, Blanchflower et al. (2003) and others have found that Black-owned small businesses are approximately twice as likely to face credit denial due to discrimination. Therefore, individuals in areas where lynchings were more prevalent in the past may endure discrimination and lose economic opportunities through a myriad of mechanisms.

Overall, our analysis suggests that the historical legacy of lynching may have cast a profound cultural imprint on race relations at the county level. Recent studies highlight the enduring influence of culture on economic outcomes. Therefore, our findings, which indicate that historical lynchings have had a negative impact on the contemporary

---

[15]In this case, the isolation variable is the dependent variable as it is measured before the lynching era.

economic prospects of Black individuals, underscore the need for policies aimed at alleviating racial tensions and enhancing economic opportunities for Black residents in the Southern United States.

8 | ROBUSTNESS TESTS AND FURTHER EVIDENCE

8.1 | Black lynchings and other races

In this study, we advance the argument that historical lynchings targeting Black individuals have had enduring implications for their long-term economic opportunities. To augment the robustness of our assertion, we explore the potential impact of lynchings of Black people on the economic prospects of other racial groups, including Whites, Hispanics, Asians, and Native Americans. Table 6 reveals no statistically significant relationships for any of these other racial groups. If the effect was significant for other racial groups, it would suggest that historical lynchings of Black individuals may have impacted economic opportunities for all individuals at the county level, rather than solely affecting the opportunities of Black individuals. This would imply that our lynching variable might be associated with general historical crime rates at the local level and may not adequately capture the unique impact of Black history. While these findings affirm our original argument, it is crucial to approach these results with caution, given the relatively limited availability of mobility data, particularly for Asians and Native Americans.

8.2 | Lynchings or racial tensions?

To explore the distinct impacts of historical lynchings from those pertaining to racial tensions at the county level in the US South, we augment our analysis by incorporating data on incidents of threats for lynchings that ultimately did not transpire, and where the mobilization of a mob did not materialize, as documented by Bailey and Tolnay (2015). To do so, we construct an index for each county to quantify the occurrences of "potential" lynchings perpetrated by Whites against Blacks and vice versa, thereby capturing the local-level racial tension in both directions. In Table 7, we add our racial tension variables as controls. The results show that the effects of lynchings remain statistically

TABLE 6 Historical lynching and intergenerational mobility for other races.

The dependent variable is intergenerational mobility for other races				
	Whites	**Hispanics**	**Asians**	**Native Ame.**
	(1)	**(2)**	**(3)**	**(4)**
Lynching activity	−0.029	−0.092	−0.072	0.076
	(0.027)	(0.060)	(0.121)	(0.111)
Geo. and hist. controls	✓	✓	✓	✓
State FE	✓	✓	✓	✓
R^2	0.404	0.064	0.000	0.105
N	737	551	282	199

Note: The units of analysis are US counties. Variables descriptions are provided in the supporting information Table B.1. The estimations include a constant term and a full set of state dummies, which are omitted for space considerations. Standard errors clustered at the county level are in parentheses.
$p < 0.01$ mean that the coefficient is statistically significant at 1%.
$p < 0.05$ mean that the coefficient is statistically significant at 5%.
$p < 0.1$ mean that the coefficient is statistically significant at 10%.

TABLE 7 Historical lynching and racial tensions: OLS estimates.

The dependent variable is intergenerational mobility for Blacks			
	(1)	**(2)**	**(3)**
Lynching activity	−0.0626***	−0.0603***	-0.0518**
	(0.0233)	(0.0232)	(0.0258)
Threats against blacks	−0.0280	−0.0293	−0.0070
	(0.0302)	(0.0305)	(0.0357)
Threats against Whites	−0.0461	−0.0378	−0.0079
	(0.0458)	(0.0463)	(0.0534)
Geographical controls		✓	✓
Historical controls			✓
State FE	✓	✓	✓
R^2	0.082	0.088	0.099
N	760	760	633

Note: The units of analysis are US counties. Variables descriptions are provided in the supporting information Table B.1. The estimations include a constant term and a full set of State dummies, which are omitted for space considerations. Standard errors clustered at the county level are in parentheses.

Abbreviation: OLS, ordinary least squares.

