

## APPENDICES

### A CONSTRUCTING PROSECUTOR AND CASE IDENTIFIERS

In the North Carolina court records, there are two features of the raw data that might confound analyses of discretionary decisions between arrest and sentencing. First, the court records almost always include the prosecutor assigned to the case but lack a consistent identifier for each prosecutor. Second, the unit of observation — the "docket" — does not always reflect the unit at which decisions are made because multiple dockets are often handled together in a single "case."<sup>193</sup> Identifying the "case" helps to better identify the sequence of discretionary choices, allowing one to track the most serious charge on the case at each juncture of the process. The two data cleaning steps described here are the same steps followed in Harrington & Shaffer, *supra* note 3.

#### *Prosecutor Identifiers*

The court records start with a set of strings that inconsistently identify prosecutors. First, generic designators (like attorney) were removed and names were parsed into first, middle, and last names or initials based on the punctuation of the name. Second, within each district attorney office, all possible pairs of names were created, and string distance algorithms were used to link together distinct names that likely reflected the same prosecutors. This generated a refined set of prosecutor names.<sup>194</sup> Finally, prosecutors with similar names across district attorney offices were linked by hand — by looking up prosecutors with common matching names or similar but not identical names who handled cases in different offices. Female prosecutors with the same first name were also checked by hand to determine if there was evidence of a marriage-induced last name change.

#### *Case Identifiers*

Organizing dockets into cases permits a more accurate assessment of the time-line of cases and the decisions of prosecutors. In each case, the most severe

---

<sup>193</sup>For some defendants, multiple charges are brought at the same time but filed under different docket numbers. For other defendants, multiple charges enter the court system separately but are resolved together in a final judgment.

<sup>194</sup>To classify the last name as matching, both last names must be populated and then there must also have been either (i) a near perfect match on the last names, (ii) a high-quality match on the last names with the first letter of the first name matching, (iii) a high-quality match on the last name and a near perfect match on the non-missing first names, or (iv) a good match on the last names with the first letter of the first name matching and a near perfect match on the first names.

"lead charge" determines the punishment under the state sentencing guidelines. The lead charge at arrest determines where defendants start in the sentencing guidelines, and the lead charge at conviction determines where defendants land in the sentencing guidelines after the prosecutor has exercised her discretion. Organizing dockets into cases allows one to identify the lead charge at each stage and, thus, to more accurately assess the time-line for each case and the prosecutor's decisions about whether to reduce the lead charge. Finally, since the punishments are served concurrently (as opposed to sequentially) unless noted otherwise in the records, organizing dockets into cases allows one to more accurately assess the sentence on each case.

Two rules determined whether multiple dockets were consolidated into a single case for these analyses: (1) dockets that were flagged in the court records as "consolidated for judgment" were combined and (2) dockets were combined if the timing of the dockets were proximate or overlapping. Specifically, dockets were consolidated if the charging or disposition dates occurred in the same week or the charges in the later docket occurred before those in the earlier docket had been resolved. If either of these timing conditions were met and the same prosecutor was recorded as having handled both dockets, the dockets were combined into a single case. Dockets recorded as handled by two different prosecutors were also kept as separate cases.

*Consolidated for judgment:* The "consolidated for judgment" field in the court records helped determine whether to join dockets that had been combined at sentencing for a single judgment. Of all offenses in the court records, 15% were consolidated with another offense at sentencing, and 37% of initial dockets had at least one consolidated offense.

*Overlapping date ranges:* When docket date ranges are proximate or overlapping, dockets with the same defendant that are handled by a single prosecutor were combined. 19.1% of all cases were consolidated using common disposition weeks across dockets. An additional 10.8% of cases were consolidated using the case filing week, and an additional 2.14% of cases were consolidated using the week that the case was charged.

*A Note about Probation Violation Records:* In the North Carolina court records, violations of probation are typically recorded on the docket of the initial offense that led to the probation sentence. These probation violations were split into their own cases based on the first date that a probation violation appeared on the docket. Probation violations are excluded from the analysis since prosecutors are rarely involved in these cases in North Carolina. Breaking off these probation violations from the initial offense is necessary to correctly date the case according to when it was first resolved. This is also essential for accurately assessing the initial punishment rather than the ultimate punishment that might be triggered by a probation violation.

