

# The Effect of Parole Board Racial Composition on Prisoner Outcomes

Julia Godfrey\*      Kegan Teng Kok Tan<sup>†</sup>      Mariyana Zapryanova<sup>‡</sup>

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## Abstract

Parole is a major part of a prisoner's interaction with the criminal justice system, and is linked to long-run prisoner outcomes. Using data from the state of Georgia, we exploit the fact that prisoners are randomly allocated to parole board members to recover the effect of parole board racial composition on prisoner outcomes. We find that a higher proportion of Black members on the parole board is associated with better parole outcomes and lower 3-year recidivism rates for Black prisoners. Further, we document that the Black-White gap in parole violation rates, conditional on measures of parole success, closes when the parole board gains a Black member. Taken together, we argue that this is consistent with a reduction in discrimination against Black inmates with regard to parole decisions.

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\*Department of Economics, University of Rochester. Contact Email: [jgodfre3@ur.rochester.edu](mailto:jgodfre3@ur.rochester.edu).

<sup>†</sup>Department of Economics, University of Rochester. Contact Email: [ttan8@ur.rochester.edu](mailto:ttan8@ur.rochester.edu).

<sup>‡</sup>Department of Economics, Smith College. Contact Email: [mzapryanova@smith.edu](mailto:mzapryanova@smith.edu). We thank Dr. Tim Carr, Researcher at the GDC Office of Planning & Strategic Management, for providing us the administrative prison files, and Steve Hayes, Director of Communications at the Georgia board of Pardons and Paroles, for many useful conversations. We are grateful for feedback from seminar participants at Smith College Brown Bag Seminar Series and the University of Massachusetts at Amherst Five College Seminar on Justice, Law, and Societies as well as conference participants at the 2022 Texas Economics of Crime Workshop (TxECW), 2022 Conference on Empirical Legal Studies (CELS), and 2022 APPAM Fall Research Conference. We thank Priscilla Liu, My Nguyen, Nick O'Brien, and Emma Ryan for excellent research assistance. The authors have no conflicts of interest to declare and there is no financial interest to report.

# 1 Introduction

Although mandatory release has become the dominant prison release mechanism over the last two decades, indeterminate sentencing and discretionary parole release still play a fundamental role in reentry.<sup>1</sup> In 2019, forty-three percent of the prisoners entering parole were released on discretionary parole (Oudekerk and Kaeble, 2019). Despite the widespread use of discretionary prison release, little quantitative research has been accumulated on parole (Doleac and LaForest, 2022), and even less is known about the role that racial bias may play in this stage of the criminal justice system.<sup>2</sup> This gap in the literature is surprising given the amount of research compiled on racial disparities in sentencing and the fact that 34 US states still use discretionary parole boards for prison releases (Renaud, 2019). Moreover, because parole boards have complete authority over how much of the prescribed sentence a prisoner serves, they may be in the position to either remedy or exacerbate any biases from earlier stages of the criminal justice system.

In this paper, we explore the role of the racial make-up of the parole board on board’s application of adjustments to its parole guidelines and prisoner’s outcomes, such as time spent in prison and eventual recidivism. We use administrative data on the universe of parole board decisions in the state of Georgia from 1980 to 2008. We complement this data with information on the race of each parole board member that we collected from the Georgia Board of Pardons and Paroles webpage.<sup>3</sup> Our empirical strategy leverages on random assignment of parole files to parole board members to causally identify the effect of having more Black members on the parole board on prisoner outcomes, and whether that effect is different for Black inmates.

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<sup>1</sup>Mandatory release is an automatic discharge of a prison inmate after serving a specified term in prison. In contrast, discretionary release is granted following a decision by a parole board.

<sup>2</sup>Most of the literature on parole supervision has focused on examining the impact of parole on recidivism by considering the extensive margin (Banan, 2022; Macdonald, 2022), intensive margin (Kuziemko, 2013; LaForest, 2022a; Zapryanova, 2020), intensity (Georgiou, 2014), and nature of parole supervision (Arbour and Marchand, 2022; Lee, 2022).

<sup>3</sup>Although we observe other characteristics, race and gender are the only reliable ones that we consistently observe. We decide to focus our analysis on race instead of gender given that less than 10% of prisoners are female vs more than 60% being Black.

We find that as the percentage of Black parole board members increases, the board exerts less discretion and is more likely to agree with the guidelines recommendations for White inmates. For Black inmates, the board deviates more from the guidelines with greater leniency. Specifically, a higher proportion of Black parole board members for Black prisoners results in shorter time spent in prison as parole is granted earlier and lower recidivism rates. We also show that, conditional on parole release and predictive measures of the likelihood of parole violation, the Black-White gap in parole violations narrowed when the board gained its first Black member. Taken together, the estimates show the differences in parole decisions due to parole member race, and that this impacts prisoner outcomes in a way that narrows post-parole outcome disparities. This is consistent with potentially discriminatory parole decisions prior to the inclusion of a Black parole board member. However, we note that it is difficult to provide conclusive evidence about racial discrimination in parole determination.

While suggestive, our results support the view that diversity, in the form of minority board membership, can help eliminate outcome disparities (parole violations) that may be driven by discriminatory practices of overly harsh parole decisions with regard to how long Black inmates stay in prison relative to Whites. We also find that just the “token” minority member is sufficient to close the racial gap in outcomes. Although the parole board in Georgia is similar to board in other States in many dimensions, our findings could still be a somewhat specific to our setting (McConnell et al., 2022). Nevertheless, given the lack of empirical evidence on parole process, we believe that our paper would inform the broader policy considerations of greater minority representation among decision makers, especially in settings where there is no representation at all.

Our work contributes to a small literature that examines racial disparities in the decision-making of parole boards (Mechoulan and Sahuguet, 2015; Anwar and Fang, 2015) and parole officers (LaForest, 2022b). Mechoulan and Sahuguet (2015) and Anwar and Fang (2015) develop models to test for prejudice using rates of recidivism grouped by prisoner race and find no evidence of racial prejudice in parole decisions against minority prisoners using data

from Pennsylvania between 1999 and 2003. In addition, they find that the amount of time served in prison is consistent with corresponding recidivism rates by race. [Mechoulan and Sahuguet \(2015\)](#) apply a similar methodology using national data and also conclude that parole board decisions do not appear to be racially biased given the higher rates of parole violations of Black inmates. [LaForest \(2022b\)](#) finds that parolees in Pennsylvania that are assigned to an officer of a different racial background are 6 percent more likely to recidivate, 3 percent more likely to commit a minor parole violation, and 6 percent less likely to be employed. We complement these studies by examining the role of the racial composition of the parole board and its effect on minority prisoners. This is critical given that in many states parole boards have sole discretion on determining prison time.

Our work also relates to the extensive literature that has investigated the extent to which racial bias at various stages of the criminal legal process is responsible for racial disparities in various criminal-justice outcomes. Studies have examined extensively racial disparities in the behavior of police officers ([Donohue III and Levitt, 2001](#); [Anwar and Fang, 2006](#); [Antonovics and Knight, 2009](#); [Goncalves and Mello, 2021](#); [Hoekstra and Sloan, 2020](#)), prosecutors ([Didwania, 2022](#); [Rehavi and Starr, 2014](#); [Starr, 2015](#); [Sloan, 2019](#); [Tuttle, 2019](#)), juries ([Anwar et al., 2012](#); [Flanagan, 2018](#)), and judges ([Ayres and Waldfogel, 1994](#); [Abrams et al., 2012](#); [Arnold et al., 2018](#); [Bielen et al., 2018](#)).<sup>4</sup> [Agan \(forthcoming\)](#) summarizes multiple channels that can lead to these racial disparities in some of these decision makers in the criminal justice system. We provide the first evidence, to our knowledge, that increasing racial diversity of the parole board closes the racial gap of parole violations.