***$p < 0.01$ mean that the coefficient is statistically significant at 1%.

**$p < 0.05$ mean that the coefficient is statistically significant at 5%.

*$p < 0.1$ mean that the coefficient is statistically significant at 10%.

significant, while those associated with the historical racial tensions exert a much lower and non-significant effect on the current economic opportunities of Black individuals.

8.3 | Lynching and heterogeneity

Another dimension to consider pertains to the Great Migration, a critical historical event wherein nearly six million Black individuals departed the South between 1910 and 1970 in pursuit of opportunities in northern and western industrial centers. Notably, this migration was largely composed of positively selected individuals (Collins & Wanamaker, 2015), which implies that those Black Southerners remaining in the South may have represented a less affluent economic background. This distinction could potentially manifest in the results of our study. Consequently, we opt to re-estimate our OLS equations by segmenting our county sample based on the level of Black illiteracy in 1900. Our aim here is to discern whether the impact of lynching on the economic opportunities of Black individuals varies with respect to the average economic, educational, and social context of the Black population at the county level. The goal is to investigate whether population mixture, encompassing factors such as wealth and education, as well as selective migration within states throughout the 20th century, may have contributed to observed differences.

As explained in Section 5.2, the illiteracy rate among Black individuals in 1900 spans from 1 to 6. Specifically, 34.65% of the total county sample feature illiteracy rates below or equal to 5, while 65.35% exhibit an illiteracy rate of 6, representing the highest level. Table 8 presents the OLS results, partitioning the sample as previously described and retaining the geographical controls. The results consistently affirm that historical lynchings exert a negative and

TABLE 8 Historical lynching and heterogeneity: OLS estimates.

The dependent variable is intergenerational mobility for Blacks		
	Low illiteracy	High illiteracy
	(1)	(2)
Lynching activity	−0.119***	−0.047*
	(0.042)	(0.024)
Geographical controls	✓	✓
State FE	✓	✓
R^2	0.046	0.141
N	250	498

Note: The units of analysis are US counties. Variables descriptions are provided in the supporting information Table B.1. The estimations include a constant term and a full set of State dummies, which are omit-ted for space considerations. Standard errors clustered at the county level are in parentheses.
Abbreviation: OLS, ordinary least squares.
***$p < 0.01$ mean that the coefficient is statistically significant at 1%.
**$p < 0.05$ mean that the coefficient is statistically significant at 5%.
*$p < 0.1$ mean that the coefficient is statistically significant at 10%.

statistically significant impact on the present-day economic opportunities of Black individuals, regardless of aggre-gate educational attainment within the counties.[16]

8.4 | Additional indicators of racial disadvantage

In addition to our main outcome variable, we further explore whether in areas with long history of lynchings, Black people still experience racial disadvantages in various aspects of social life. To do so, we collect data on voter regis-tration rates of Blacks and Whites at the county level from Williams (2022). Then we construct the proportion of the rates of registered Black voters relative to White voters for two subsequent election years in 2000 and 2004.[17] In this way, we test whether historical lynchings could have affected the participation of Black individuals in contempo-rary political life relative to their White counterparts. In panel A of Table 9, we regress the above variables on our historical lynching variable controlling for all our potential confounders and State fixed effects as in Equation (1). The results suggest that, in areas with higher lynching activity, Black people tend to participate less in political life.[18] Our findings are in line with previous literature such as Jones et al. (2017) who suggest that lynchings reduced historical local voter turnout significantly.

---

[16]In unreported findings, we run regressions involving our metric of Black illiteracy rates in 1900 as the dependent variable, considering lynchings up to 1900 while including our control variables. Across all model specifications, our analysis consistently reveals no discernible association between lynchings and literacy rates at the county level. Furthermore, we extended our primary Equation (1) by augmenting the control variables with illiteracy rates. Remarkably, this expansion of variables yields unchanged results, reaffirming the consistency of our baseline findings. We also examine whether historical lynchings have heterogeneous effects related to diverse contemporary economic and social characteristics at the county level by using interaction models. These characteristics include the percentage of Black people, poverty rates, income and racial segregation, social capital, the percentage of religious people, school expenditure per student, and student–teacher ratio. None of our estimations suggest spatially heterogeneous effects of historical lynchings on current economic opportunities.