## B ESTIMATION STRATEGY

### *i. Comparing Prison Disparities Across All Defendants*

All analyses in Part II. first consider the raw relationship between criminal records and prison sentences for white defendants relative to Black defendants. To trace out the full relationship between a defendant's criminal history and the likelihood of a prison sentence, I estimate racial disparities in prison for defendants without prior felony convictions and in four quantiles of the felony record prior point distribution. I include the 58% of defendants without felony records (who almost always have 0 or 1 prior point) in  $Q_0$ ,<sup>195</sup> and in  $Q_1$ – $Q_4$ , I include four quantiles of prior points among defendants with felony records.  $Q_1$  includes defendants in the lowest quartile of prior points (2 points);  $Q_2$  includes defendants in the second quartile (3–4 points);  $Q_3$  includes defendants in the third quartile (5–8 points); and  $Q_4$  includes defendants in the highest quartile (=9 points).

Letting  $q_i$  denote defendant  $i$ 's group in the felony record distribution, I measure the raw difference between white and Black defendants' likelihood of a prison sentence with the following estimating equation:

$$\text{Prison}_i = \sum_{n=0}^4 (\beta_{n,\Delta} \mathbb{1}[\text{White}_i, q_i = n] + \beta_{n,\text{Black}} \mathbb{1}[q_i = n]) + \epsilon_i. \quad (3)$$

In this specification, the coefficient  $\beta_{n,\text{Black}}$  reflects the prison rate for Black defendants in the  $n$ th felony record group, and  $\beta_{n,\Delta}$  reflects the difference in prison rates for white defendants relative to Black defendants in the same group.

As a concrete example, consider the estimated coefficients for defendants in the highest criminal record quartile in the third column of Table E.2. Since  $\beta_{4,\text{Black}} = 53.95$  and  $\beta_{4,\Delta} = 9.15$ , these estimates indicate that 54% of Black defendants in the highest quartile receive a prison sentence and that white defendants in the highest quartile are 9 percentage points more likely than Black defendants to receive a prison sentence (which implies a prison rate of 63% for white defendants in this quartile).

To account for sentencing practices that differ across district attorney offices, standard errors are clustered by elected district attorney, which is equivalent to clustering by the district attorney office in the year span associated with the elected's term of office (in most offices, four or eight years of the ten year sample period). When estimating variation across prosecutors, standard errors are clustered by prosecutor.

---

<sup>195</sup>Among defendants without felony records, 1% have more than one prior point because they have been convicted of multiple misdemeanors in Superior Court, which are each worth one point.

To summarize the average disparate penalty of prior points, I estimate the average linear relationship between a defendant’s number of criminal record prior points and racial disparities in prison rates. I estimate this linear relationship using the following:

$$\text{Prison}_i = \beta_{\text{Priors},\Delta} \mathbb{1}[\text{White}_i] p_i + \beta_{\text{Priors},\text{Black}} p_i + \beta_{0,\Delta} \mathbb{1}[\text{White}_i] + \beta_{0,\text{Black}} + v_i. \quad (4)$$

In this specification,  $\beta_{0,\text{Black}}$  reflects prison rates for Black defendants with zero prior points, and  $\beta_{0,\Delta}$  reflects the difference in prison rates for white defendants relative to Black defendants with no priors. The coefficient  $\beta_{\text{Priors},\text{Black}}$  reflects the increase in a Black defendant’s likelihood of prison as his prior record becomes longer; and the coefficient  $\beta_{\text{Priors},\Delta}$  reflects the difference in this increase in prison risk for white defendants relative to Black defendants with more priors.