Our results add to previous empirical work that has found strong effects of the composition of other decision makers in the criminal justice system on the application of criminal justice and has highlighted the importance of decision-makers' race ([Anwar et al., 2012](#); [Flanagan, 2018](#)), ethnicity ([Lim et al., 2016](#)), age ([Anwar et al., 2014](#)), gender ([Schanzenbach, 2005](#); [Anwar et al., 2019a](#); [Knepper, 2018](#)), political affiliation ([Anwar et al., 2019b](#);

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<sup>4</sup>Defendant race has also been found important for peer effects within prison ([Tan and Zapryanova, 2022](#)).

Berdej3 and Yuchtman, 2013; Cohen and Yang, 2019), and family structure (Glynn and Sen, 2015) in judicial and jury behavior. Anwar et al. (2012) show that a small change in the race composition of the jury pool (adding one Black member) has a large impact on the conviction rates of Black versus White defendants (Anwar et al., 2012). Flanagan (2018) finds that jury pools with higher proportions of White men convict Black male defendants at higher rate. Using data from English juries in 1919, Anwar et al. (2019a) find that the inclusion of women in juries has little effect on overall conviction rates but has large effect on offenses involving women, such as sex offenses.

Our paper is also related to the literature that studies the effect of racial diversity of the U.S. criminal justice system and has focused primary on its effect on “front-end” sentencing decisions done by judges (Schanzenbach, 2005; Harris, 2022; Collins et al., 2010). We add to this body of work by examining the “back-end” decisions, namely the practice releasing prisoners on parole and sending them back to prison for violating the requirements of their supervised release. Raphael and Stoll (2014) highlight the importance of considering both “front-end” and “back-end” policies in the effort to reduce incarceration rates while maintaining public safety. Thus, understanding how racial diversity of parole boards impact institutional and prisoner outcomes is an important policy-relevant question.

The rest of this paper is organized as follows. Section 2 provides an overview of our data while Section 3 gives context on the parole process in the state of Georgia. Section 4 outlines our empirical strategy. Sections 5 presents our results. Finally, in Section 6, we conclude.

## 2 Data

We use two datasets from the state of Georgia to analyze the effect of parole board composition on the board decision-making and prisoner outcomes. First, we compile a dataset that contains the race of each parole board member that has served on Georgia’s

parole board.<sup>5</sup> These data come from historical biographies of the parole board members (including a color headshot) and annual reports of the Georgia board of Pardons and Paroles. We calculate parole board composition as the percent of Black members serving on the board in a given month. We show the changes in percent of Black parole board members as well as other changes in the board membership over time in Figure 1. We observe that there has always been at least one Black member serving on the Georgia’s parole board except for the late 1980s and that the percent of Black parole members reached its highest (60%) in the early 2000s.<sup>6</sup>

Second, we use an administrative database from the Georgia Department of Corrections of the universe of people admitted to prison in Georgia after 1980 and released before January 1, 2008. These records contain rich information about socio-demographics, criminal history, parole, and current conviction for each person admitted to state prison in Georgia. Importantly for our study, we observe various parole decision-making and prisoner outcomes as well as most of the information included in the parole files. For example, the data contain the severity levels (describing the seriousness of the crime committed by inmates) and the success scores (measuring the risk of recidivism) computed by the parole guidelines. We merge these two datasets on the date the prisoner is rated by the guidelines.<sup>7</sup> We further restrict our sample to male prisoners that are eligible for parole.

We present summary statistics of our outcomes as well as parole board composition variable in Table 1. In our estimation sample, the average prisoner faces a parole board that has 36.14% Black members.<sup>8</sup> The vast majority of prisoners are release on parole (91%), and about 30% return back to prison within 3 years of release. On average, the parole board

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<sup>5</sup>For some parole members, we observe other characteristics, such as highest education achieved or marital status, but we are not able to use these data because of many missing values.

<sup>6</sup>Figure A1 presents the overall distribution of the parole board composition over our sample entire period.

<sup>7</sup>Unfortunately, we do not observe the exact date on which each parole board member reviews prisoner’s parole file. However, we use the rate date as the earliest date on which the parole file is ready to be reviewed by the board.

<sup>8</sup>Note that the composition variable is scaled by factor of 10 for a cleaner presentation of our regression results.

agrees with the guidelines recommended prison time 55% of the time and increases it 30% of the time. Given that, it is not surprising that on average the board extends the guidelines recommended TPM by about 2 months. We also observe that it is more likely that prisoners receive a post-parole condition and have a nonviolent disciplinary charge.

We report the summary statistics that describe the prison population of our sample in Table A1. Notably, almost 60% of prisoners in our sample are Black and only about a third of prisoners have high school degree or above. On average, prisoners are thirty years old and receive a 4.3 year sentence. The majority of prisoners are incarcerated because of a property crime.

### 3 Institutional Details

The Georgia parole board consists of five-members appointed by the governor to staggered, renewable seven-year terms, and subject to confirmation by the State Senate. The parole board in Georgia is required by law to make parole decisions based on the risk a person may pose to public safety if they were released on parole ( O.C.G.A. §42-9-40). To determine that risk, the parole board has established Parole Decisions guidelines that take into account prisoner’s parole success score, which is based on their prior criminal history, and current crime severity level.<sup>9</sup> In making its decisions, the board depends on a hearing examiner (rater) to compile a prisoner’s parole file to expedite the process. The rater uses the guidelines to determine a “guidelines recommendation,” which lists the number of months recommended by the guidelines for the person to serve in prison, and adds it to prisoner’s parole file.<sup>10</sup>

Once prisoner’s parole file is complete, it is then sent sequentially, and more importantly

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<sup>9</sup>For more information about the guidelines and the parole process in Georgia, please refer to <https://pap.georgia.gov/parole-consideration/parole-consideration-eligibility-guidelines>.

<sup>10</sup>When the parole file reaches the parole board, in addition to the information from the guidelines, it usually contains prisoner’s sentencing, diagnostic, personal and criminal history, and prison disciplinary information, as well as any statements from law enforcement agents and victims. In addition, the rater writes a short summary discussing the content of the parole file.

for our identification, at random, to the parole board members. In accordance O.C.G.A. §42-9-42, the parole file is being sent to members until three of the five members vote the same way.<sup>11</sup> It is worth noting that most parole-eligible inmates are statutorily eligible for parole after serving one-third of their prison sentence. When making a decision, each member can set a temporary parole month (TPM), set a reconsideration date, or set neither. The guidelines suggest a TPM, which the board can agree with as well as have full discretion to increase or decrease it. When the parole board sets a TPM, the board is making a decision to possibly grant parole on the date specified conditional on whether the person no longer poses a risk to public safety by that date. The TPM is not a release date, but rather a date when the board will review the person’s parole file again to make its final decision to grant or deny parole. If the board set a reconsideration date, the board is denying parole for the present, but agrees to review the file again in the future to reconsider the person for parole. When the board does not set a reconsideration date or a tentative parole month, the board is denying parole for the rest of the person’s sentence.

