A Brief Moment in the Sun: The Racialized (Re)Construction of Punishment in the American South*

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Why did policing and incarceration emerge as an institution in the South in light of its otherwise “hollow state?” I explore this question in context of the 19th and early 20th century U.S. South—a region which many point to as the crucible of punishment in America. I argue that outside intervention by the federal government during Reconstruction helped lay the groundwork for the carceral state. By empowering African Americans without fundamentally changing the social structure of Southern society, Reconstruction generated incentives for Southern elites to invest in repressive state institutions like incarceration and the police to maintain the existing social order. I test the argument by assembling a new panel dataset from individual-level administrative records from Georgia in addition to data on black wealth and office holding. A difference-in-differences identification strategy demonstrates support for the argument: counties with greater exposure to Reconstruction had higher rates of incarceration especially against blacks after the end of Reconstruction. Additional results on black wealth, black office-holding, and the police force provide suggestive evidence in line with the theory. This article verifies key arguments going back to W.E.B. Du Bois in addition to crystallizing racialized and coercive dimensions of state power.

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INTRODUCTION

Maintaining social order is one of the most fundamental activities that states engage in. In nearly all societies, states attempt to maintain social order coercively through the use of punishment (Foucault 1995). In the U.S. context and especially in the South, direct state involvement in punishment remained limited up until the Civil War.¹ For instance, data from Georgia in Figure 1 shows that incarceration via state imprisonment rapidly grew following the end of the Civil War and Reconstruction—a trend well-documented throughout the South by historians of the time period (Ayers 1984; Mancini 1996; Lichtenstein 1996; Blackmon 2008). When viewed in tandem with the U.S.’s lack of substantive state institutions in the 19th century (Skowronek 1982), this sudden growth in incarceration generates the following puzzle: why did policing and incarceration emerge as an institution in the South in light of its otherwise “hollow state?”

Starting from the fundamental premise of the centrality of punishment for understanding the state, this paper goes back in time to the antebellum and post-bellum U.S. South—a region that many point to as exemplifying many of the qualities of the modern carceral state such as private corporate involvement, high racial disparities, and periods of rapid expansion—as a window into understanding the origins of policing in the United States (Blackmon 2008). In this respect, I refer to this early penal system as the proto-carceral state. A prominent set of extant research on the topic emphasizes the importance of incarceration—particularly, convict leasing—as a way to help modernize the South through the development of mining and rail-

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¹Institutions such as chattel slavery in the ante-bellum South relied on vigorous private provision of punishment and coercion on the plantation. The state’s involvement in this process was largely around recapturing escaped slaves. This piece focuses on the transition of the provision of punishment on the plantation to the state-led provision of punishment.
road infrastructure (Lichtenstein 1996). This set of explanations is insufficient on its own to explain why African Americans were disproportionately incarcerated and why some counties had high levels of incarceration while others did not since there were relatively few convict camps. Moreover, the rise of the carceral state cannot alone by explained as a simple reproduction of slavery (Blackmon 2008): incarceration itself was nowhere near the same scale as chattel slavery. Even more, the institutionalization of policing is even more puzzling within the context of the South given its long-reliance on an “honor culture” to enforce social order (Nisbett and Cohen 1996). These features then suggest existing explanations for the rise of the proto-carceral system are incomplete.

I build on work across history and the social sciences to develop a political framework for...
understanding variation in the rise of the proto-carceral state (Du Bois 1901b, 2014; Weaver 2007; Acemoglu and Robinson 2008). This framework emphasizes how sudden resistance by and empowerment of subaltern groups motivate the development of a carceral state apparatus. The historical turn in this piece necessitates a re-characterization of incarceration and policing during this time period. Drawing on work within the political violence literature in comparative politics, I conceptualize incarceration during this time period as a form of state repression meant to suppress the political, economic, and social freedoms of a subaltern population (Davenport 2007). By reconceptualizing incarceration as a form of political violence, it becomes clear why elites would make costly investments in this system: repression via incarceration is meant to inspire fear among marginalized groups and demobilize them from challenging the existing status quo that puts them into coercive economic and social relationships with elites (Lerman and Weaver 2010, 2014; Young 2019; White 2019).

I argue that the temporary and incomplete empowerment of a marginalized group generates incentives for the elite to engage in repression so as to maintain the existing socio-political hierarchy. By incomplete empowerment, I mean the material empowerment of a group without the fundamental alteration of the fundamental social structures and hierarchies in a society. Applying the framework to the U.S. South during and after the Reconstruction period, I argue that the incomplete empowerment of African Americans by the federal government created incentives for white elites to use incarceration as a means to exert social control over this threatening population. This framework makes two key predictions: (1) areas with greater exposure to Reconstruction should, after its end, be more likely to incarcerate their popula-

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2 I use the term subaltern to refer to African Americans in the context of the U.S. South. This term, I believe, helps capture the experience of a systematic lack of power by African Americans in the Southern political economy before and after the end of Reconstruction. In this sense, I use the term much like in the spirit of Gramsci to refer to a group of people who are subordinate to existing power structures and thereby marginalized.

3 Davenport (2007) uses a definition of state repression from Goldstein (2001), who focused on the case of the United States. Wright (1973) also makes this argument in discussing the role of the prison in American society. The concepts and study of political violence and state repression no longer appear the “mainstream” American politics canon. I return to this point in the conclusion.
tions, and (2) that the impact of Reconstruction should be increasing in the proportion of the population that benefited from it (African Americans). By not fundamentally leveling racialized land-labor power structures in the South, Reconstruction generated incentives for white elites to set up a highly repressive state apparatus to maintain their dominant status in the social order.\(^4\) Though not a reproduction of slavery itself, I argue that the proto-carceral state served to maintain highly racialized and coercive relationships between white planter elites and African Americans.\(^5\)

To test these predictions, I assemble a new panel dataset from individual-level handwritten records from the Georgia Convict Ledger from 1817-1868, individual-level data from administrative records in the Georgia Biennial Report from 1880-1882, and county aggregates from 1897-1911. In total, this data spans 137 counties, 94 years, and over 15,000 prisoners. Using a difference-in-differences (DID) design leveraging the sharp removal of troops from Georgia once the state was re-admitted to the Union in 1870, I find evidence of a strong link between backlash against Reconstruction and the rise of the proto-carceral state. Moreover, the impact of Reconstruction is concentrated in areas with high shares of enslaved populations in 1860. Using data on prisoner race, I show that these results are concentrated among individuals of color rather than whites, ruling out an alternative explanation rooted in general rising crime trends across both groups. In addition, the results are robust to estimation strategies and are not sensitive to any one outlier county.

To test the hypothesized mechanism—that Reconstruction incompletely empowered African Americans thereby engendering incentives for elites to invest in carceral capacity, I collect data originally assembled by Du Bois (1901a) on black property holding in Georgia in addi-

\(^4\)Thus, an important scope condition of the argument is the nature of empowerment. Where the empowerment does not fundamentally alter social structure, the theory predicts an investment in repressive state institutions by elites. In situations where social structures do become level, the theory does not have explanatory power.

\(^5\)It is in this respect, how incarceration became “slavery by another name” (Blackmon 2008).
Further results suggest that Reconstruction was effective in increasing American Americans’ economic empowerment as proxied by property wealth. This increase in black wealth is inconsistent with the alternative explanation that blacks were engaging in more crime given the vast research showing that improved material status reduces crime (Becker 1968). In line with the argument, I also show that Reconstruction did not fundamentally alter the land-labor social structure in Georgia: areas with greater exposure did not see a substantial increase in black landholding. This lack of a fundamental change in social structure and hierarchy translated into modest gains at the office as proxied by black-office holding (Foner 1996, 2011). I also show using data from the U.S. Federal Census that greater exposure to Reconstruction also led to a rise in the size of the police force. These additional results are consistent with the argument of this paper that Reconstruction helped to empower African Americans, which generated incentives for white elites to invest in coercive state infrastructure. Overall, the results paint a clear picture: state-led punishment emerged as a mechanism to control a population that could threaten the power of white elites (Du Bois 2014).

This study makes several contributions to literatures involving incarceration, race, and American political development. First, this piece speaks directly to scholars interested in the development of the carceral state. While much of this literature focuses on explaining the growth of incarceration (Gottschalk 2006; Weaver 2007; Miller 2008; Murakawa 2014; Gottschalk 2016; Hinton 2017), this piece departs from this literature by studying why policing and incarceration emerged as institutions to begin with. Building on recent work by Muller (2018) on Georgia’s convict lease system, I emphasize the way in which economic structures are ensconced in broader political transformations that may generate incentives for elites to use the state’s coercive power to hold onto racial hierarchies. This analysis shows striking

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6By carceral capacity, I mean inputs into policing such as the number of police, establishment of prisons or labor camps, and equipment (Gilmore 2007).
similarities with the frontlash thesis offered by Weaver (2007) on the modern carceral state: the Southern proto-carceral state operated in a way that was designed to subjugate a status-threatening population. This study builds on and contributes to existing studies of incarceration in the United States by highlighting the tragedy of external empowerment—one of many factors that drive changes in punishment throughout American history (Smith 2004; Lerman and Weaver 2010; Jacobs and Jackson 2010; Walker 2014; Alexander 2012; Fortner 2013; Eckhouse 2016; Enns 2016; Pfaff 2017; Forman, Jr. 2017; Beim, Clark, and Lauderdale 2019; Harris 2019; Harvey and Yntiso 2019).