To make the estimated relationship between prior points and prison rates more interpretable, all tables presenting linear estimates reflect the average increase in prison-rates given one additional low-level felony conviction (which is equal to two additional prior points).<sup>196</sup>

*ii. Comparing Defendants With Similar Case Files Within Offices*

Black defendants with long criminal records may be more likely than white defendants to be arrested for more minor crimes. They may also be more likely to be arrested in parts of the state where prosecutors put less weight on prior convictions for *all* defendants regardless of race. In either case, the relationship between prior points and racial disparities would partly reflect racial differences in defendants’ *current* arresting charge or different sentencing practices across place.

To focus in on the role of prior convictions in prosecutorial decision-making, I assess disparities in sentencing outcomes among defendants with similar arresting charges and criminal records. I estimate racial disparities in prison rates for defendants who start in the same position under the sentencing guidelines in the same year.

Letting  $p_i$  denote defendant  $i$ ’s prior points,  $g_i$  the offense class of his arrest charge,  $t_i$  the year of conviction, and  $q$  his felony record group, I estimate prison rates for white defendants relative to Black defendants using the following esti-

---

<sup>196</sup>Operationalizing this simply requires scaling defendants’ number of prior points by two.

mating equation:<sup>197</sup>

$$\text{Prison}_i = \sum_{n=0}^4 (\beta_{n,\Delta} \mathbb{1}[\text{White}_i, q_i = n]) + \mu_{p(i),g(i),t(i)} + \epsilon_i. \quad (5)$$

In this specification,  $\beta_{n,\Delta}$  reflects the percentage point difference in prison rates for white defendants relative to Black defendants in the  $n$ th felony record group who start in the same position under the state sentencing guidelines in the same year.<sup>198</sup>

In other specifications, I further control for the crime-unit and district attorney office handling the case. This allows me to interpret the estimates as reflecting the difference in prison rates for white defendants relative to Black defendants with similar case files in the same office and crime-unit. Cases in my analyses are categorized into units based on the broad category of crime (e.g., drug possession or larceny).<sup>199</sup>

Letting  $j_i$  denote the district attorney office handling his case and  $c_i$  the crime-type of his arrest charge (e.g., drug possession), and again letting  $p_i$  denote defendant  $i$ 's prior points,  $g_i$  the offense class of his arrest charge,  $t_i$  the year of conviction, and  $q$  his felony record group, I estimate prison rates for white defendants relative to Black defendants using the following:

$$\text{Prison}_i = \sum_{n=0}^4 (\beta_{n,\Delta} \mathbb{1}[\text{White}_i, q_i = n]) + \mu_{p(i),g(i),j(i),c(i),t(i)} + \epsilon_i. \quad (6)$$

In this specification,  $\beta_{n,\Delta}$  reflects the percentage point difference in prison rates for white defendants relative to Black defendants in the  $n$ th felony record group who start in the same position under the state sentencing guidelines in the same year and who have their cases adjudicated in the same office and crime-unit.

To summarize the disparate weights put on the prior convictions of facially

---

<sup>197</sup>I compute prior points for each defendant using his Superior Court cases from 1995 to 2019. Therefore, the majority of the prior points are accrued from past felony convictions rather than misdemeanor convictions. Since most misdemeanor cases are handled in District Court, I can only see misdemeanor convictions if the defendant was indicted to Superior Court on felony charges that were reduced to a misdemeanor at conviction. For all fixed effects using defendant prior points, I include an indicator for every two prior points from 0–11 and an indicator for at least twelve points (the 97th percentile of the prior-point distribution).

<sup>198</sup>Prison rates for Black defendants at each felony record quantile are absorbed by the fixed effects for prior conviction points.