## 4 Empirical Strategy

We estimate the following regression equation:

$$Y_{it} = \alpha_0 + \alpha_1 comp_{it} + \alpha_2 comp_{it} \times Black_i + \alpha_3 tenure_{it} + \alpha_4 X_i + \alpha_5 G_i + \pi_{it} + \varepsilon_{it} \quad (1)$$

where  $Y_{it}$  refers to prisoner outcome of interest, such as whether the board agrees with the guidelines recommendation or probability of parole, for prisoner  $i$  rated in month  $t$ .<sup>12</sup>  $Comp_{it}$  is the percent of Black members of the parole board that decides on the parole case of prisoner  $i$  in month  $t$ . Ideally, we would like to observe exactly which members vote on

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<sup>11</sup>The board does not meet as a group to review parole files or interviews the prisoner. Rather, each board member received parole files at random and votes based on the content of the file independently. We want to note that the parole members votes are not anonymously recorded.

<sup>12</sup>Refer to Table 1 for the full list of outcomes.



each parole file, but this is not available in our data because the individual votes are classified as “state secrets.” We instead assign each prisoner to the parole board that they were likely to engage with based on the date the parole file was rated by the guidelines.<sup>13</sup> Our results should be interpreted as *intent-to-treat* effect of increasing the probability of prisoner’s parole case being reviewed by a more racially diverse board.

We also control for the average tenure of the parole board members ( $tenure_{it}$ ) in order to isolate the effect of changes in the racial composition of the board from any other changes in its membership.  $X_i$  is a vector of prisoner characteristics listed in Table A1, such as race, gender, and criminal offense.  $G_i$  are controls for success score and crime severity level used by the rater to obtain the guidelines recommendation.  $\pi$  are rater-by-year fixed effects to account for any observable rater specific heterogeneity of how the parole file is prepared and presented to the board. The fixed effects also account for secular trends in parole outcomes over the sample period. We cluster the error terms  $\varepsilon_{it}$  by rater-year.

The parameter  $\alpha_1$  captures the effect of increase in the percent of Black members on the parole board on prisoner outcomes using within-rater-by-year variation. The parameter  $\alpha_2$  captures the differential effect of racial diversity on prisoner outcomes for prisoners who are Black. We establish the causal interpretation of these parameters by relying on the randomization that occurs in the assignment of parole files to parole members. Without this institutional detail, it is possible that prisoners are allocated to parole members based on their characteristics, leading to endogeneity concerns. Identifying variation comes from the fact that the assignment of parole cases to board members is random, thus breaking any correlation between parolee characteristics and board member characteristics. To empirically test that the randomization assumption holds, we perform a series of balance tests by regressing each prisoner characteristics on parole board composition. We report the results in Table A2 and find that for the most part, our tests are consistent with the plausibly random

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<sup>13</sup>From conversation with the Georgia parole board administrators, we were told that the board starts reviewing files soon after the rating is complete. This eases some of our concerns that our results could be subject to measurement error if the parole reviews the files not close to the rate date.

parole board composition that prisoners face. Although some coefficients are statistically significant in the balance test perhaps due to number of regressions we run, all of them are very small in magnitude.

## 5 Results

### 5.1 Parole process

We present our main results of the racial composition of the parole board on various aspects of the parole process and prisoner outcomes in Tables 2 to 3. Across the board, we find that our estimates are largely robust to differences in the fixed effects included (Columns (3) and (4)). We also find that it is important to interact board composition with prisoner race.

First, we estimate the effect of the racial composition of the parole board on how the board engages with the guidelines and whether it deviates from the guidelines recommendation in a significant way. We present our results in Table 2. Our estimates show that the impact of more minority board members on agreeing with recommendation of the guidelines is positive and statistically significant for most specifications (a 4 p.p. increase in the probability of agreeing with recommendations for a 10 p.p. increase minority membership, Table 2 Panel A). That is to say, the board on the whole exercises less discretion in deviating from guidelines. Interestingly, however, that is not the case for Black inmates. Instead, more discretion is exercised for Black inmates when minority board membership increases.

To unpack this further, we look at the way the board deviates from the guidelines. When the board has more minority board members, it is 2 p.p. less likely to be harsher than the guidelines and also 2 p.p. less likely to be more lenient than the guidelines for White inmates. However for Black inmates, an increase in minority board membership leads to a roughly 3 p.p. reduction in the probability of choosing a harsher parole outcome than the guidelines, and a 7-8 p.p. increase in the probability of choosing a more lenient outcome

than the guidelines (Table 2 Panels B and C). Indeed, Panel D underlines this, showing that for White inmates there is a 13-17 day increase in prison time relative to guidelines when minority board membership goes up, and a 47-51 day decrease for Black inmates.<sup>14</sup>

These results can be explained by an adjustment upon the inclusion of more minorities on the board in the relative harshness of the board toward Black and White inmates who qualify for parole. The additional minority board member might have a slightly more negative prior toward White inmates, and the presence of a minority board member might inform and move the priors that other board members hold with regard to Black inmates. This is consistent with findings from other areas of the criminal justice system, for example, Harris (2022) finds that the addition of a Black colleague on the judicial bench results in shrinking the Black-White incarceration gap.

In contrast, Table 3 reports that overall parole probabilities decline very slightly with an increase in minority membership, as well as for Black inmates. The impact, a 2 p.p. decrease in probability of being released on parole for a 10% increase in Black board membership, is small relative to the mean of 91% parole rate. That is, the extensive margin effect is opposite to the intensive margin that drive Table 2. As an additional check, we also evaluate the impact on time served in prison in Table 3 Panel D. We find that an additional Black member on the parole board statistically significantly reduces prison time for Black inmates. We also document that the probability of having post-parole conditions increase for Black inmates and pre-parole conditions decrease, as Black membership of the board increased.

These results suggest that the parole board mostly maintains parole probabilities overall but is more lenient to inframarginal Black inmates as reflected in the reductions in time served in prison. This is reasonably accompanied by more stringent post-parole conditions as Black inmates are being released sooner than before.

These changes in parole decision-making process in response to changes in the racial

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<sup>14</sup>We observe only the final TPM date set by the board, and we have no information on whether parole files have been reconsidered multiple times. Thus, our results should be interpreted as the effect of parole board composition on the last TPM set by the board before a prisoner is released.

composition of the board tell one-half of the story with regard to the potential for discrimination that may come with an underrepresented group on the parole board. It is possible that the longer parole lengths (and hence shorter sentence served) for Black inmates when Black board members joined the board was unwarranted, given the underlying probabilities for parole violation. To investigate this, we turn to look at parole violations and recidivism more broadly.

## 5.2 Recidivism

We begin with the setup from [Anwar and Fang \(2015\)](#), where parole boards make parole decisions primarily based on the probability of violating parole. If inmates are more likely to violate parole than a given threshold level, then the board should keep them in the prison system until that propensity drops down below the threshold, paying the cost of incarceration. Under such a regime, given that parole boards have full discretion over the release of inmates on parole as a proportion of sentence length, it can be shown that all inmates who are released on parole must be precisely at the threshold level of likelihood for violating parole.