Additionally, this study pushes forward the literature on race and ethnic politics in the United States. While much of the literature on racial politics emphasizes the role of public opinion (Gilens 1996; Kinder and Sanders 1996; Valentino and Sears 2005; Tesler and Sears 2010), geography (Key 1949; Enos 2017; Cook, Logan, and Parman, Forthcoming; Reny and Newman 2018), or electoral politics in shaping black-white relations (Valentino, Hutchings, and White 2002; Frymer 2010), this study joins and extends the literatures looking at the independent effect of the state in crystallizing black-white political, social, and economic inequality (Frymer 2005; Katznelson 2005; King and Smith 2005; Francis 2014; White, Nathan, and Faller 2015; Soss and Weaver 2017; Michener 2018; White 2019). By taking the analytical lens back in time, this study shows and reinforces the idea that the state was used and continues to be used to stratify societies by race and class (Soss and Weaver 2017). Moreover, the framework and results presented in this article have serious implications for contemporary debates around racial conflict. Outside efforts to empower marginalized populations can backfire when these marginalized groups are not able to institutionalize their gains. As a whole, the upshot of this piece is that studies of racial politics are incomplete insomuch as the state (whether federal, state, or local) is absent in these accounts.

A renewed stream of American political development work seeks to understand the puzzles of democratization in the South and its role in the larger national polity (Mickey 2015;
Acharya, Blackwell, and Sen 2018a; Caughey 2018; Bateman, Katzenelson, and Lapinski 2018). For instance, work by Gibson (2013) and Mickey (2015) shows that the South can generally be characterized as an “authoritarian enclave” where subnational politics essentially operate as a single-party autocracy. This study enriches this observation by focusing on a particular dimension of state power—punishment—in subjugating subaltern populations. Viewed in tandem with studies on Southern paternalism (Alston and Ferrie 1993), white supremacist institutions were either implicitly or explicitly private-public partnerships. Additionally, this helps push forward the recent historiographical and empirical literature on the successes and failures of Reconstruction (Foner 2011). While this study and others show that Reconstruction did indeed empower African Americans economically (Logan 2018; Rogowski 2018; Chacon and Jensen 2018; Suryanarayan and White 2019), it also shows that this empowerment came at the cost of black lives (Stewart and Kitchens 2018). Moreover this study lies in contrast to Bensel (1990) who argues that Reconstruction represents a failed opportunity at state-building; instead, the argument and results presented here suggest that Reconstruction actually helped pave the way for coercive state-building precisely because it was an “unfinished revolution (Foner 2011).

Finally, this study also contributes to deepening our understanding of violence and repression in America. While many existing studies place primary focus on the use of lynching as an informal method of whites’ subordination of the African American population (Beck and Tolnay 1990; Francis 2014; Smangs 2016; Weaver 2019), the scale of the proto-carceral state dwarfed the scale of lynching in the period right after Reconstruction. Data from Georgia, for instance, puts the number of black lynching victims at approximately 30 while there were more than 800 black prisoners on hand during this same time period. A contribution of this study, then, is to highlight and better understand the logic of the first substantive investment in coercive capacity through incarceration. More broadly, the sheer magnitude of the state-driven coercion relative to informal systems of subordination demands much further study.
by the discipline (Soss and Weaver 2017).

FRAMEWORK: RACIALIZED COERCION AND STATE POWER

A large branch of existing work generally relates the use of formalized punishment as a tool for white elites to control the subaltern black population (Du Bois 1901b; Myers 1990; Mancini 1996; Du Bois 2014). In this section, I distill this literature into several analytical building blocks to develop a framework for understanding race, punishment, and state power. To summarize, I argue that the subaltern population's outside options and salience threaten the in-group's positions of economic, political, and cultural status. In response to these features, elites in societies with sufficient capacity to engage in formalized violence through punishment will do so. This theory essentially places the state as a technology of racial hierarchy production.

Before I outline the variables emphasized in this article, it is important to address the following question: what does punishment do? Ostensibly, punishment is a means to address some sort of transgression against a written set of laws that all citizens of a society must abide by. Yet, two factors transform punishment beyond a technocratic policy designed to correct or deter certain proscribed behaviors: its uneven application and the way in which punishment is ensconced in social systems. As Holland (2016) shows, the uneven application and enforcement of laws generates distributive consequences, which can go on to empower some groups and take away power from others. This feature of punishment is one way in which formal punishment becomes politicized. Additionally, punishment itself is embedded in social rules that proscribe some behaviors as "deviant" and others as not. This feature allows punishment to become not only a way to create order, but also to exert social control (Black

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7 Obviously, both incarceration and lynching during this time period are two forms of violence production that deserve further study given their enormous importance to the process of American political development (MingFrancis2014).

8 Throughout the rest of the text, I refer to African Americans as the subaltern population.
Thus, punishment is a way in which the state exercises coercive power in ways that can be and often are politicized along group boundaries.

The state’s ability to use repression, often times through incarcerating members of “deviant” populations, is a key tactic toward maintaining power. A large literature in comparative politics highlights how the police are used in authoritarian societies as a means to exert control over their populations (Davenport 2007; Greitens 2016). Of course, authoritarian elites do not jail the entire status threatening subaltern populations. Instead, they opt to some small fraction of the group as a means to generate a sense of fear among the entire group (Young 2019).

What are the incentives for elites to engage in this sort of repression? I argue that one such incentive that would drive elites to use formal punishment to control subaltern populations is the role of outside options—a feature noted in political economy theories of coercion and exploitation (Chwe 1990; Wright 2000; Acemoglu and Wolitzky 2011). Minority power is most threatening in situations where that group has the highest outside options. The logic is that elites can hold power and extract more from groups when they are able to reduce the value of all the alternative relationships that a minority group might enter into. For instance, when an individual can credibly exit a relationship with a potentially coercive elite by moving away or entering into some other occupation or social relationship, then the elite is able to extract less from that individual. This suggests that in places where the subaltern group becomes materially empowered (i.e., his/her outside options become higher in value), then elites should endogenously use the tools they have available in order to reduce the subaltern group’s outside options. In contexts where there is an incomplete transformation in the fundamental power structure between elites and the subaltern, the empowerment of the subaltern, even in a material and “real” sense, can lead the elite to dis-empower that group via state coercion and violence (Acemoglu and Robinson 2008). Formalized punishment and incarceration, then, provide tools through which white elites can use the state to “lock-up” individuals who pose...
a threat to their status and power. This logic, which I formalize in the Online Appendix, can help to explain variation in the intensity of incarceration.

In this article, I focus on how Reconstruction helped to empower African Americans thereby engendering incentives for elites to use repression. A primary goal of Reconstruction was to fundamentally alter the race-class relations of the South by empowering African Americans to gain land and property (Foner 2007, 2011; Du Bois 2014). With this goal in mind, the militaries used a whole host of coercive methods to push for this transition in the Southern social order: “Military oversight of the law changed the dynamics of Southern life; magistrates who once held vast powers to regulate their neighborhoods (and whose decisions were rarely tested by appeal to higher courts) suddenly could be called to answer to nearby military authorities who could overrule and even depose them” (Downs 2015, p. 30). In addition to taking control of local institutions, the military played a large role in overseeing elections in the face of electoral violence. Where the Freedmen's Bureau could not perform its functions as a result of staffing issues, the military stepped in to fill these gaps (Downs 2015). While it is well established that Reconstruction itself did not fundamentally transform Southern society as many of its more radical proponents wished (Vallely 2004; Foner 2011; Du Bois 2014), recent research on the short to medium-term impact of Reconstruction provides evidence that it did at least increase black literacy (Stewart and Kitchens 2018), voter turnout (Rogowski 2018), and fiscal capacity (Chacon and Jensen 2018; Suryanarayan and White 2019). Blacks' material empowerment as a result of the enforcement of Reconstruction suggests that white elites should have an incentive to use the state to re-exert social control over this population after the end of its enforcement.

Without a doubt, the end of slavery and the newfound sense of freedom by former slaves as a result of Reconstruction brought a real sense of empowerment to them. Foner (2011, p. 79) writes,
Blacks relished opportunities to flaunt their liberation from the innumerable regulations, significant and trivial, associated with slavery. Freedmen held mass meetings and religious services unrestrained by white surveillance, acquired dogs, guns, and liquor (all barred to them under slavery), and refused to yield the sidewalks to whites. They dressed as they pleased, black women sometimes wearing gaudy finery, carrying parasols, and replacing the slave kerchief with colorful hats and veils. In the summer of 1865, Charleston saw freedmen occupying ‘some of the best residences,’ and promenading on King Street ‘arrayed in silks and satins of all the colors of the rainbow,’ while black schoolchildren sang “John Brown’s Body’ within ear-shot of Calhoun’s tomb.’ Rural whites complained of ‘insolence’ and ‘insubordination’ among the freedmen, by which they meant any departure from the deference and obedience expected under slavery. On the Bradford plantation in Florida, one untoward incident followed another. First, the family cook told Mrs. Bradford ‘if she want any dinner she kin cook it herself.’ Then the former slaves went off to a meeting with Northern soldiers to discuss ‘our freedom.’