[17]We prefer the election years before the financial crisis of 2008 since other potential endogenous economic disadvantages may have affected this year's elections.

[18]The availability of data for our US South sample at the local level reduces significantly. Nevertheless, we consider it as significant suggestive evidence on the effects of historical lynchings on the political life of Black people.

TABLE 9 Historical lynching and alternative measures for racial disadvantages.

	Panel A: Political participation for Blacks	
	% Voting for Blacks in 2000	% Voting for Blacks in 2004
The dependent variables are as follows:	(1)	(2)
Lynching activity	−0.015***	−0.015***
	(0.007)	(0.006)
Geo. and hist. controls	✓	✓
State FE	✓	✓
R^2	0.296	0.342
N	308	399
	Panel B: Racial hate crime	
	Mean per capita black offenders	Mean per capita white offenders
The dependent variables are as follows:	(1)	(2)
Lynching activity	0.007***	0.001
	(0.003)	(0.003)
Econ crime controls	✓	✓
State FE	✓	✓
R^2	0.165	0.223
N	376	275

Note: The units of analysis are US counties. Variables descriptions are provided in the supporting information Table B.1. The estimations include a constant term and a full set of State dummies, which are omitted for space considerations. Standard errors clustered at the county level are in parentheses.

***$p < 0.01$ mean that the coefficient is statistically significant at 1%.

**$p < 0.05$ mean that the coefficient is statistically significant at 5%.

*$p < 0.1$ mean that the coefficient is statistically significant at 10%.

Moreover, we examine whether recent crime rates related to acts of racism against Black individuals are also associated with historical lynching activity. We build on previous work by Kaplan (2019), who provides recent data on "anti-Black" and "anti-White" crime rates at the local level in the United States. Kaplan (2019) uses data from the US Department of Justice based on the Uniform Crime Reporting (UCR) program. Racial crime is described as a criminal offense committed against a person, property, or society, which is motivated, in whole or in part, by the offender's bias against her/his race. Therefore, for each county, we construct a racial hate crime variable that measures the average Black offenders per capita from the period 2007-2017.

We then regress this index on our historical lynching variable, controlling for an array of variables framed in the literature on the economics of crime. Specifically, we control for household income and income inequality (Enamorado et al., 2016), the fraction of Black people (Quillian & Pager, 2001), segregation of income and poverty (Krivo et al., 2009), social capital (Lederman et al., 2002), the fraction of religious people (Iyer, 2016), and education level (Lochner & Moretti, 2004).

In panel B of Table 9, column 1 shows the results. Historical lynching activity appears to have played a significant role in shaping current levels of hate crime against Black people. As a potential robustness check, we further investigate whether historical lynchings have affected racial crime rates for Whites. In this case, people from locations that have experienced historical lynching could have adopted violence as an attitude not only for Blacks but also for Whites. For this reason, we also construct our index of racial crime for White people at the county level, and we repeat our estimation by replacing our outcome variable. The results for this regression are reported in column 2 of

TABLE 10 Historical lynching and spillover effects.

The dependent variables are as follows:	Lynching (1)	Lynching (2)	Intergenerational mobility (3)	Intergenerational mobility (4)
Lynching activity			−0.054***	−0.049***
			(0.020)	(0.022)
Spillover	0.071***	0.062***	−0.039***	−0.036***
	(0 .014)	(0.018)	(0.008)	(0.012)
Geo. and hist. controls		✓		✓
State FE	✓	✓	✓	✓
R^2	0.164	0.284	0.101	0.096
N	875	737	760	633

Note: The units of analysis are US. counties. Variables descriptions are provided in the supporting information Table B.1. The estimations include a constant term and a full set of State dummies, which are omit-ted for space considerations. Standard errors clustered at the county level are in parentheses.

***$p < 0.01$ mean that the coefficient is statistically significant at 1%.

**$p < 0.05$ mean that the coefficient is statistically significant at 5%.

*$p < 0.1$ mean that the coefficient is statistically significant at 10%.

Table 9 panel B. Surprisingly, the coefficient is not statistically significant. This suggests that there is no effect of historical lynching on anti-White crime rates. These findings may corroborate the notion that historical lynchings played a key role in influencing anti-Black sentiments, thus impacting the economic opportunities for Black individuals.