This in turn implies that absent of bias generating different thresholds, the rates of parole violations for released parolees should not be affected by inmate’s race, conditional on a rich set of observables available to the parole boards to predict violations. In our setting, the guidelines success score uses inmate’s observables to determine the risk of recidivism. We therefore plot parole violations for statutory eligible for parole inmates (those who served between 33% and 100% of their sentences) by race and success score as the parole board composition changes (see [Figure 2](#)). The plots make it clear that there exists a Black-White gap in parole violation rates when parole boards were all White, but that gap closes when the board has at least one Black member.<sup>15</sup> Black parolees are *less likely* to commit parole violations prior to the inclusion of Black members on the board, conditional on the same

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<sup>15</sup>We also find similar patterns in the sample of all inmates, not only those who are statutory eligible for parole inmates (see [Figure A3](#)).

success score.<sup>16</sup>

We find this to be strongly suggestive evidence of a more stringent threshold in place for Black inmates with a given success score compared to their White counterparts when the parole board does not include any Black members. The fact that the violations gap closed with the inclusion of Black members further underscores this interpretation.<sup>17</sup> We confirm this pattern with our regressions in Table 4, Panel B, where a 10% increase in Black membership on the parole board was associated with an approximately 8 p.p. increase in parole violations for Black inmates. Looking back at our parole results, this is consistent with the earlier releases for Black inmates when Black members are included in the parole board. Interestingly, despite the higher rates of parole violations, overall 3-year recidivism for Black inmates declined as Black members joined the parole board. This suggests that the more lenient parole decisions may have been beneficial for lowering overall recidivism.

## 6 Conclusions

This paper investigates the impacts of the racial diversity of the Georgia parole board on prisoner experience while in prison and outcomes post-release. We exploit the random assignment of prisoner case files to board members in our analysis, interpreting the composition of the board as a probability that a prisoner will face a board member of the same racial group. Within the broader literature, this paper contributes greatly to the role of discrimination in the criminal justice system at the parole stage. The parole stage of the rehabilitation process is imperative to future outcomes of inmates in that it determines both sentence length and parole conditions. We not only find that more diverse boards result in shorter sentences for Black inmates, but also declines in recidivism rates. Taken in combination, these two results suggest that diversity can close racial gaps in an equitable manner.

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<sup>16</sup>We find a much smaller Black-White gap when we dilute the measure of recidivism risk with new court convictions, suggesting that the board is primarily concerned with parole violations as the factor driving parole decisions, in line with the model set up by [Anwar and Fang \(2015\)](#) (see Appendix Figure A2).

<sup>17</sup>[Mechoulan and Sahuguet \(2015\)](#) and [Anwar et al. \(2012\)](#) find no evidence of discrimination for parole decisions but in different settings than ours, both in terms of time and space.

Our results show that a 10% increase in minority share of the parole board leads to, on average, a 46 day reduction in the board-agreed TPM for Black prisoners (meaning that the board on average chooses a TPM 47-51 days sooner than the guidelines-recommended one). Conversely, we see a 13-17 day increase in the board-agreed release date for white prisoners. This finding is potentially representative of a shift in the board towards leniency for Black prisoners as more Black board members are appointed. To ensure that this leniency is warranted, we check post-release outcomes of prisoners and find that even with early release, a 10% increase in minority share of the parole board is associated with a decrease in recidivism after 3 years by 17 percentage points for Black prisoners. This implies that the shift towards leniency by the board is likely driven by informed decision-making and not just homogeneity bias. Our findings that a more diverse parole board leads to decreases in recidivism rates has important implications given the interest of practitioners and policy-makers across the country to reduce recidivism rates and the mixed results of the effectiveness of various re-entry programs ([Doleac, 2019](#)).

The state of Georgia is one example, of 35 states, that possess a discretionary parole board. Members of such boards possess power and discretion over the future lives of countless prisoners; and thus, have the potential to either perpetuate or lessen the present racial discrimination in the many levels of the US criminal justice system. Our paper is somewhat limited in its external validity, given that we study a particular institutional setting within one state. However, we believe this case study can still inform other settings and other dimensions of decision making disparities that may not be justified when looking subsequent outcomes.

Future research should continue to address this stage of the legal process. While we address issues of racial diversity, there are other factors that demand future research, including; gender composition, political alliance, education, or training. More effective (and less biased) parole boards will bring positive change to the lives and recidivism-risk of prisoners, and in turn lessen the financial burden of our prison system and the social costs of crime

more broadly.

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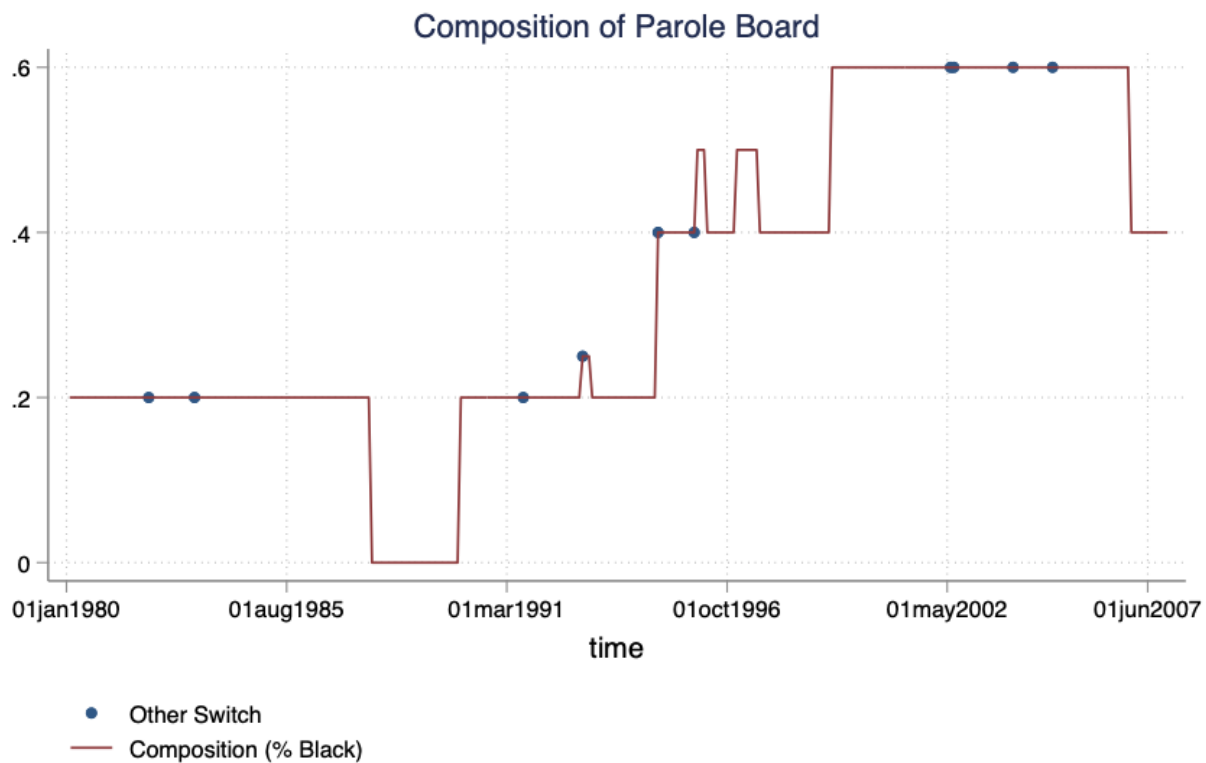
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## 7 Tables and Figures