Such displays of power from the ballotbox to day-to-day life threatened the status that whites had at the time. Most of the former slaves tended to stay near the plantations where they were previously enslaved: “In fact, a majority of freedmen did not abandon their home plantations in 1865, and those who did generally traveled only a few miles” (Foner 2011, p. 81). The presence of such a newly empowered group, then, generated a sense of resentment by whites. This suggests that the impact of Reconstruction should be increasing the salience of the newly freed black population. Additionally, the white elite cannot costlessly engage in coercion against all groups. At a psychological level, engaging in coercion against other individuals who share the same ethnic/racial identity group as the elite might be cognitively costly. This becomes less costly as the social distance between the elite's ethnic identity group
and the subaltern's ethnic identity group increases (Tajfel and Turner 1986; Enos 2017). From a strategic perspective, white elites also needed to maintain cross-class cohesion in its project of white supremacy (Du Bois 2014; Merritt 2017). By punishing and violently coercing one's own group, this could threaten intra-group cohesion—a point that Du Bois notes throughout his writings (Du Bois 1901b, 2014). These features of class-race stratified societies can help to explain why punishment would become racialized in this way. As a result, we should expect the impact of external empowerment (Reconstruction) on incarceration to be increasing in the share of the subaltern (formerly enslaved) population.

The theory, then, makes two key testable predictions:

1. H1: Punishment should be increasing in the intensity of Reconstruction.

2. H2: The impact of Reconstruction should be increasing in the relative size of the enslaved population.

The following section provides a brief overview of the case used in this study. Then, I describe the data used to test the argument and present empirical tests of the main hypotheses, assumptions, and causal mechanisms.

BACKGROUND: FORMAL PUNISHMENT IN A VIOLENT SOCIETY

Many refer to the 19th century U.S. South as a violent society (Ayers 1984; Nisbett and Cohen 1996; Roth 2009). Slavery, for instance, was an institution predicated on the threat and use of violence against African Americans in order to extract labor from them. Beyond this type of violence, the South also has a particular relationship with informal and formal punishment. During the antebellum period, the Southern penal institutions essentially had two different tracks—one for slaves and one for whites. For slaves, transgressions were nearly exclusively dealt with on the plantation since slaves were viewed as expensive property. For whites, there
was a system of police, courts, and juries to deal with white criminality—a phenomenon driven by the way in which slavery generated a sense of destitution for poor, landless whites (Merritt 2017).

Following the Civil War and emancipation, punishment on the plantation turned into a vast formalized system known as convict lease. Noting this shift, Du Bois (2014, p. 415) writes, “This penitentiary system began to characterize the whole South. In Georgia, at the outbreak of the Civil War, there were about 200 white felons confined at Milledgeville. There were no Negro convicts, since under the discipline of slavery, Negroes were punished on the plantation. The white convicts were released to fight in the Confederate armies. The whole criminal system came to be used as a method of keeping Negroes at work and intimidating them. Consequently there began to be a demand for jails and penitentiaries beyond the natural demand due to the rise of crime.” This new system, which allowed private companies and individuals to hire out incarcerated individuals, represented a reproduction of slavery in nature (forced labor), but also a departure from it in its scale and industrial nature. With the imposition of this new system following the end of Reconstruction, the incarcerated population rose over ten fold to over 3,000 prisoners—the vast majority of whom were African American. The first recorded lessee was leased on May 11th, 1869, but by April 1st, 1879, all of the prisoners in Georgia were leased out to private corporations (Taylor 1942b). In this sense, one might think of the convict lease system as one of America’s earliest examples of a private-public partnership.

Much of this historiography around the rise of the proto-carceral state in the South likens it to a form of neo-slavery (Oshinsky 1996; Blackmon 2008). Though obviously incarceration was not on the same scale as slavery, its nature resembled many of the features of slavery. For instance, the convict lease system forced incarcerated individuals—who were mainly African American—into forced labor on farms and in factories. This system continued to operate well into the 20th century in the South, and its legacy is still felt today in the form of mass incarceration.

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9Statistics based on author’s tabulations. I provide more details and descriptive statistics on the data later in the article.
American—to work long hours, often under brutal conditions. Taylor (1942b) recounts a severe, but not irregular instance of punishment:

According to the testimony, “Directly the Captain called the negro out and whipped him. He whipped him a while and put him back on the barrel and made him work for a few minutes and then took him off of the barrel and called two negroes and made them turn the negro across a barrel and hold him down while he whipped him again; and after he turned the negro loose, the negro staggered off to one side and fell across a lumber pile there, and laid there for a while.” He died shortly afterwards. An inquest was held, with the coroner’s jury consisting of the guards of the camp. Witnesses testified that the Negro man had become overheated and had drunk a great deal of water while in that condition. The camp physician stated that in his opinion the death was caused by Negro’s drinking too much water; and that was the verdict reached by the jury.

This form of coercion shared a marked continuity with the forms of violence on the ante-bellum plantation.

As many historians note, much of the convict labor pool was used for projects aimed at industrializing the South such as building railways and road infrastructure (Zimmerman 1951; Lichtenstein 1996; Worger 2004). The lease system presented a perfect constellation of political interests where Southern industrialists and racists were able to find common ground over this policy. Despite many known reports of the brutality of the system, politicians held onto this system as a journalist documents, “The state treasury has just lost a quarter of a million dollars through prohibition, and the complete abolition of the lease system would take as much or more annually from the state treasury. Some of the legislators are coming to the conclusion that while morality is a very good thing, it don’t go very well with a low tax rate” (Taylor 1942a). Both the ways in which incarceration allowed for the re-subjugation
of a newly freed population and to augment Southern state budgets helped maintain the the survival of this system even in the face of harsh criticism by a variety of groups. On top of all of this violence done against African Americans, the cash coming in through the lease system helped to finance the white public education system (Taylor 1942b). Violence done against black bodies helped to nurture white ones. At its core, the consolidation of the convict lease system eventually turned Georgia into a state of prisoners without any prisons.\(^{10}\)

That the rise of this system had little to do with overall crime trends seems to be an agreed upon point by the historical record. Governor James M. Smith of Georgia in 1872 discusses this issue directly in referring to the rise of incarceration in Georgia: “...this marked increase in the number of convicts is not due to any augmentation of crime in the South, but is believed to be the result entirely of a more rigid and proper enforcement of the laws” (quoted in Ayers (1984)). Thus, crime alone seems to be insufficient to understanding the rise of the proto-carceral state.\(^{11}\)

As the system expanded, it began to face opposition from an alliance of religious groups and white labor within the context of reports of corruption in the system. In Georgia, the suffragist Rebecca Latimer Felton lobbied politicians quite fiercely and coordinated religious groups to demonstrate their opposition to the system largely because this system seemed too harsh and dehumanizing (Zimmerman 1951). Ironically, Rebecca Latimer Felton also owned slaves before the war and was noted for being an ardent supporter of lynching. In tandem with this moral crusade, labor unions opposed the system since they viewed the largely black convict labor system as competing with white labor. Eventually, Georgia formally abolished the practice of convict lease in 1908 with the last lease expiring on April 1st, 1909.

The theory developed in this paper argues that at least part of the rise of this system can be\(^{10}\)LeFlouria (2015) documents how the proto-carceral state even broke deep norms around gender roles in the way in which the system forced women to take on traditionally “masculine” economic roles.

\(^{11}\)It could be the case that such a statement is insincere. Further results on the mechanisms, however, provide evidence inconsistent with this crime explanation.
traced back to the way in which Reconstruction incompletely empowered African Americans. The following sections outline the data and empirical strategy used to test this argument.

DATA AND DESCRIPTIVE STATISTICS: EVIDENCE FROM GEORGIA

To test the argument, I build a new dataset combining individual-level and county-level administrative records on over 15,000 prisoners over the time period 1817-1911 from Georgia. I then go onto describe the data and show basic descriptive trends and statistics. Figures A1-5 and A1-6 in the Online Appendix show that Georgia represents a typical case in the South thus allaying worries about external validity.\footnote{See also Aronow and Samii (2016) on the ways in which regression with larger samples do not recover more “representative” causal effects than quasi-experimental methods.}

Data

The core research design leverages over-time change within counties to assess the empirical validity of the aforementioned hypotheses. I assemble pre-period data (1817-1865) from the Georgia Register of Convicts, which records fairly granular information on the identity of the incarcerated individual. These include the prisoner’s age, name, county of sentencing, crime, skin color, eye color, and height. From the skin color, I deduce the race of the prisoner depending on whether they were described as being “fair” or “sallow” versus some other description. While skin color does not itself equate with ethnicity, it is the best available information to ascertain the prisoner’s race. For the post-period, I use the first available Biennial Report of the Principal Keeper of the Georgia Penitentiary, which covers prisoners entering through the Georgia State Penitentiary System between October, 1880 to October, 1882.\footnote{Muller (2018) uses data from this report in a recently published article.} The Biennial Report records and classifies prisoners based on their race such as “white”, “negro”, and “mulatto.” In addition, I collect data on individuals also discharged and pardoned during this
period from the same report so as to capture all individuals who had some contact with the Georgia Penitentiary System between 1880-1882. Finally, I collect additional post-period data from the Annual Report of the Principal Keeper of the Georgia Penitentiary for the years 1897, 1902, 1905, 1907, and 1911. This data only contains aggregate counts of total convicts for each county and does not contain data on counts by race.