8.5 | Spillover effects and alternative data sources for lynching

According to Tolnay et al. (1996), lynchings were a form of spatially contagious behavior which could be diffused among nearby areas. More specifically, they find that Whites were satisfied with the local Black people being sufficiently threatened by nearby lynchings, and Black people were adapting their behavior to minimize conflict with local Whites. This means that lynchings could have been affected by a local spatial relationship that we should consider.

In order to consider these spillover effects, for each county, we calculate the mean lynching activity within all adjacent neighboring counties.[19] For instance, Decatur, a random county in Southern Georgia borders with another seven counties that also experienced lynching activity. Therefore, lynching cases in Decatur could have influenced and have been influenced by the violent activity of its neighboring counties. Thus, we compute our "Spillover" variable as the sum of all lynchings divided by the total area of its all neighbor (share part of its border) counties. This is the mean lynching activity of the neighborhood for each county. In columns 1 and 2 of Table 10, we show the correlations between lynching activity in counties and the mean lynching activity of their neighborhood counties. Our "Spillover" variable has a positive and highly significant effect on our main lynching activity variable. In columns 3 and 4 of Table 10, we then perform our main analysis controlling for our "Spillover" variable to distinguish between the effects of historical lynchings in the counties themselves and those that may originate from surrounding counties.

The results suggest that even when we consider the contagious effects stressed out by Tolnay et al. (1996), we still find that historical lynching activity is a deep root of unequal economic opportunities for Black people in the US South.[20]

Given the historical nature of our data, concerns about potential collection bias may arise. To address this, we employ an alternative lynching database known as Project HAL: Historical American Lynching. This dataset originates

---

[19]To calculate this measure, we use the focal statistics tool in ArcGIS.

[20]We also use Conley (1999)'s method with a cutoff distance of 100 km to correct for spatial dependence of an unknown form. The effect of historical lynchings remains positive and significant (*t*-stat = 2.9).

from the NAACP Lynching Records at Tuskegee Institute in Tuskegee, Alabama, and has been employed in prior research, including that of Williams (2022). As outlined in Table A.2 in the supporting information, we replicate our primary OLS and IV regressions using this alternative data source. The coefficients across all estimates remain consistent, implying that our main findings are unlikely to be substantially influenced by data collection bias.

9 | CONCLUSION

In this study, we examine the impact of historical lynchings in the Southern United States of America on economic opportunities of the Black population today. As the 20th century dawned, the region witnessed a surge in illicit and unlawful public crimes, with a particular focus on the unjust targeting and killing of over 3500 Black individuals by White mobs. Among various underlying factors, the intensification of urbanization and industrialization emerged as driving forces for inter-racial competition and the subsequent lynching of Black individuals. Additionally, we contend that persistent racial prejudice against Black people serves as a relevant factor linking historical lynchings to their contemporary economic opportunities.

To test our hypothesis, our analysis unfolds in several ways. Our baseline findings demonstrate that historical lynchings have exerted a detrimental impact on the current economic prospects of Black individuals. These results receive validation through both OLS analysis and an IV approach, in which we employ historical cotton suitability as an instrument for lynchings. Furthermore, we provide empirical support for the assertion that the upsurge in urbanization and industrialization across the Southern United States post-1880 was accompanied by a parallel increase in the frequency of lynchings. This empirical finding corroborates historical evidence, highlighting the concurrent nature of urbanization and industrialization (attributable to the influx of Black and other immigrant populations) and escalating racial tensions. We also ascertain that regions characterized by pronounced early urbanization and industrialization rates witnessed a gradual concentration of Black residents throughout the 20th century.

Moreover, we explore whether regions with a higher historical incidence of lynchings also exhibit higher levels of racial tension. This analysis is motivated by the overarching objective of demonstrating that the link between historical lynchings and the contemporary economic prospects of Black individuals can, in part, be explained by the prevailing cultural norms and beliefs concerning race relations at the county level. To this end, we utilize crude proxies for prejudice, offering suggestive evidence in support of our hypothesis.