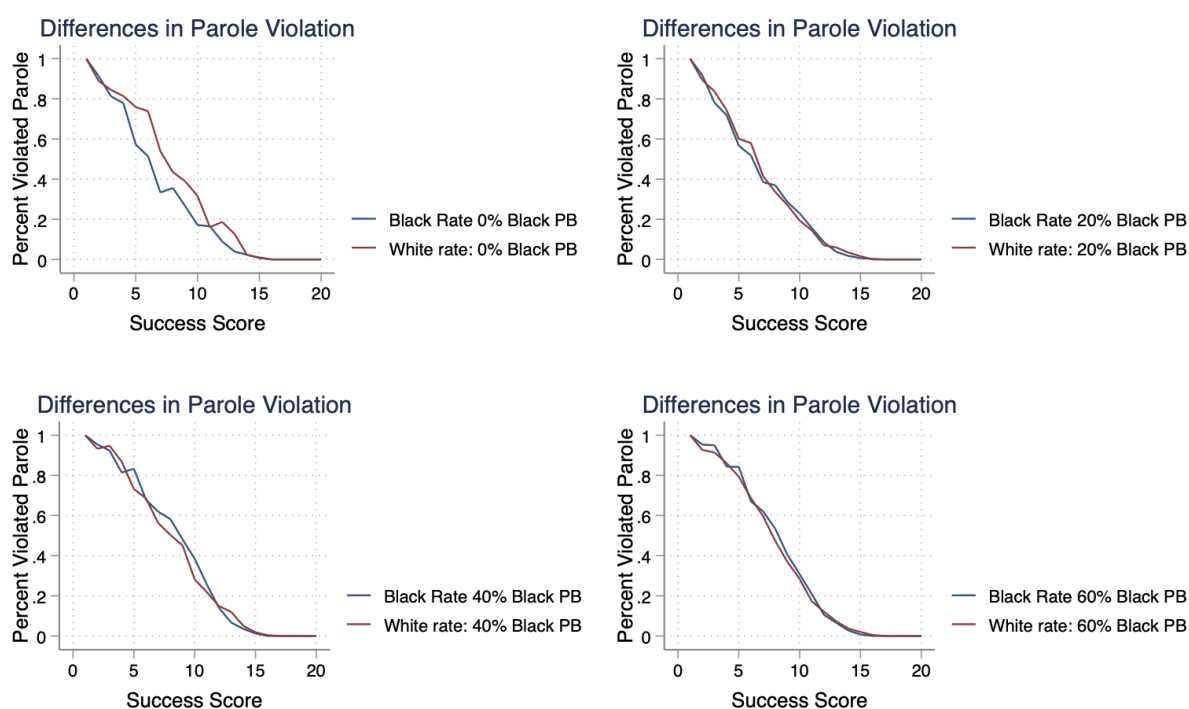
Figure 1: parole board racial composition over time



*Note:* This figure plots changes in the parole board over our sample period. Solid lines indicate changes in the percent of parole board members who are Black while dots are representative of any other type of board transition.

Figure 2: Probability of returning to prison with a parole/probation violation vs guidelines success score: Statutorily eligible for Parole

### Restricted Sample: served at least 33%



*Note:* The y-axis plots the probability of returning to prison because of a parole/probation violation. On the x-axis we plot the success score. We plot the probability of returning to prison by prisoner race and different parole board compositions. The sample includes only prisoners released after serving 1/3 of their sentence.

Table 1: Summary statistics: Outcome variables and Parole composition

	Mean	S.D.
Paroled	0.910	0.286
Board Agrees with Recomm.	0.548	0.498
Board Increases Recomm.	0.304	0.460
Board Decreases Recomm.	0.148	0.355
Board m guidelines TPM	65.683	311.191
Recidivate in 3 years	0.342	0.474
Num of pre-parole conditions	0.104	0.412
Num of post-parole conditions	0.577	0.694
Any pre-parole condition	0.074	0.262
Any post-parole condition	0.471	0.499
Disciplinary charges: violent	0.392	1.699
Disciplinary charges: nonviolent	2.725	7.744
Disciplinary charges: total	3.117	9.048
Comp	3.614	1.985
N	111,410	

Notes: The table shows summary statistics of our main variable of interest (comp) that measures the proportion of Black parole board members serving on the board as well as all the outcomes of interest, 3.6 signifies that on average 36% of the board was Black throughout our sample.

Data source: Georgia Prison and Conviction Data.

Table 2: Parole Decision-Making

Panel A: board agrees with the guidelines recommendation				
	(1)	(2)	(3)	(4)
Comp	0.0357*** (0.0075)	0.0385*** (0.0077)	0.0394*** (0.0093)	0.0399*** (0.0096)
Comp x Black		-0.0432** (0.0170)	-0.0408*** (0.0151)	-0.0408*** (0.0151)
Mean Dept. Var.	0.548	0.548	0.548	0.548
R-squared	0.115	0.115	0.187	0.187
N	111410	111410	111410	111410
Panel B: board increases the guidelines recommendation				
	(1)	(2)	(3)	(4)
Comp	-0.0241*** (0.0068)	-0.0217*** (0.0069)	-0.0202** (0.0080)	-0.0177** (0.0079)
Comp x Black		-0.0374** (0.0164)	-0.0274* (0.0154)	-0.0274* (0.0154)
Mean Dept. Var.	0.304	0.304	0.304	0.304
R-squared	0.164	0.164	0.214	0.214
N	111410	111410	111410	111410
Panel C: board decreases the guidelines recommendation				
	(1)	(2)	(3)	(4)
Comp	-0.0116** (0.0049)	-0.0168*** (0.0049)	-0.0192** (0.0090)	-0.0223** (0.0087)
Comp x Black		0.0806*** (0.0115)	0.0682*** (0.0104)	0.0682*** (0.0104)
Mean Dept. Var.	0.148	0.148	0.148	0.148
R-squared	0.139	0.139	0.211	0.211
N	111410	111410	111410	111410
Panel D: Difference between board and guidelines recommended TPM				
	(1)	(2)	(3)	(4)
Comp	9.7719** (4.0858)	13.0891*** (4.1600)	15.8600** (6.5386)	17.4798*** (6.4393)
Comp x Black		-51.4277*** (10.8980)	-46.7330*** (10.3494)	-46.7191*** (10.3454)
Mean Dept. Var.	65.683	65.683	65.683	65.683
R-squared	0.202	0.202	0.259	0.259
N	111410	111410	111410	111410
Mean tenure	X	X	X	X
Prisoner controls	X	X	X	X
Crime type controls	X	X	X	X
Linear time trend	X	X		
Rater-year FE			X	X
Gender Comp Control				X

Notes: The dependent variable is indicated in the header of each panel. Comp is percent of the parole board members who are Black. Mean tenure controls for the average tenure of the parole board. Prisoner controls include; prisoner demographics (IQ, indicators for having children or being married, social class), crime incidence characteristics, sentence length, previous convictions, guidelines parole success score, and crime severity level. Standard errors are clustered by rater-year.