A key concern regarding bias in these records is the potential for systematic undercounting by race and county. In the pre-period, the key concern is that this data does not pick up individuals incarcerated for petty crimes. Given police and administrative discretion over this issue, one would expect potential systematic undercounting of African Americans if they were disproportionately targeted by the whims of the police bureaucracy. Thus, the results would under-estimate the “true” effect. In the post-period, a key concern is that officials might not record everyone. This does not seem to be an issue given the convict lease incentive system. Officials needed to record and keep track of all prisoners in order to properly account and lease out prisoners. Additionally, the research design uses within-county variation thereby addressing some of these differential measurement error issues that are constant within county. Therefore, these potential biases do not seem to be a prodigious issue for the empirical analysis.

Descriptive Statistics

Having assembled this data, one can instantly see the explosion in incarceration in Georgia. Figure 2 plots the total incarcerated population over time separately by race. Prior to emancipation, two features are clear. First, the overall scale of the proto-carceral state is quite small in magnitude. Second, whites seem to be the main incarcerated population—a fact consistent with qualitative accounts (Merritt 2017). Following the Civil War and emancipation, though, it is clear that incarceration rises dramatically in Georgia. This is a pattern consistent with the

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14I use the term “colored” when presenting and analyzing the data since that is the term used at the time.
rest of the South as well (Ayers 1984). What is also clear from the post-period is that African Americans become an increasingly large fraction of the incarcerated population—a fact that would be prima facie evidence consistent with the historical record and theory.

Was the rise in African American incarceration following the war racially “biased?” Figure 3 plots the number of whites and African Americans incarcerated scaled by each group’s respective populations in 1880. Relative to their populations, people of color were more than 10 times likely to be incarcerated relative to whites. This, again, is consistent with historian’s characterization of the Southern penal system across the region (Ayers 1984).
RESEARCH DESIGN: CONTINUOUS DIFFERENCE-IN-DIFFERENCES

Unit of Analysis: County

For the analysis, I use the county as the main unit of analysis. The county is the appropriate unit during this time for several reasons. First, law enforcement and courts in Georgia were organized along county boundaries. Essentially, decisions about who to incarcerate were made from county-to-county. Second, counties are generally the most comparable unit in Georgia because it is the lowest level of aggregation for which the ledgers report the sentencing location. Thus, I proceed to use the county as the main unit of analysis.
Dependent Variables

The main dependent variable that I use for the empirical analysis is the total number of convicts in a given county in a given year scaled by the total population in 1860. I scale by the total population in order to make sure that the dependent variable is comparable across counties, but use 1860 so as to avoid any issues of post-treatment conditioning (Acharya, Blackwell, and Sen 2016a; Montgomery, Nyhan, and Torres 2018). I use the total convicts for the main analysis instead of the natural logarithm since the parallel trends seems to best hold visually in the total number (see Figure 4). To ensure that my results are robust to alternative transformations, I also show that the results hold when using the natural logarithm transformation. To establish the racialization of punishment in addition to discounting alternative explanations about crime waves, I also compute alternative dependent variables of the scaled white and black convict populations.

Independent Variables

Data for the main independent variable in this study—Reconstruction intensity—comes from Downs and Nesbit (2015)’s Mapping Occupation Project to compute the average number of troops stationed in a given county in Georgia during Reconstruction. I then scale this by the 1860 population and take the natural logarithm. This variable captures the degree to which the federal government exerted effort at empowering the newly freed population as per Hypothesis 2.

In addition, I consider a number of other alternative explanations. First, I consider the potential for the sudden enfranchisement of African Americans in the South to confound the impact of Reconstruction. To measure this, I compute the county-level proportion enslaved from the 1860 Federal Census county-level aggregates (Haines). Second, I also consider the role of the destruction caused by the Civil War. It could be the case that areas were targeted for
Reconstruction in order to rebuild areas that suffered significant infrastructural damage. To measure this, I create an indicator for whether a county in Georgia intersected with Sherman's March to the Sea where General William Tecumseh Sherman razed counties that his troops crossed on their way from Atlanta to Savannah, Georgia in 1865.\footnote{I thank James Feigenbaum for sharing data on the location of Sherman's March. For more on the economic destruction and recovery in response to Sherman's March, see Feigenbaum, Lee, and Mezzanotti.}

**Measuring the Mechanism: Black Wealth**

The key mechanism highlighted in this paper is the role of blacks' outside options. To measure this, I rely on data compiled by W.E.B. Du Bois on black wealth in Georgia from 1875-1900 and presented in the Bureau of Labor's Bulletin (Du Bois 1901a). This data records the total value of all property held by African Americans in Georgia consistently in 5-year periods from 1875 to 1900. Despite its incredible richness, this data has yet to be used by political scientists (to the best of the author's knowledge). For the analysis, I compute the natural logarithm of the total wealth of African Americans in a given county in each period.

**Measuring the Mechanism: Black Officeholding**

To measure the degree to which African Americans were politically empowered, I collect data on black officeholders during and after the Reconstruction period from Foner (1996). In addition to measuring the descriptive representation of African Americans during this time period, black officeholders also mattered substantively in terms of financing public goods provision (Logan 2018). This data records the county associated with the officeholder. For the analysis, I create a binary variable for whether the county had any black officeholders.\footnote{The vast majority of counties only had one black elected official if they had any.}
Measuring the Mechanism: Police Force Size

Finally, an implication of the theory is that there should be more investments in carceral capacity in response to African American’s empowerment during Reconstruction. To measure this, I collect data from the 1850 and 1880 full count U.S. Decennial Census and digitized by the Minnesota Population Center (Ruggles et al. 2019). From this, I create a count of the number of individuals employed as police per 10,000 population in 1850 as a measure of state carceral capacity.  

Identification Strategy

A simple cross-sectional comparison between counties with high exposure to Reconstruction versus low exposure to Reconstruction could be driven any number of pre-existing differences either observable or unobservable to the researcher. It could be the case, for instance, that certain counties just have a punitive culture and that this is correlated with both the treatments as well as the amount of incarceration. To eliminate these threats to inference, I rely on a difference-in-differences (DID) framework to recover the causal effect of the key variables of interest. This relies on comparing changes in the treatment intensity within unit over time. While many have pointed out deficiencies of this approach when the treatment time period is staggered (Goodman-Bacon 2018) or when units can select into timing of treatment (Imai and Kim 2019), the setup in this paper links most closely to the classical DID framework in which the units are all forced into treatment at the same time following the end of the Civil War/abolition (1865) and the end of federal occupation in Georgia (1871). Thus, all units are forced into treatment with the intensity of the treatment based on intensity of the enforcement of Reconstruction. These types of continuous DID strategies are common in the economics literature (Duflo 2001; Bailey 2006; Bleakley 2007).

I also show that the results are robust to using the log and absolute level measures.
Within this framework, I estimate equations of the following form:

\[
Y_{c,t} = \beta \mathbb{1}\{\text{Post-1871}\}_{t} \ast \log(\text{Avg. Troops})_{c,1870} + \pi X_{c,t} + \Omega C_{c} + \Gamma T_{t} + \epsilon_{c,t}
\]  

(1)

The main outcome of interest is represented by \(Y_{c,t}\) in a given county \(c\) in time \(t\). To measure this, I use the number of incarcerated individuals from a county \(c\) in time \(t\) divided by the pre-treatment population in 1860 per 100,000. The results are also robust to a log specification to limit the influence of outliers. The main causal parameter of interest is \(\beta\), which represents the impact of each treatment variable on \(Y_{c,t}\). The terms \(\Omega C_{c}\) and \(\Gamma T_{t}\) represent county and time fixed effects to eliminate unit-level time invariant confounders and to flexibly control for global time trends. Additionally, the term \(\pi X_{c,t}\) represents time-varying confounders such as the impact of slavery post-emancipation and Sherman’s March post-Civil War. The term \(\epsilon\) is a stochastic error term. Finally, I estimate Equation 1 using Ordinary Least Squares (OLS) and cluster standard errors at the county.
A key implication of the identification assumption is that the treated and untreated counties should be evolving on parallel trends absent the actual treatment. To visually interrogate this assumption, I create a dichotomous treatment variable for whether a county had any federal troops. I then plot the average of the incarceration rate (y-axis) over time (x-axis) separately by each treatment group in Figure 4 by Reconstruction-status. This plot shows that both the treated and untreated groups seemed to have parallel trends prior to Reconstruction and actually very little level differences. Thus, these graphical results provide suggestive evidence in support of the DID identifying assumption.\(^\text{18}\)

\(^{18}\)I also present additional evidence in Figure A1-4 that Reconstruction exposure is balanced on an exhaustive set of observable characteristics prior to the Civil War.
Results

Table 1: Main Difference-in-Differences Estimates: Georgia 1817-1882

<table>
<thead>
<tr>
<th></th>
<th>Num. Convicts per 100,000</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
</tr>
<tr>
<td>Log(Troops per Thousand)</td>
<td>40.127**</td>
<td>40.040*</td>
<td>44.461*</td>
</tr>
<tr>
<td></td>
<td>(20.467)</td>
<td>(20.634)</td>
<td>(22.733)</td>
</tr>
<tr>
<td>Main Effect Reconstruction</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>County FE</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Year FE</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Time-Varying Covariates</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Number of Clusters</td>
<td>137</td>
<td>137</td>
<td>137</td>
</tr>
<tr>
<td>N</td>
<td>7,989</td>
<td>7,989</td>
<td>7,699</td>
</tr>
</tbody>
</table>

*p < .1; **p < .05; ***p < .01
Standard errors clustered by county in parentheses.