Our results are relevant for policy makers given the deep-rooted economic effects that historical injustices like lynchings have caused on the Black population over the long-run. Certainly, implementing policies that promote greater economic opportunities for Black people may alleviate these long-lasting effects, paying attention on the descendants of those who were victims of lynchings. In any case, our findings may serve as clear evidence of the economic legacy originated from a critical episode in the US history. As such, our results may help policy to raise awareness about the historical context of lynchings and their important impact on the present economic opportunities of Black people. Furthermore, our results regarding prejudice as a mechanism between historical lynchings and current economic opportunities may underscore the need to strengthen and enforce antidiscrimination laws, which can help combat persistent racial prejudice.

In terms of future research, it would be worthwhile to investigate the main drivers of equalizing economic opportunities for people of all races given that economic opportunities are influenced by several factors, such as education and antidiscrimination laws. Finally, to provide external validity to our main argument that historical crimes such as lynching may have long-lasting economic effects on the affected population, it would be interesting to focus on determining any potential relationship between historical racial crime, prejudice, and current economic opportunities for minorities in different parts of the world with significant racial welfare gaps, such as Europe.

Overall, we believe that our findings make a valuable contribution to the expanding body of economic literature aimed at understanding the long-term consequences of lynching in the United States and the role of historical legacies in shaping the enduring disparities in economic opportunities among diverse racial groups.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available from the corresponding author upon reasonable request.

ORCID

Aldo Elizalde https://orcid.org/0000-0003-4098-3390

REFERENCES

Acharya, A., Blackwell, M., & Sen, M. (2016). The political legacy of American slavery. *The Journal of Politics*, *78*(3), 621–641.

Adermon, A., Lindahl, M., & Waldenström, D. (2018). Intergenerational wealth mobility and the role of inheritance: Evidence from multiple generations. *The Economic Journal*, *128*(612), F482–F513.

Alesina, A., Michalopoulos, S., & Papaioannou, E. (2016). Ethnic inequality. *Journal of Political Economy*, *124*(2), 428–488.

Andrews, R., Casey, M., Hardy, B. L., & Logan, T. D. (2017). Location matters: Historical racial segregation and intergenerational mobility. *Economics Letters*, *158*, 67–72.

Arnesen, E. (1994). "Like Banquo's ghost, it will not down": The race question and the American railroad brotherhoods, 1880-1920. *The American Historical Review*, *99*(5), 1601–1633.

Ayers, E. L., Gould, L. L., Oshinsky, D. M., & Soderlund, J. R. (2011). *American passages: A history of the United States, volume 2: Since 1865, brief*: Cengage Learning.

Bailey, A. K., & Tolnay, S. E. (2015). *Lynched: The victims of southern mob violence*: UNC Press Books.

Beck, E. M., & Tolnay, S. E. (1990). The killing fields of the deep south: The market for cotton and the lynching of blacks, 1882-1930. *American Sociological Review*, *55*(4), 526–539.

Bertocchi, G., & Dimico, A. (2014). Slavery, education, and inequality. *European Economic Review*, *70*, 197–209.

Bignon, V., Caroli, E., & Galbiati, R. (2017). Stealing to survive? Crime and income shocks in nineteenth century france. *The Economic Journal*, *127*(599), 19–49.

Blanchflower, D. G., Levine, P. B., & Zimmerman, D. J. (2003). Discrimination in the small-business credit market. *Review of Economics and Statistics*, *85*(4), 930–943.

Bodenhorn, H., & Ruebeck, C. S. (2007). Colourism and African–American wealth: Evidence from the nineteenth-century south. *Journal of Population Economics*, *20*, 599–620.

Browne, R. S. (1972). The economic case for reparations to black america. *The American Economic Review*, *62*(1/2), 39–46.

Célerier, C., & Matray, A. (2019). Bank-branch supply, financial inclusion, and wealth accumulation. *The Review of Financial Studies*, *32*(12), 4767–4809.

CSDE (2015). CSDE lynching database. http://lynching.csde.washington.edu/#/home

Chetty, R., Friedman, J. N., Hendren, N., Jones, M. R., & Porter, S. R. (2018). The opportunity Atlas: Mapping the childhood roots of social mobility. (*techreport*): National Bureau of Economic Research.

Chetty, R., Friedman, J. N., Saez, E., Turner, N., & Yagan, D. (2020). Income segregation and intergenerational mobility across colleges in the united states. *The Quarterly Journal of Economics*, *135*(3), 1567–1633.