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

Table 3: Parole outcomes

Panel A: Probability of parole				
	(1)	(2)	(3)	(4)
Comp	-0.0120*** (0.0034)	-0.0105*** (0.0035)	-0.0061 (0.0045)	-0.0057 (0.0047)
Comp x Black		-0.0221** (0.0096)	-0.0275*** (0.0091)	-0.0275*** (0.0091)
Mean Dept. Var.	0.910	0.910	0.910	0.910
R-squared	0.072	0.072	0.102	0.102
N	111410	111410	111410	111410
Panel B: Probability of having any post-parole condition				
	(1)	(2)	(3)	(4)
Comp	-0.0621*** (0.0069)	-0.0668*** (0.0070)	-0.0064 (0.0108)	-0.0015 (0.0103)
Comp x Black		0.0737*** (0.0218)	0.1091*** (0.0206)	0.1091*** (0.0206)
Mean Dept. Var.	0.471	0.471	0.471	0.471
R-squared	0.311	0.311	0.364	0.365
N	111410	111410	111410	111410
Panel C: Probability of having any pre-parole condition				
	(1)	(2)	(3)	(4)
Comp	-0.0060*** (0.0019)	-0.0030 (0.0021)	0.0099** (0.0042)	0.0124*** (0.0038)
Comp x Black		-0.0460*** (0.0114)	-0.0343*** (0.0114)	-0.0343*** (0.0114)
Mean Dept. Var.	0.074	0.074	0.074	0.074
R-squared	0.053	0.053	0.068	0.068
N	111410	111410	111410	111410
Panel D: Time Served in Prison (days)				
	(1)	(2)	(3)	(4)
Comp	27.0252*** (5.2762)	28.9842*** (5.2578)	10.4808 (7.0451)	8.0479 (7.2423)
Comp x Black		-30.5856*** (10.8269)	-29.7721*** (10.0972)	-29.7960*** (10.0966)
Mean Dept. Var.	557.803	557.803	557.803	557.803
R-squared	0.467	0.467	0.516	0.516
N	101347	101347	101347	101347
Mean tenure	X	X	X	X
Prisoner controls	X	X	X	X
Crime type controls	X	X	X	X
Linear time trend	X	X		
Rater-year FE			X	X
Gender Comp Control				X

Notes: The dependent variable is indicated in the header of each panel. Comp is percent of the parole board members who are Black. Mean tenure controls for the average tenure of the parole board. Prisoner controls include; prisoner demographics (IQ, indicators for having children or being married, social class), crime incidence characteristics, sentence length, previous convictions, guidelines parole success score, and crime severity level. Standard errors are clustered by rater-year. Panel D is further restricted by whether a prisoner ever was on parole and if they were released before their sentence was completed.

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



Table 4: Recidivism Outcomes

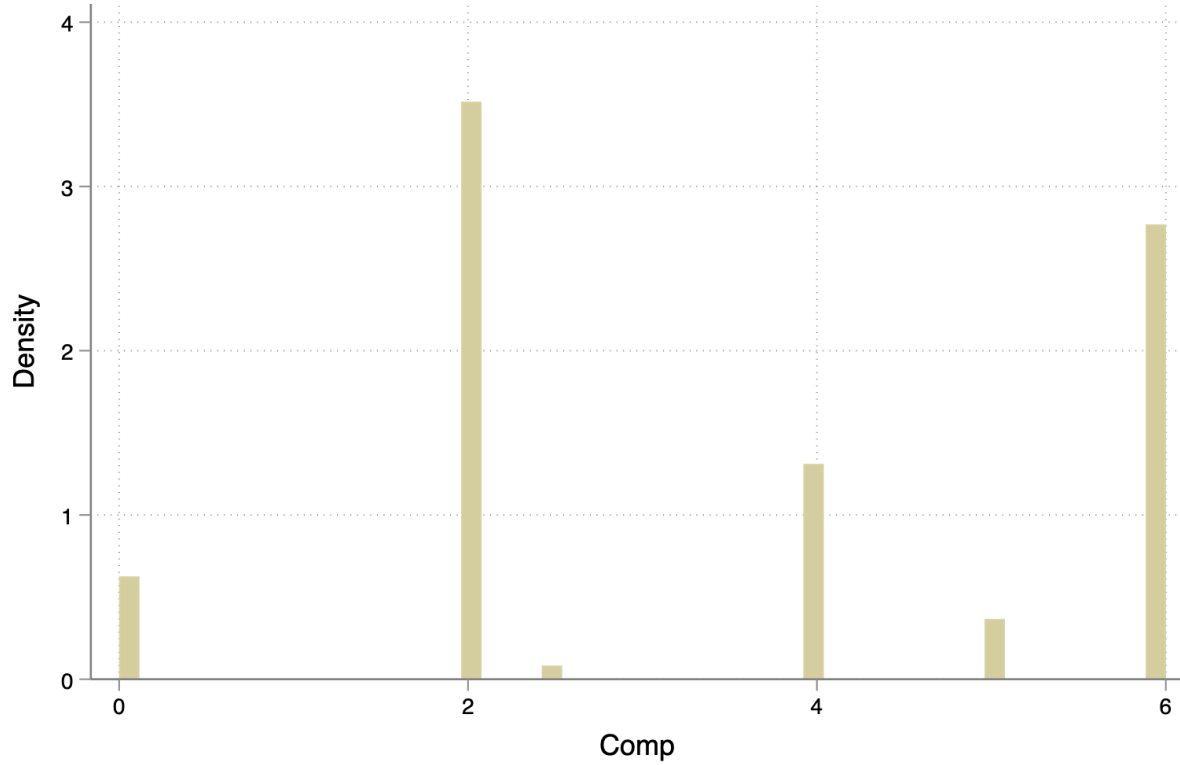
Panel A: Probability of recidivism within 3 years of release				
	(1)	(2)	(3)	(4)
Comp	0.0193*** (0.0025)	0.0305*** (0.0026)	0.0170*** (0.0045)	0.0178*** (0.0047)
Comp x Black		-0.1725*** (0.0128)	-0.1777*** (0.0129)	-0.1777*** (0.0129)
Mean Dept. Var.	0.342	0.342	0.342	0.342
R-squared	0.106	0.107	0.115	0.115
N	111410	111410	111410	111410
Panel B: Recidivism: return to prison for parole/probation violation				
	(1)	(2)	(3)	(4)
Comp	-0.0351*** (0.0041)	-0.0398*** (0.0043)	-0.0217*** (0.0066)	-0.0202*** (0.0067)
Comp x Black		0.0723*** (0.0164)	0.0890*** (0.0156)	0.0889*** (0.0156)
Mean Dept. Var.	0.331	0.331	0.331	0.331
R-squared	0.356	0.357	0.379	0.379
N	73620	73620	73620	73620
Panel C: Recidivism: return to prison for any reason				
	(1)	(2)	(3)	(4)
Comp	-0.0103*** (0.0024)	-0.0095*** (0.0026)	0.0003 (0.0044)	0.0010 (0.0044)
Comp x Black		-0.0118 (0.0142)	-0.0063 (0.0140)	-0.0063 (0.0140)
Mean Dept. Var.	0.786	0.786	0.786	0.786
R-squared	0.404	0.404	0.413	0.413
N	73620	73620	73620	73620
Mean tenure	X	X	X	X
Prisoner controls	X	X	X	X
Crime type controls	X	X	X	X
Linear time trend	X	X		
Rater-year FE			X	X
Gender Comp Control				X

Notes: The dependent variable is indicated in the header of each panel. Comp is percent of the parole board members who are Black. Mean tenure controls for the average tenure of the parole board. Prisoner controls include; prisoner demographics (IQ, indicators for having children or being married, social class), crime incidence characteristics, sentence length, previous convictions, guidelines parole success score, and crime severity level. Standard errors are clustered by rater-year.