First, I begin by presenting the main DID results in Table 1. Column 1 begins by presenting the interaction between Reconstruction and post-1871 controlling for the main effect of Reconstruction and year fixed effects. Next, Column 2 presents the results of a county fixed effects model and coefficient remains essentially unchanged. These results suggest that Reconstruction did indeed increase the size of the incarcerated population.

What do these results mean in substantive terms? Going from a county with no federal presence to one with the median amount ($\Delta \approx \log(3 \text{ troops per 1,000})$) increased the number of convicts per 100,000 by about 40. This is approximately a 25% effect above the control-group mean in the post-period. In short, these effects are quite large especially given the overall explosive growth in the scale of the Georgia incarceration rates.

I also show that these results are robust to controlling for two primary alternative explanations—slavery and Civil War destruction—in Column 3. Encouragingly, the coefficient remains positive and the magnitude actually increases. This results, then, indicates that other events that also occurred during this time period are insufficient to explain the patterns found here.
Next, I assess the degree to which these effects persisted using an event study framework. Here, I estimate lags and leads of the Reconstruction treatment with a regression of the following form:

\[
Y_{c,t} = \sum_{t=1818}^{1905} \left( \beta_{t,1818} \cdot \text{Log(Avg. Troops)}_{c,1870} \right) + \Omega C_c + \Gamma T_t + \epsilon_{c,t}
\]

This not only allows me to estimate the degree to which the effects persist over time, but also allows me to more formally analyze whether there were pre-existing trends in the data prior to the end of Reconstruction. I plot the results of this event study analysis in Figure 5 below where each point represents an estimated coefficient of the Reconstruction exposure measure interacted with a year fixed effect.\(^{19}\)

\(^{19}\)The baseline year is 1817.
This set of results shows that the impact of Reconstruction seems to have been persistent over time. Thus, not only did exposure to Reconstruction shape incarceration trends in the short-run, but also over 30 years after the end of Reconstruction.

Figure 5: Event Study Estimates
Figure 6: Effect on White versus “Colored” Incarceration Rate

Thick shaded bars represent 90% confidence intervals while light bars represent 95% confidence intervals.

Though there is strong evidence showing a causal relationship between slavery or Reconstruction and incarceration, it might just reflect a general increase in crime. This alternative explanation potentially has little to do with social control, but instead could reflect crime waves that took hold in these areas due to changing opportunity-cost incentives. While there is unfortunately no systematic crime data from this time period at the county-level, the dataset I assembled does have information on race of the incarcerated individual. If these results are driven by general crime trends, then one should expect these effects to be symmetric between whites and non-whites. Using this test, I re-estimate the results from Column 2 of Table 1 and estimate it separately for the white and non-white incarceration rates in Figure 6 shows
that the effects are concentrated among African American/colored individuals rather than whites—a pattern consistent with the argument advanced in this piece and inconsistent with a general crime channel. Together, the results presented are consistent with the argument advanced in this piece.\textsuperscript{20}

In addition to the results presented in the paper, I also run a number of robustness checks (details can be found in the Online Appendix). First, one might be worried about the potential for military presence during Reconstruction to be driven by factors such as the presence of racial conflict over the course of Reconstruction. To address this, I demonstrate that the results are robust to using the location of troops right at the end of the Civil War—variation that is plausibly exogenous with respect to later on racial conflict since these locations are primarily determined by on-the-ground battlefield conditions. Second, a major concern with panel designs is the presence of secular trends by unit (Stephens, Jr. and Yang 2014). I directly address this issue by estimating models that include county specific linear and quadratic trends. The point estimates remain unchanged and statistically significant even when estimating these more demanding specifications. Next, I show that the results remain robust to an alternative identification strategy that conditions on both county and year fixed effects in addition to the lagged dependent variable. Then, I show that the results are not driven any one county. I also show that the results hold when just subsetting to crimes with more discretionary potential such as property crimes (Muller 2018). Overall, these results provide robust evidence in support of the argument.

\textsuperscript{20}Given the lack of racial breakdowns after 1880, this analysis only uses data from 1817-1880.
Figure 7: Effect Modification of Reconstruction by Intensity of Slavery

Error bars represent 95% confidence intervals of the binned regression estimate. Shaded regions represent the 95% confidence intervals of the marginal effect across the support of proportion population enslaved in 1860.

Another implication of the argument is that the impact of Reconstruction should only matter in places with large shares of newly empowered populations. This implies that the effect of Reconstruction should be increasing in the share of the subaltern population. To test this, I estimate the impact of exposure to Reconstruction as it varies with the proportion population enslaved in 1860. Figure 7 provides evidence consistent with this hypothesis. While Reconstruction seems to have had little or even a negative impact on incarceration in areas with little exposure to slavery, the effect seems to be particularly concentrated in areas with greater than half the population enslaved.
Reconstruction Increased Black Wealth
but Not Control over Land

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Estimated Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Log(Black Wealth)</td>
<td></td>
</tr>
<tr>
<td>Log(Black Wealth per Capita)</td>
<td></td>
</tr>
<tr>
<td>Log(Acres Owned by Blacks)</td>
<td></td>
</tr>
<tr>
<td>Log(Acres Owned by Blacks per Capita)</td>
<td></td>
</tr>
</tbody>
</table>

Note: Covariates include 1860 total population, percentage enslaved, rail access, canal access, and wealth.

Figure 8:

Dark shaded bars represent 90% confidence intervals while light bars represent 95% confidence intervals.

One major concern with interpreting this interaction is that slavery is not randomly assigned. To address this, I also compute the county-level suitability for growing cotton as a more exogenous measure of a county’s reliance on slavery (Acharya, Blackwell, and Sen 2016b). Results presented in the Online Appendix show that the interaction effect is robust to using cotton suitability instead of the proportion enslaved thereby supporting a causal interpretation of the effect modification results.
Mechanism: The Role of (Incomplete) Black Economic Empowerment

The theoretical framework posits that white elites will be most likely to use the state to exercise control over African Americans in areas where African Americans have increased power to exit coercive relationships with white elites. To test this, I estimate the impact of Reconstruction on black empowerment as proxied by their wealth as well as landholding. Unfortunately, data on black wealth does not exist in a readily attainable format prior to Reconstruction so I am limited to showing simple cross-sectional evidence over time. In this respect, the analysis here should only be viewed as suggestive. I run analyses regressing the total black wealth in a county against the measure of Reconstruction exposure used throughout the study controlling linearly for the log of the total population, percentage slave population, rail access, canal access, and overall wealth in 1860. Figure 8 plots the estimated coefficient on Reconstruction intensity on the total and per capita measure of wealth and land holding. The results provide suggestive evidence consistent with the theoretical mechanism. Areas with more exposure to Reconstruction have wealthier black populations, but they did not fundamentally gain control of land—the root of political power during the period. Additionally, these results are inconsistent with an alternative explanation around the role of black criminality since increases in material status are known to decrease criminal activity (Becker 1968). Thus, these results provide additional empirical support for the theoretical framework advanced in this project in addition to existing work on historical incarceration (Muller 2018).

Mechanism: The Role of Black Political Empowerment

In addition to looking at the role of black economic empowerment, I also investigate the impact of Reconstruction on black political empowerment. To do so, I collect data on the number of black political office holders in a given county following Reconstruction from Foner (1996)’s directory of black office holders. The original directory contains detailed bi-
Thick shaded bars represent 90% confidence intervals while thin bands represent 95% confidence intervals.

I collect and aggregate this data to the county-level for Georgia and re-estimate simple cross-sectional models looking at the impact of Reconstruction exposure on whether a given county had any black office holders. These results, shown in Figure 9, demonstrate supportive evidence for the idea that backlash may have occurred because African Americans were not able to substantially increase their hold over Southern political institutions. On average, areas with more exposure to Reconstruction were only slightly more likely to elect a black politician relative to those with less exposure. Thus, these results are again consistent with the results on land ownership: African Americans were not able to gain control over fundamental eco-
Thick shaded bars represent 90% confidence intervals while thin bands represent 95% confidence intervals.

Economic and political institutions thereby creating the space for political backlash by southern elites.

**Mechanism: The Rise of the Southern Police Force**

Finally, I assess the role of Reconstruction in increasing the state’s carceral capacity using data on the county-level growth of the police force from 1850 to 1880.\(^{21}\) To do so, I visually demonstrate within a DID framework the growth of the police force comparing trends in the police force size per 10,000 population between areas with any military presence and those

\(^{21}\)Data comes from the full population decennial census.
with none. Figure 10 demonstrates that Reconstruction nearly tripled the size of the police force in Georgia. These results hold when estimated within a regression framework as well. Thus, these results demonstrate that Southern elites seemed to have significantly invested in Georgia’s coercive capacity as proxied by the size of the police.