Chetty, R., & Hendren, N. (2018a). The impacts of neighborhoods on intergenerational mobility I: Childhood exposure effects. *The Quarterly Journal of Economics*, *133*(3), 1107–1162.

Chetty, R., & Hendren, N. (2018b). The impacts of neighborhoods on intergenerational mobility II: County-level estimates. *The Quarterly Journal of Economics*, *133*(3), 1163–1228.

Chetty, R., Hendren, N., Kline, P., & Saez, E. (2014). Where is the land of opportunity? The geography of intergenerational mobility in the united states. *The Quarterly Journal of Economics*, *129*(4), 1553–1623.

Christian, C. (2017). Lynchings, labour, and cotton in the us south: A reappraisal of Tolnay and Beck. *Explorations in Economic History*, *66*, 106–116.

Clark, G. (2015). *The son also rises: Surnames and the history of social mobility: Surnames and the history of social mobility*: Princeton University Press.

Collins, W. J., & Wanamaker, M. H. (2015). The great migration in Black and White: New evidence on the selection and sorting of southern migrants. *The journal of Economic History*, *75*(4), 947–992.

Conley, T. G. (1999). GMM estimation with cross sectional dependence. *Journal of Econometrics*, *92*(1), 1–45.

Cook, L. D. (2014). Violence and economic activity: Evidence from african american patents, 1870–1940. *Journal of Economic Growth*, *19*, 221–257.

Cook, L. D., Logan, T. D., & Parman, J. M. (2018). Racial segregation and southern lynching. *Social Science History*, *42*(4), 635–675.

Dahis, R., Nix, E., & Qian, N. (2019). Choosing racial identity in the United States, 1880-1940. (*techreport*): National Bureau of Economic Research.

Daniele, G., & Geys, B. (2015). Organised crime, institutions and political quality: Empirical evidence from Italian municipalities. *The Economic Journal*, *125*(586), F233–F255.

Dessi, R. (2008). Collective memory, cultural transmission, and investments. *American Economic Review*, *98*(1), 534–560.

Eckert, F., Gvirtz, A., Liang, J., & Peters, M. (2020). A method to construct geographical crosswalks with an application to us counties since 1790. (*techreport*): National Bureau of Economic Research.

Enamorado, T., López-Calva, L. F., Rodríguez-Castelán, C., & Winkler, H. (2016). Income inequality and violent crime: Evidence from Mexico's drug war. *Journal of Development Economics*, *120*, 128–143.

Feigenbaum, J. J. (2018). Multiple measures of historical intergenerational mobility: Iowa 1915 to 1940. *The Economic Journal*, *128*(612), F446–F481.

Gannett, H. (1903). *Occupations of the Black people*: Baltimore: Trusteess.

Gaston, S. (2021). Historical racist violence and intergenerational harms: Accounts from descendants of lynching victims. *The Annals of the American Academy of Political and Social Science*, *694*(1), 78–91.

Gibson, C., & Jung, K. (2002). *Historical census statistics on population totals by race, 1790 to 1990, and by hispanic origin, 1790 to 1990, for the United States, regions, divisions, and states*: Washington, DC.

Glaeser, E. L. (2005). The political economy of hatred. *The Quarterly Journal of Economics*, *120*(1), 45–86.

Guzman, J. P., & Hughes, W. H. (1941). Lynching-crime. *Negro year book: A review of events affecting Negro life*, *1946*, 302–319.

Iyer, S. (2016). The new economics of religion. *Journal of Economic Literature*, *54*(2), 395–441.

Jaremski, M., & Fishback, P. V. (2018). Did inequality in farm sizes lead to suppression of banking and credit in the late nineteenth century? *The Journal of Economic History*, *78*(1), 155–195.

Jiang, W. (2017). Have instrumental variables brought us closer to the truth. *Review of Corporate Finance Studies*, *6*(2), 127–140.

Jones, D. B., Troesken, W., & Walsh, R. (2017). Political participation in a violent society: The impact of lynching on voter turnout in the post-reconstruction south. *Journal of Development Economics*, *129*, 29–46.