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

## A Appendix

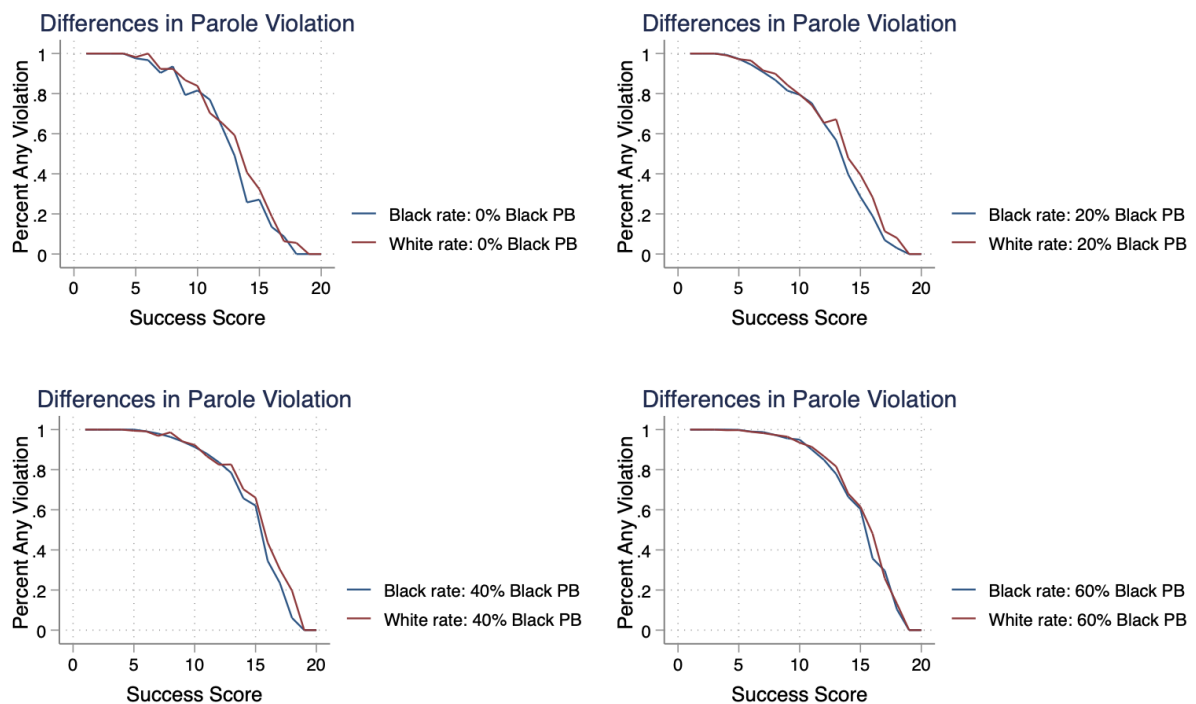
Figure A1: Distribution of the racial composition of Georgia's parole board



*Note:* This figure shows the distribution of the the percent of parole board members who are Black in our estimation sample.

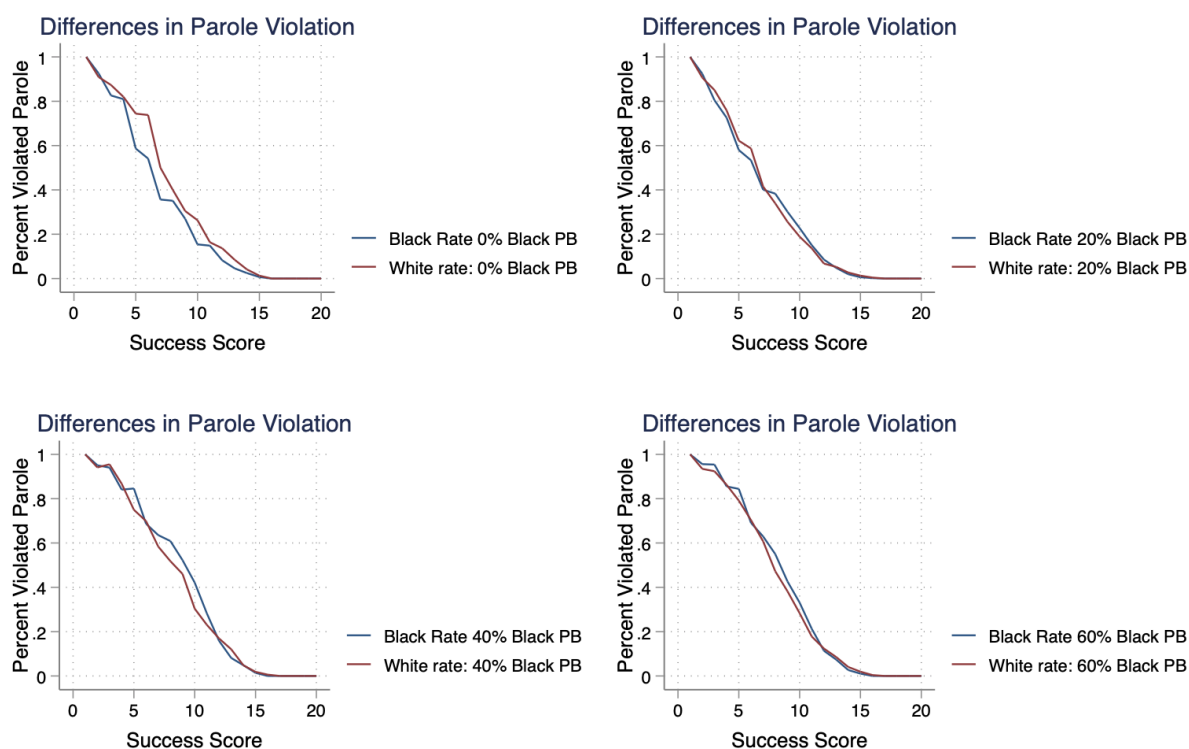
Figure A2: Probability of returning to prison with a parole/probation violation or a new sentence vs guidelines success score: Statutorily eligible for Parole

**Restricted Sample: served at least 33%**



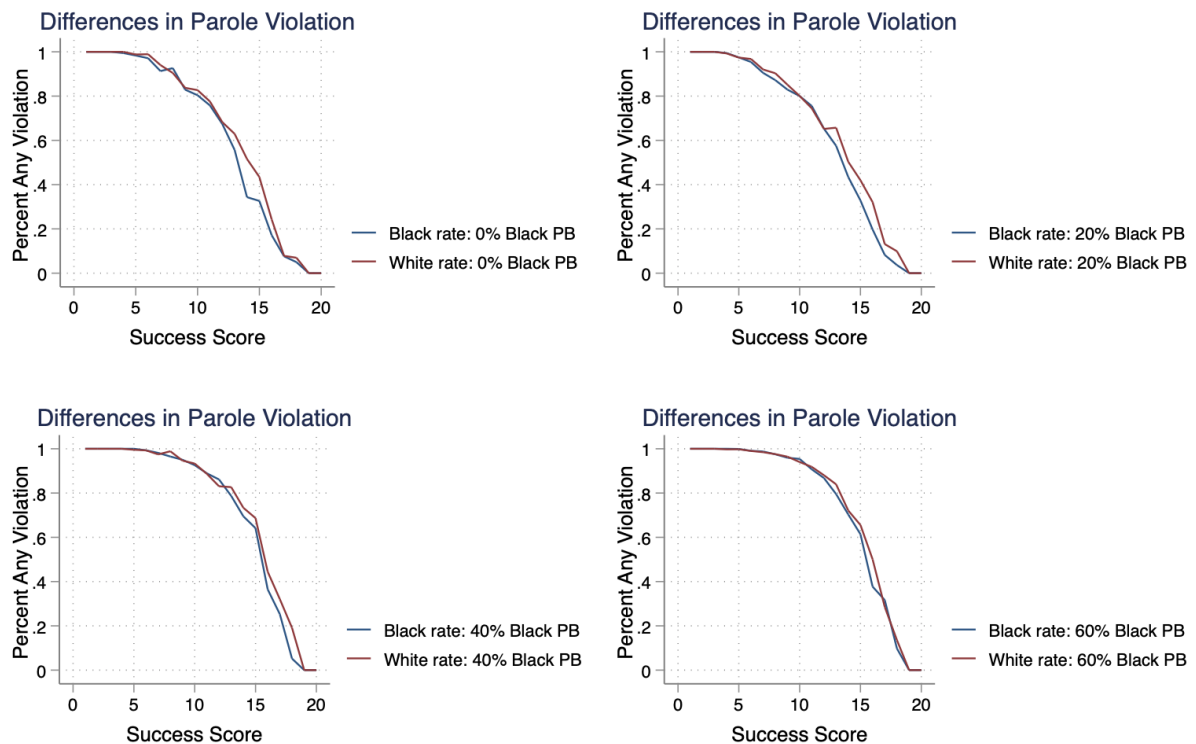
*Note:* The y-axis plots the probability of returning to prison. The return to prison can be because of a new conviction or because of parole/probation violation. On the x-axis we plot the success score. We plot the probability of returning to prison by prisoner race and different parole board compositions. The sample includes only prisoners released after serving 1/3 of their sentence.