CONCLUSION

What explains the rise of the proto-carceral state? I explore this question within the context of Georgia during the 19th century—a state that many historians view as being a paragon of Southern punishment during the time period. Building off of the work of many scholars, I synthesize existing arguments into a parsimonious theoretical framework to understand the ways in which newly empowered subaltern populations might only experience such power for a brief moment in time when a white, wealthy elite maintains control over the state’s coercive capacity. Using newly assembled panel data on over 130 counties across the time period 1817-1911, I show that the external (yet incomplete) empowerment of African Americans led to an increase in incarceration. This effect is concentrated solely among African Americans and not whites—a pattern consistent with a political account of the rise of this system and inconsistent with theories stress the role of general crime waves. In addition, data assembled from Bureau of Labor reports on black wealth in Georgia and data on black elected politicians provide suggestive evidence consistent with the causal mechanisms. I also show that areas with greater exposure to Reconstruction also saw a larger increase the size of the police force consistent with the argument. In short, this project lends systematic empirical credence to arguments about punishment and state power that go as far back as Du Bois (1901b) yet remain highly relevant today.

While this study uses Georgia as a window into studying the origins of the proto-carceral state, it remains to be determined the degree to which the lessons learned form this case can
be applied to understand the rest of the United States. Particularly, the South’s history of racial repression by whites might make the incentives outlined in this article particularly acute relative to other regions (Acharya, Blackwell, and Sen 2018a). In this respect, the theory may not apply to societies that lack such racialized conflict. Future research would benefit from focusing on the degree to which racial conflict per se animates the creation of repressive political institutions like prisons and policing.

The theory and data collected here open up many new avenues of inquiry into the role of incarceration in the political development of the United States. A natural question that comes out of this study is whether these early, local incarceration patterns persist until today. Furthermore, we might ask ourselves under to what degree the policing of African American communities in the past continues the shape the lives of members of this community today.

Interpreted against the backdrop of other recent work in American politics, which urges us to more carefully consider the role of repression, violence, and coercion (Soss and Weaver 2017), this study suggests that students of American politics ought to more thoroughly interrogate the way in which state-led repression has so fundamentally shaped the marginalization of groups based on their identities. For instance, we might ask ourselves to what degree did the rise of other class-based subaltern movements such as labor suffer from the same sorts of repressive carceral strategies in the North?22 Not only was repression a strategy the state pursued against the labor movement, but also civil rights organizations following World War II. Lynchings of African Americans and immigrants, often done under the tacit or explicit consent of the state, served as a way to reinforce the social bonds needed to maintain a repressive Jim Crow system (Smangs 2016). Even today, the revelation of systematic extraction from African Americans in Ferguson via the police suggests the continued relevance of state-led violence for the lives of those on the periphery.

Incarceration, when politically motivated, should be viewed analytically as an act of po-

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22 I thank Alex Gourevitch for raising this inquiry.
political violence. If we take this idea seriously, then existing analytical and theoretical tools we use to study American politics, could be deficient to understanding cause, process, and consequence of incarceration as political violence.\footnote{There are, however, some recent studies that attempt to understand the causes and consequences of violence production in American history (Kalmoe 2018; Obert 2018; Hall, Huff, and Kuriwaki, Forthcoming)} Fortunately, students of comparative politics have much to contribute to our understanding given their long emphasis on the micro, meso, and macro-structures that shape political violence (Tilly 2003; Wilkinson 2004; Kalyvas 2006; Weinstein 2006; Wood 2012; Fujii 2013; Cohen 2016). Thus, this study joins recent work such as Davenport (2015) and Weaver (2019) in using concepts from the comparative literature on political violence to better understand how repression works in the United States. Clearly, the historical and contemporary politics of the United States are rife with examples of political violence; as such, our research ought to take more seriously its occurrence (and non-occurrence) and how the politics of American repression intersect with the politics of identity.
References


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Online Appendix
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FORMALIZING THE FRAMEWORK

Baseline Model Setup and Predictions

I build a static game theoretic model of a potentially repressive society inspired by features identified by the historical work on Southern society following the Civil War as described above. This model abstracts away from many features of the specific coalitions and bureaucratic features of Southern society so as to elucidate the underlying political economy and social identity incentives that would influence why Southern elites decided to invest in incarceration as a strategy of social control. The model delivers two key predictions, which I test using newly collected data: (1) that raising the value of the subaltern group’s “outside options” induces more repression and (2) greater social distance between the elite group and the subaltern generates more repression.

The society is composed of representative actors from two groups—an elite $E$ and labor $L$. While I assume that $E$ is unified in terms of types, I allow $L$ to be differentiated by its social distance from $E$ represented by the term $\Delta$. Larger values of $\Delta$ indicate less social distance between $E$ and $L$. This variable captures, in the context of the U.S. South, the social distance between whites and blacks as guided by race. In doing so, this model parsimoniously captures situations of class-conflict conditioned by ethnic and racial identity concerns.

Initially, $E$ offers a wage $w \in \mathbb{R}^+$ to $L$. Next, $L$ chooses to accept or reject $E$’s offer. If $L$ accepts the offer, the game ends and players receive their utilities $U_E = \Pi - w$ and $U_L = u(w)$. In this case, $E$ receives some utility from output under a “free” labor pool $\Pi$ minus the amount of wages $w$ that $E$ must pay to $L$. $L$ receives utility $u(w)$ from the contract with $E$.

---

24 I assume a representative actor from each group, which abstracts away from issues like coordination or collective action. Since these are not features that are central to the phenomenon I wish to explain, this assumption is reasonable in this situation.

25 These contracts are not “free” in the sense that they are made in the shadow of repression as described in the next stage of the game.
When $L$ rejects the offer, $E$ can decide to use repression $r \in \mathbb{R}^+$ against $L$ to forcibly extract from $L$. Using repression, however, comes at a cost $c(r) = \frac{\Delta}{2}r^2$ that is convex and increasing in the closeness of $E$ and $L$ in social terms. These costs might come from the fact that repression requires concentrating government resources in “unproductive” ways in addition to the way in which repression reduces the supply of labor available for other activities. I allow the cost to vary by $\Delta$ to capture both the psychological costs of engaging in violence against members of one’s own group and the potential costs that $E$ might play in terms of maintaining a cross-class coalition among members of their own racial/ethnic group. I allow repression to forcibly generate output at the rate $\beta \in \mathbb{R}^+$ thus generating benefits for $E$ equal to $\Pi \beta r$. This captures both a general feature of coercion as being “productive”/output-enhancing as per Acemoglu and Wolitzky (2011) in addition to capturing the feature of the Southern prison system (and many other carceral systems around the world) that force prisoners to work. After deciding how much repression to engage in, actors receive their utilities $U_E = \Pi \beta r - \frac{\Delta}{2}r^2$ and $U_L = u(g) - r$. In this situation where $L$ decides not to accept, they receive an outside wage equal to $g$. This outside-wage/option can be thought of as the value of other careers outside of picking or growing cotton for the planter elite.

To summarize, the sequence of play is as follows:

1. $E$ offers a wage $w \in \mathbb{R}^+$ to $L$.

2. $L$ can accept or reject this offer.
   - If $L$ accepts, the game ends and each group receives utilities.

3. If $L$ rejects, then $E$ chooses the amount of repression $r \in \mathbb{R}^+$ to engage in. Utilities are realized.

---

26 While the model in this paper parameterizes the cost function $c(r)$ using quadratic loss, the general comparative statics hold so long as the cost function is convex and differentiable.

27 Values of $\beta \in [0, 1]$ imply a relatively lower rate of return on repression relative to the “free-market” output.
Solving the game for Subgame Perfect Nash Equilibria (SPNE) via backwards induction yields the following results:

**Proposition 1:** Positive shocks to outside options will induce more repression for sufficiently high values of $\beta$.

This proposition captures the tradeoff that $L$ makes when weighing the benefits of “EXITing” and pursuing their outside options against the costs of repression that they might face when doing so. From the perspective of $E$, repression is only credible when the benefits are sufficiently high. So long as the value of $g$ is sufficiently high, $L$ still stands to benefit from pursuing the outside option. As described above, African American ex-slaves pursued many ways to “exit” from their previously coercive relationships with the planter elite despite the risks that this would entail. In this sense, embracing a “brief moment in the sun” entailed the risk of going back into slave-like relationships through state repression.

While the above model makes the assumption of deterministic costs, I relax this assumption in the Online Appendix and show that the basic results hold when considering the potential to be repressed as a costly lottery with risk-neutral preferences. I also consider an extension where the value of the outside option $g$ is probabilistically determined and the basic results hold.