<sup>199</sup>Specifications that include office unit fixed effects divide cases into twelve broad offense types: Any Assault, Arson/Discharge Weapon, Breaking and Entering, Court/Prison Offenses, Drug Possession, Drug Sales/Possession With Intent, Forgery, Flee/Elude Law Enforcement, Sex Offenses, Larceny, Weapon Possession, and Robbery/Burglary.

similar Black and white defendants in the same office, I estimate the average linear relationship between criminal records and prison sentences for white defendants relative to Black defendants:

$$\text{Prison}_i = \beta_{\text{Priors},\Delta} \mathbb{1}[\text{White}_i] p_i + \beta_0 \mathbb{1}[\text{White}_i] + \mu_{p(i),g(i),j(i),c(i),t(i)} + \nu_i. \quad (7)$$

The coefficient  $\beta_0$  reflects the percentage point difference in prison for white defendants relative to facially similar Black defendants with no felony record within the same office unit. The coefficient  $\beta_{\text{Priors},\Delta}$  reflects the increase in a white defendant's likelihood of prison as his felony record increases relative the increase for a facially similar Black defendant. As in the raw specifications, I rescale prior points so that  $\beta_{\text{Priors}}$  can be interpreted as the increase in prison for every additional low-level felony conviction (which is equivalent to two additional prior points).

I also consider racial disparities in the penalty for prior convictions that control for the composition of the defendant's specific prior record. I include fixed effects for the number of prior convictions in each of the ten felony offense classes (# Felony Class E Prior Convictions x # Felony Class F Prior Convictions x . . .) as well as for the number of prior convictions in twelve broad offense types (# Larceny Prior Convictions x # Drug Sale Prior Convictions x . . .).<sup>200</sup> Finally, I include controls for defendant age and gender and the specific offense charged at arrest (e.g. Assault with a Deadly Weapon with Intent to Kill).

### *iii. Estimating the Role of Prosecutor Beliefs*

To investigate the role of prosecutorial discretion, I estimate the relationship between a prosecutor's reported beliefs about the drivers of racial disparities and the disparities in her cases. As detailed in the last section, I first assessed the raw relationship between prosecutor reported beliefs and how disparities in their cases evolve as defendants' records become more severe. I also estimated this relationship for defendants who start in the same position in the state sentencing guidelines.

However, cases may be systematically, unobservably different across prosecutors who express different beliefs.<sup>201</sup> Since cases are quasi-randomly assigned within units of a district attorney office, I better isolate prosecutors' impacts by comparing prosecutors who handle cases in the same office and unit in the same

<sup>200</sup>The twelve offense types are Any Assault, Arson/Discharge Weapon, Breaking and Entering, Court/Prison Offenses, Drug Possession, Drug Sales/Possession With Intent, Forgery, Flee/Elude Law Enforcement, Sex Offenses, Larceny, Weapon Possession, and Robbery/Burglary.

<sup>201</sup>Appendix C discusses this identification threat in more detail.

year.<sup>202</sup> Comparing prosecutors who receive comparable cases will ensure that estimated differences across prosecutors are not simply picking up unobservable differences across offices or crime types that are correlated with prosecutors' reported beliefs.

To restrict comparisons of prosecutors to other prosecutors in the same district attorney office and unit and thereby estimate the disparate response to race within offices and units, I allow each unit to vary in its prison rates for Black and white defendants with different levels of criminal record prior points (i.e. I include fixed effects for DA Office Unit x Year x Prior Points x White).<sup>203</sup> These controls in effect remove the average racial disparity in each unit's penalty of prior convictions, thereby netting out any unobservable differences in cases across offices and units that may induce *all* prosecutors, regardless of their expressed beliefs, to make sentencing decisions that yield higher or lower disparities.

Finally, I consider specifications that look within prosecutor, by allowing prosecutors to vary in their prison rates for defendants with different prior record levels (i.e. fixed effects for Prosecutor x Prior Points). These controls ensure that the estimated difference in the racially disparate penalty of priors across prosecutors is comparing prosecutors to themselves.

To provide a summary measure of the priors-prison relationship across prosecutors, I also estimate the linear relationship between a prosecutor's reported belief and her racially disparate penalty of prior convictions (*e.g.*, Tables 2 and E.13 and Tables E.14, E.15, and D.1). To ease interpretation of these estimates, I normalize the mean response to zero so that the coefficients on covariates that are *not* interacted with survey responses reflect prosecutors with average beliefs. I normalize the standard deviation of survey responses to one so that the coefficients on covariates that *are* interacted with survey responses reflect the average increase in the relationship for prosecutors with responses one standard deviation above the mean. For instance, the estimates in the first column of Table 2 indicate that the penalty for prior points was 2.57pp higher for white defendants than Black defendants on average (row four), and that prosecutors who reported beliefs about racial bias one standard deviation above the mean had a .59pp larger penalty for white defendants' priors relative to Black defendants' priors (row one).