Kaplan, J. (2019). Jacob Kaplan's concatenated files: Uniform crime reporting (UCR) program data: Hate crime data 1991-2017. Ann Arbor, MI: Inter-university Consortium for Political and Social Research [distributor], 7–27. https://www.openicpsr.org/openicpsr/project/100707/version/V17/view

Kelly, M. (2000). Inequality and crime. *Review of Economics and Statistics*, *82*(4), 530–539.

Krivo, L. J., Peterson, R. D., & Kuhl, D. C. (2009). Segregation, racial structure, and neighborhood violent crime. *American Journal of Sociology*, *114*(6), 1765–1802.

Lederman, D., Loayza, N., & Menendez, A. M. (2002). Violent crime: Does social capital matter? *Economic Development and Cultural Change*, *50*(3), 509–539.

Lochner, L., & Moretti, E. (2004). The effect of education on crime: Evidence from prison inmates, arrests, and self-reports. *American Economic Review*, *94*(1), 155–189.

Logan, T. D., & Parman, J. M. (2017). The national rise in residential segregation. *The Journal of Economic History*, *77*(1), 127–170.

Markussen, S., & Røed, K. (2020). Economic mobility under pressure. *Journal of the European Economic Association*, *18*(4), 1844–1885.

Mehlum, H., Moene, K., & Torvik, R. (2005). Crime induced poverty traps. *Journal of Development Economics*, *77*(2), 325–340.

Mocan, N., & Raschke, C. (2016). Economic well-being and anti-semitic, xenophobic, and racist attitudes in germany. *European Journal of Law and Economics*, *41*, 1–63.

Olzak, S. (1990). The political context of competition: Lynching and urban racial violence, 1882–1914. *Social Forces*, *69*(2), 395–421.

Oster, E. (2019). Unobservable selection and coefficient stability: Theory and evidence. *Journal of Business & Economic Statistics*, *37*(2), 187–204.

Page, T. N. (1904). The lynching of Negroes: Its cause and its prevention. *The North American Review*, *178*(566), 33–48.

Pfeifer, M. J. (2004). *Rough justice: Lynching and american society, 1874-1947*: University of Illinois Press.

Pinotti, P. (2015). The economic costs of organised crime: Evidence from Southern Italy. *The Economic Journal*, *125*(586), F203–F232.

Quillian, L., & Pager, D. (2001). Black neighbors, higher crime? The role of racial stereotypes in evaluations of neighborhood crime. *American Journal of sociology*, *107*(3), 717–767.

Sequeira, S., Nunn, N., & Qian, N. (2020). Immigrants and the making of America. *The Review of Economic Studies*, *87*(1), 382–419.

Sharkey, P., & Torrats-Espinosa, G. (2017). The effect of violent crime on economic mobility. *Journal of Urban Economics*, *102*, 22–33.

Solon, G. (2018). What do we know so far about multigenerational mobility? *The Economic Journal*, *128*(612), F340–F352.

Spolaore, E., & Wacziarg, R. (2013). How deep are the roots of economic development? *Journal of Economic Literature*, *51*(2), 325–369.

Staiger, D. O., & Stock, J. H. (1997). Instrumental variables regression with weak instrument. *Econometrica*, *65*, 325–369.

Tolnay, S. E., Deane, G., & Beck, E. M. (1996). Vicarious violence: Spatial effects on southern lynchings, 1890-1919. *American Journal of Sociology*, *102*(3), 788–815.

Williams, J. A. (2021). Confederate streets and Black-White labor market differentials. In *AEA Papers and Proceedings*, *111*, pp. 27–31.

Williams, J. (2022). Historical lynchings and the contemporary voting behavior of Blacks. *American Economic Journal: Applied Economics*, *14*(3), 224–253.

Williams, J. A., Logan, T. D., & Hardy, B. L. (2021). The persistence of historical racial violence and political suppression: Implications for contemporary regional inequality. *The Annals of the American Academy of Political and Social Science*, *694*(1), 92–107.

Wood, A. L. (2011). *Lynching and spectacle: Witnessing racial violence in America, 1890-1940*: Univ of North Carolina Press.

Wood, A. L. (2018). The spectacle of lynching: Rituals of white supremacy in the Jim Crow south. *American Journal of Economics and Sociology*, *77*(3-4), 757–788.

SUPPORTING INFORMATION

Additional supporting information can be found online in the Supporting Information section at the end of this article.