**Proposition 2:** Greater social distance between groups induces more repression.

The intuition behind this result is straightforward. Repression, as described above, requires the elite to engage in actions that might raise the risk of revolt, breaking one's ethnic coalition, or simple psychological costs of doing harm to member's of one's social identity group. As these groups get farther apart in social distance (ie, the identity group of the labor pool is farther apart from the identity group of the elite), the cost of engaging in repression by $E$ against $L$ becomes lower. Thus, increases in social distance increases repression.\(^{28}\)

\(^{28}\)Repression itself can also endogenously increase social distance. See Acharya, Blackwell, and Sen (2018b) for a formal model of this process.
Moreover, the impact of social distance should be increasing in the value of the outside option. This is because for low values of \( g \), repression is less likely to happen in equilibrium. As \( g \) increases however, repression increases at a rate inversely proportional to social distance.

The theory, then, makes several testable predictions:

1. H1: Punishment should be increasing in the size of the subaltern group where the size proxies for the salience of \( \Delta \).

2. H2: Punishment should be increasing in the value of the subaltern group’s outside options \( g \).

3. H3: The impact of group size should be especially salient where the group has a higher outside option.

Model Proofs and Extensions

Proof. Proof of Proposition 1: The Effect of Outside Options

Given the Subgame Perfect Equilibrium Concept used in this paper, I solve the game via backwards induction. Starting at the terminal node where \( E \) must choose a level of repression \( r \in \mathbb{R}^+ \). At this node, \( E \)'s utility function is \( U_E = \Pi \beta r - \frac{\Delta}{2} r^2 \).

Taking the derivative with respect to \( r \), we get the following first-order condition:

\[
\frac{\partial U_E}{\partial r} = \Pi \beta - \Delta r
\]  

(3)

Setting this equal to zero, we can solve for the optimal level of repression \( r^* \):

\[
r^* = \frac{\Pi \beta}{\Delta}
\]  

(4)

We can now substitute \( E \)'s expression for the optimal level of repression to characterize \( L \)'s “exit” constraint:
Here, $L$ chooses to “exit” and pursue their outside options if and only if their utility from the outside option is greater than the utility they would receive from entering into “wage” labor plus the cost he would face from repression.

From this constraint, we can see that positive shocks to $g$ will induce more repression.
Proof. Proof of Proposition 2: The Effect of Social Distance

Consider $E$'s expression for the optimal level of repression $r^*$. From this equation, it is clear to see that an increase in $\Delta$ (closer social distance between the $E$ and $L$) reduces the optimal level of repression. This is because the derivative of $r^*$ with respect to $\Delta$ is strictly negative:

$$\frac{\partial r^*}{\partial \Delta} = \frac{-\Pi \beta}{\Delta^2} < 0$$

(6)
Proof. Risky Lottery of Labor’s Outside Option

Instead of considering a deterministic cost of repression for labor, we can reinterpret that term as an “expected” utility as follows:

\[ U_L = (1 - p)U(g) - pc(r) \] (7)

Where \( p \in (0, 1] \) represents the probability of getting caught. So long as \( U(g) \) is still sufficiently high, \( L \) will take the risky lottery.

Now we can re-write \( L \)‘s ”exit” constraint as:

\[ (1 - p)U(g) - pr^* \geq u(w) \] (8)

\[ \Rightarrow U(g) \geq \frac{u(w) + pr^*}{1 - p} \] (9)
Proof. Probabilistic Outside Option

Assume we have a mass of $L_i$ which with outside option $g^i \sim F(.)$ with mean $\mu$ and $F(.)$ symmetric around $\mu$. This allows us to rewrite $L_i$'s constraint as

$$U(g^i) \geq \frac{u(w) + pr^*}{1 - p}$$

(10)

This generates a cutpoint where $L_i$ with sufficiently high draws of $g^i$ will decide to exit. All else equal, increasing the average $\mu$ increases the proportion of individuals that $E$ will attempt to repress. Those under the cut-point are offered “free”-market wages.
DATA APPENDIX

- **Incarceration (pre-Reconstruction):**
  - **Source:** *Georgia Register of Convicts*. Accessed through Ancestry.com.
  - **Level of analysis:** Individual

- **Incarceration (1880-1882):**
  - **Source:** *Biennial Report of the Principal Keeper of the Georgia Penitentiary, 1880-1882*
  - **Level of analysis:** Individual

- **Incarceration (1897-1911):**
  - **Source:** *Annual Report of the Principal Keeper of the Georgia Penitentiary*
  - **Level of analysis:** County

- **Population (1810-1910):**
  - **Level of analysis:** County

- **Average number of troops during Reconstruction**
  - **Source:** Gregory P. Downs and Scott Nesbit, *Mapping Occupation: Force, Freedom, and the Army in Reconstruction*
- **Level of analysis**: County

- Proportion population enslaved (1860):


  - **Level of analysis**: County

- Sherman's March Locations


  - **Level of analysis**: County

- Freedmen's Bureau locations:

  - **Source**: https://www.google.com/maps/d/u/0/viewer?ie=UTF8&oe=UTF8&msa=0&mid=11kGBhLi6gJ9jvXqF9I2X47uHAgk&ll=32.47155077708247%2C-88.26405249999999&z=5

  - **Level of analysis**: County

- Total Black Property Wealth (1875-1900):


  - **Level of analysis**: County

- Black Officeholding:

- **Level of analysis:** Individual

- Police Force Size:


  - **Level of analysis:** Individual
CONVICT RECORDS

Figure A1-1: Sample from the Georgia Convict Register, 1817-1868
Figure A1-2: Sample from the Biennial Report of the Georgia Penitentiary, 1880-1868
**BLACK LAND VALUES**

**NEGRO AND WHITE POPULATION OF LUMPKIN COUNTY AT EACH CENSUS, 1840 TO 1890.**

<table>
<thead>
<tr>
<th>Census year</th>
<th>Negroes</th>
<th>Whites</th>
</tr>
</thead>
<tbody>
<tr>
<td>1840</td>
<td>528</td>
<td>5,143</td>
</tr>
<tr>
<td>1850</td>
<td>960</td>
<td>7,905</td>
</tr>
<tr>
<td>1860</td>
<td>470</td>
<td>4,156</td>
</tr>
<tr>
<td>1870</td>
<td>462</td>
<td>4,699</td>
</tr>
<tr>
<td>1880</td>
<td>451</td>
<td>6,075</td>
</tr>
<tr>
<td>1890</td>
<td>414</td>
<td>6,453</td>
</tr>
</tbody>
</table>

**ASSESS VALUE OF REAL ESTATE AND OF TOTAL PROPERTY OWNED BY NEGROES OF LUMPKIN COUNTY, AT 5-YEAR PERIODS, 1875 TO 1900.**

<table>
<thead>
<tr>
<th>Year</th>
<th>Acres of land owned</th>
<th>Assessed value</th>
<th>Acres of land owned</th>
<th>Assessed value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Land</td>
<td>Town and city real estate</td>
<td>Total property</td>
<td>Town and city real estate</td>
</tr>
<tr>
<td>1875</td>
<td>2,225</td>
<td>$1,960</td>
<td>$1,170</td>
<td>$5,431</td>
</tr>
<tr>
<td>1880</td>
<td>1,136</td>
<td>1,340</td>
<td>215</td>
<td>4,094</td>
</tr>
<tr>
<td>1885</td>
<td>2,476</td>
<td>2,965</td>
<td>1,530</td>
<td>6,481</td>
</tr>
<tr>
<td>1890</td>
<td>2,018</td>
<td>2,325</td>
<td>1,045</td>
<td>5,477</td>
</tr>
<tr>
<td>1895</td>
<td>1,539</td>
<td>1,865</td>
<td>1,045</td>
<td>5,477</td>
</tr>
<tr>
<td>1900</td>
<td>1,791</td>
<td>2,505</td>
<td>3,225</td>
<td>9,232</td>
</tr>
</tbody>
</table>

Figure A1-3: Sample from the Bureau of Labor Bulletin on Black Wealth
BALANCE CHECK OF PRE-TREATMENT BASELINE OBSERVABLES

The lack of level differences in the pre-treatment period suggests two things: (1) that the difference-in-differences design essentially leans on cross-sectional variation for estimating causal effects and (2) places that experienced Reconstruction did not seem to differ on the baseline outcome variable. To assuage concerns over cross-sectional imbalances, I perform an omnibus balance check regressing the Reconstruction exposure variable on an exhaustive set of observable, pre-treatment covariates. These include demographics such as population, urbanization, and slave intensity; economic variables such as manufacturing intensity and wealth; social variables such as church counts; and climactic variables such as suitability for growing different crops. The test here suggest that Reconstruction exposure is balanced on these pre-treatment characteristics thereby supporting the causal interpretation of the results.
EXTERNAL VALIDITY

Though the study leans on the case of Georgia for both analytical and empirical reasons, Georgia is emblematic of the Former Confederacy. The following figures demonstrate that this is the case using census data from 1860. Thus, there are reasons to believe that this case is instructive of broader patterns in the South.
Figure A1-5: Distribution of Demographic Variables Across the Former Confederacy
Figure A1-6: Distribution of Economic Variables Across the Former Confederacy
Figure A1-7: Age Distributions of Convicts in 1880-1882 by Race
Figure A1-8: Distribution of Crimes by Type in 1880-1882
Figure A1-9: Map of Convict Population Growth in Georgia
Figure A1-10: Binned Scatter plot of raw relationship.