Figure A3: Probability of returning to prison with a parole/probation violation vs guidelines success score: Full sample



*Note:* The y-axis plots the probability of returning to prison because of a parole/probation violation. On the x-axis we plot the success score. We plot the probability of returning to prison by prisoner race and different parole board compositions. The sample includes all prisoners regardless of what fraction of their sentence they have served.

Figure A4: Probability of returning to prison with a parole/probation violation or a new sentence vs guidelines success score: Full sample



*Note:* The y-axis plots the probability of returning to prison. The return to prison can be because of a new conviction or because of parole/probation violation. On the x-axis we plot the success score. We plot the probability of returning to prison by prisoner race and different parole board compositions. The sample includes all prisoners regardless of what fraction of their sentence they have served.

Table A1: Summary statistics: Control variables

	Mean	S.D.
Sentence Length (days)	1574.663	722.779
Less than HS	0.658	0.475
HS Diploma	0.245	0.430
Some College	0.084	0.277
Graduate School	0.013	0.112
IQ: less than 60	0.006	0.080
IQ: First Quantile	0.233	0.423
IQ: Second Quantile	0.232	0.422
IQ: Third Quantile	0.276	0.447
IQ: Fourth Quantile	0.253	0.435
Has Kids	0.631	0.483
Married	0.157	0.363
Age at Sentencing	30.282	9.204
Welfare	0.073	0.260
Occasionally Employed	0.048	0.214
Minimum Standard	0.405	0.491
Middle Class	0.444	0.497
Zero Prior Convictions	0.342	0.474
1 Prior Conviction	0.163	0.370
2-3 Prior Convictions	0.208	0.406
4-7 Prior Convictions	0.185	0.388
8+ Prior Convictions	0.101	0.301
Black	0.598	0.490
Drug Related Crimes	0.297	0.457
Property Related Crimes	0.410	0.492
Other Crimes	0.293	0.455
N	111,410	

Notes: The table shows summary statistics of the control variables used in our OLS estimation sample. Recidivate is the probability that an individual returns to prison in the state of Georgia within 3 years of release. Subtract (add) time is the probability that the parole board votes for shorter (longer) prison time than recommended by the Guidelines.

Data source: Georgia Prison and Conviction Data.

Table A2: Balance tests

Panel A: Covariates									
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	
Less than HS	HS Diploma	Some College	Graduate School	Zero Prior Convictions	1 Prior Conviction	2-3 Prior Convictions	4-7 Prior Convictions	8+ Prior Convictions	
Comp	-0.0026 (0.0051)	0.0025 (0.0041)	-0.0012 (0.0013)	-0.011 (0.0013)	-0.0146** (0.0060)	-0.0045 (0.0031)	0.0053 (0.0036)	0.0109** (0.0030)	0.0029 (0.0037)
Mean Dept. Var.	0.661	0.244	0.082	0.013	0.341	0.162	0.208	0.186	0.103
Panel B: Covariates (cont.)									
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	
IQ: less than 60	IQ: First Quantile	IQ: Second Quantile	IQ: Third Quantile	IQ: Fourth Quantile	Welfare	Occasionally Employed	Minimum Standard	Middle Class	
Comp	-0.0014* (0.0009)	-0.0041 (0.0045)	0.0076** (0.0033)	0.0002 (0.0033)	-0.0023 (0.0051)	0.0009 (0.0031)	0.0003 (0.0059)	0.0007 (0.0062)	0.0007 (0.0062)
Mean Dept. Var.	0.006	0.233	0.232	0.276	0.253	0.071	0.046	0.397	0.423
Panel B: Covariates (cont.)									
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	
Sentence Length (days)	Has Kids	Married	Age at Sentencing	Black	Drug Related Crimes	Property Related Crime	Other Crimes		
Comp	-38.3741*** (12.0746)	-0.0016 (0.0038)	0.0087*** (0.0029)	0.0601 (0.1165)	-0.0093 (0.0062)	0.0068 (0.0060)	0.0063 (0.0074)	-0.0131** (0.0064)	0.0063 (0.0064)
Mean Dept. Var.	1537.377	0.611	0.154	30.358	0.355	0.296	0.412	0.292	0.292

Notes: The dependent variable is indicated in the header of each column. All covariates are presented in two panels. Regressions include rate-by-year FEs. Standard errors are clustered by rate-year.  
\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Table A3: Prisoner outcomes

Panel A: Total disciplinary charges				
	(1)	(2)	(3)	(4)
Comp	0.0033 (0.0572)	-0.0344 (0.0566)	0.0880 (0.1058)	0.0801 (0.1071)
Comp x Black		0.5844** (0.2822)	0.6768** (0.2812)	0.6768** (0.2812)
Mean Dept. Var.	3.117	3.117	3.117	3.117
R-squared	0.096	0.097	0.106	0.106
N	111410	111410	111410	111410
Panel B: Non-violent disciplinary charges				
	(1)	(2)	(3)	(4)
Comp	0.0223 (0.0490)	-0.0295 (0.0489)	0.0531 (0.0953)	0.0480 (0.0962)
Comp x Black		0.8031*** (0.2509)	0.8691*** (0.2505)	0.8691*** (0.2505)
Mean Dept. Var.	2.725	2.725	2.725	2.725
R-squared	0.099	0.099	0.109	0.109
N	111410	111410	111410	111410
Panel C: Violent disciplinary charges				
	(1)	(2)	(3)	(4)
Comp	-0.0190** (0.0092)	-0.0049 (0.0086)	0.0350*** (0.0133)	0.0320** (0.0135)
Comp x Black		-0.2187*** (0.0426)	-0.1923*** (0.0420)	-0.1923*** (0.0420)
Mean Dept. Var.	0.392	0.392	0.392	0.392
R-squared	0.052	0.053	0.060	0.060
N	111410	111410	111410	111410
Mean tenure	X	X	X	X
Prisoner controls	X	X	X	X
Crime type controls	X	X	X	X
Linear time trend	X	X		
Rater-year FE			X	X
Gender Comp Control				X

Notes: The dependent variable is indicated in the header of each panel. Comp is percent of the parole board members who are Black. Mean tenure controls for the average tenure of the parole board. Prisoner controls include; prisoner demographics (IQ, indicators for having children or being married, social class), crime incidence characteristics, sentence length, previous convictions, guidelines parole success score, and crime severity level. Standard errors are clustered by rater-year.

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