Bins computing using optimal binning procedure developed in Cattaneo, Crump, Farrell and Feng (2019).
Figure A1-II: Raw scatter plot of relationship.
Figure A1-12: Map of Reconstruction Exposure Variable.
ROBUSTNESS CHECKS

Robustness to Using Measure of Troops at End of Civil War

Over the course of Reconstruction in Georgia, one might be concerned that exposure to the military might be driven by factors such as the amount of racial conflict or violence thus confounding the relationship between Reconstruction and incarceration. To address this concern, I instead use a measure of troop presence right after the end of the Civil War in 1865 as the main explanatory variables. The location of troops at the end of the Civil War is a function of local battlefield considerations, which are arguably exogenous with respect to later on incarceration patterns. Using this measure, I re-analyze the main results and demonstrate that they remain robust.

Table A1-1: Robustness to Using Troops Located Right after End of Civil War

<table>
<thead>
<tr>
<th>Num. Convicts per 100,000</th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Log(Troops per Thousand)</td>
<td>49.644**</td>
<td>48.314**</td>
<td>51.192**</td>
</tr>
<tr>
<td></td>
<td>(22.577)</td>
<td>(22.382)</td>
<td>(23.467)</td>
</tr>
<tr>
<td>Main Effect Reconstruction</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>County FE</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Year FE</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Time-Varying Covariates</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Number of Clusters</td>
<td>137</td>
<td>137</td>
<td>137</td>
</tr>
<tr>
<td>N</td>
<td>7,989</td>
<td>7,989</td>
<td>7,699</td>
</tr>
</tbody>
</table>

*p < .1; **p < .05; ***p < .01
Standard errors clustered by county in parentheses.
Effect concentrated among Non-Whites...

Note: Models estimated using county and year fixed effects.
Robustness to Inclusion of Freedmen's Bureaus

One potential concern with the analysis is that the results may instead be driven simply by the location of Freedmen’s Bureau offices instead of the actual military enforcement of Reconstruction. To address this, I geolocate Freedmen’s Bureau locations onto 1880 Georgia county boundaries. Then, I re-estimate the main difference-in-differences models with only Freedmen’s Bureau status interacted with the post 1871 variable and simultaneously with the main Reconstruction intensity variable used in the main analysis. The results indicate that the impact of military occupation is unaffected by the location of Freedmen’s Bureaus.
Table A1-2: Difference-in-Differences Estimates (Freedmen's Bureau): Georgia 1817-1882

<table>
<thead>
<tr>
<th></th>
<th>Num. Convicts per 100,000</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(1)</td>
</tr>
<tr>
<td>Any Freedmen's Bureau Office</td>
<td>34.163 (43.541)</td>
</tr>
<tr>
<td>Log(Troops per Thousand)</td>
<td></td>
</tr>
<tr>
<td>County FE</td>
<td>YES</td>
</tr>
<tr>
<td>Year FE</td>
<td>YES</td>
</tr>
<tr>
<td>Number of Clusters</td>
<td>137</td>
</tr>
<tr>
<td>N</td>
<td>7,989</td>
</tr>
</tbody>
</table>

*p < .1; **p < .05; ***p < .01
Standard errors clustered by county in parentheses.
### County-specific Linear Trends

Table A1-3: Robustness to County Linear Trends

<table>
<thead>
<tr>
<th></th>
<th>Num. Convicts per 100,000</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(1)</td>
</tr>
<tr>
<td>Log(Troops per Thousand)</td>
<td>36.368*</td>
</tr>
<tr>
<td></td>
<td>(18.739)</td>
</tr>
<tr>
<td>County FE</td>
<td>YES</td>
</tr>
<tr>
<td>Year FE</td>
<td>YES</td>
</tr>
<tr>
<td>Time-Varying Covariates</td>
<td>NO</td>
</tr>
<tr>
<td>Number of Clusters</td>
<td>132</td>
</tr>
<tr>
<td>N</td>
<td>7,989</td>
</tr>
</tbody>
</table>

*p < .1; **p < .05; ***p < .01
Standard errors clustered by county in parentheses.
**County-specific Quadratic Trends**

Table A1-4: Robustness to County Quadratic Trends

<table>
<thead>
<tr>
<th></th>
<th>Num. Convicts per 100,000</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(1)</td>
</tr>
<tr>
<td>Log(Troops per Thousand)</td>
<td>25.613***</td>
</tr>
<tr>
<td></td>
<td>(9.792)</td>
</tr>
<tr>
<td>County FE</td>
<td>YES</td>
</tr>
<tr>
<td>Year FE</td>
<td>YES</td>
</tr>
<tr>
<td>Time-Varying Covariates</td>
<td>NO</td>
</tr>
<tr>
<td>Number of Clusters</td>
<td>132</td>
</tr>
<tr>
<td>N</td>
<td>7,989</td>
</tr>
</tbody>
</table>

*p < .1; **p < .05; ***p < .01
Standard errors clustered by county in parentheses.
## Lagged Dependent Variable

### Table A1-5: Robustness to Lagged Dependent Variable

<table>
<thead>
<tr>
<th></th>
<th>Num. Convicts per 100,000</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(1)</td>
</tr>
<tr>
<td>Log(Troops per Thousand)</td>
<td>7.420**</td>
</tr>
<tr>
<td></td>
<td>(3.486)</td>
</tr>
<tr>
<td>Main Effect Reconstruction</td>
<td>Yes</td>
</tr>
<tr>
<td>County FE</td>
<td>No</td>
</tr>
<tr>
<td>Year FE</td>
<td>YES</td>
</tr>
<tr>
<td>Time-Varying Covariates</td>
<td>No</td>
</tr>
<tr>
<td>Lagged DV</td>
<td>YES</td>
</tr>
<tr>
<td>Number of Clusters</td>
<td>132</td>
</tr>
<tr>
<td>N</td>
<td>7,852</td>
</tr>
</tbody>
</table>

*p < .1; **p < .05; ***p < .01

Standard errors clustered by county in parentheses.
Log Specification

Table A1-6: Robustness to Log Transformation of Total Convicts per 100,000

<table>
<thead>
<tr>
<th></th>
<th>Log(Num. Convicts per 100,000)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(1)</td>
</tr>
<tr>
<td>Log(Troops per Thousand)</td>
<td>0.087</td>
</tr>
<tr>
<td></td>
<td>(0.059)</td>
</tr>
<tr>
<td>Main Effect Reconstruction</td>
<td>Yes</td>
</tr>
<tr>
<td>County FE</td>
<td>No</td>
</tr>
<tr>
<td>Year FE</td>
<td>YES</td>
</tr>
<tr>
<td>Time-Varying Covariates</td>
<td>No</td>
</tr>
<tr>
<td>Number of Clusters</td>
<td>132</td>
</tr>
<tr>
<td>N</td>
<td>7,989</td>
</tr>
</tbody>
</table>

*p < .1; **p < .05; ***p < .01
Standard errors clustered by county in parentheses.
**Interaction with Cotton Suitability**

Table A1-7: Effect Moderation by Cotton Suitability

<table>
<thead>
<tr>
<th></th>
<th>Num. Non-White Convicts per 100,000</th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Log(Troops per Thousand)*Post</td>
<td>-43.767**</td>
<td>-43.740**</td>
<td>-36.830**</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(17.862)</td>
<td>(17.992)</td>
<td>(17.848)</td>
<td></td>
</tr>
<tr>
<td>Log(Troops per Thousand)</td>
<td>0.124</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.314)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Log(Troops per Thousand)<em>Post</em>Cotton Suitability</td>
<td>0.014***</td>
<td>0.014***</td>
<td>0.013***</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.003)</td>
<td>(0.003)</td>
<td>(0.003)</td>
<td></td>
</tr>
<tr>
<td>Log(Troops per Thousand)*Cotton Suitability</td>
<td>0.303</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.852)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Main Effect Reconstruction</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>County FE</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Year FE</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td></td>
</tr>
<tr>
<td>Number of Clusters</td>
<td>132</td>
<td>132</td>
<td>132</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>7,308</td>
<td>7,308</td>
<td>7,043</td>
<td></td>
</tr>
</tbody>
</table>

*p < .1; **p < .05; ***p < .01
Standard errors clustered by county in parentheses.
### Table A1-8: Estimated Impact on Migration

<table>
<thead>
<tr>
<th></th>
<th>Log(Non-White Population)</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
</tr>
<tr>
<td>Log(Troops per Thousand)</td>
<td>0.093*</td>
<td>-0.051</td>
<td>-0.008</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.053)</td>
<td>(0.057)</td>
<td>(0.051)</td>
<td></td>
</tr>
<tr>
<td>Trends</td>
<td>No</td>
<td>Linear</td>
<td>Quadratic</td>
<td></td>
</tr>
<tr>
<td>County FE</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Year FE</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Time-Varying Covariates</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Number of Clusters</td>
<td>137</td>
<td>137</td>
<td>137</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>7,854</td>
<td>7,854</td>
<td>7,854</td>
<td></td>
</tr>
</tbody>
</table>

*p < .1; **p < .05; ***p < .01

Standard errors clustered by county in parentheses.
Impact on Property Crimes

Figure A1-13: Impact Concentrated among Discretionary Crimes
Results Not Driven by Any One County

Figure A1-14: Results Robust to Sequentially Dropping Counties from Dataset