---

<sup>202</sup>Appendix C presents the results of two validations of quasi-random assignment.

<sup>203</sup>Specifically, I interact the district attorney Office with the broad crime-type of the arresting charges and the defendant's number of prior points.

## C VALIDATING QUASI-RANDOM ASSIGNMENT OF CASES TO PROSECUTORS

In order for the survey analysis to isolate the association between prosecutors' beliefs and their impacts on disparities in their cases, cases assigned to prosecutors who expressed certain beliefs must not be systematically different in *unobservable* ways that are correlated with defendant race and criminal history. Specifically, any unobservable differences in cases across prosecutors with different reported beliefs must be parallel across Black and white defendants.

To see this concern about selection on unobservables, imagine, for instance, that prosecutors who perceive significant anti-Black bias were more likely to work in offices or take on cases in which *all* prosecutors would be more likely to discount the weight on Black defendants' priors.<sup>204</sup> This type of selection on unobservables would lead prosecutors who express more progressive beliefs to incarcerate fewer Black defendants with longer criminal histories than facially similar white defendants relative to prosecutors who express less progressive beliefs, despite the fact that these "less progressive" prosecutors would have made the same decisions as the "more progressive" prosecutors had they handled their cases.

If selection on unobservables were being driven by prosecutors choosing to work in certain offices or units, the analysis in this Article comparing prosecutors *within* the same office and unit would alleviate this threat. However, to the extent that cases are non-randomly assigned within units — and also that more progressive prosecutors tend to handle cases that differ unobservably for Black defendants with longer prior records — this concern would persist.

Many district attorney offices I spoke with say that cases are assigned using a rotation system within "units" or "teams" that handle certain types of offenses (i.e. the "drug team").<sup>205</sup> This suggests that cases are quasi-randomly assigned within office units and thus that comparing prosecutors within units would capture prosecutors' causal effects on disparities (relative to others in their unit) rather than their selection of cases.

To test the plausibility of assuming quasi-random assignment, I performed two validation exercises. First, I assessed imbalances in case characteristics across prosecutors who indicated more versus less progressive beliefs on the survey. Specifically, I estimated differences in Black and white defendants' observable characteristics at the time prosecutors first receive their case-files, focusing on

---

<sup>204</sup>It is admittedly difficult to think of a plausible story that would induce this kind of selection. One could imagine more progressive prosecutors choosing to work in offices or on cases where priors are universally considered less relevant to punishment, but it is more difficult to imagine why these offices or case-types would induce all prosecutors, regardless of their views, to discount the weight on Black relative to white defendant's priors.

<sup>205</sup>Some smaller offices do not have units.



defendants' prior records and their predicted likelihood of being sentenced to prison based on their observable characteristics just after arrest. If observable differences between Black and white defendants look similar across prosecutors' in the same unit who reported different beliefs, unobservable differences across Black and white defendants may also be similar across prosecutors' reported beliefs. Table C.1 shows that prosecutors' responses to the survey are overwhelmingly not statistically significant (or economically meaningful) predictors of their case characteristics or the disparities in these characteristics. For instance, in column two, prosecutors who report one standard deviation more progressive views on systemic racial bias have 1% fewer cases with Black defendants (a 0.63pp difference in the share of cases with Black defendants compared to an average of 61.9%). In column four, however, we do see that Black prosecutors tend to have fewer cases with Black defendants with longer criminal records than white defendants with longer records relative to other prosecutors (in row five).<sup>206</sup>

After assessing balance, I then validate quasi-random case assignment using prosecutor moves between district attorney offices in North Carolina. This validation exercise was used in Harrington & Shaffer to demonstrate quasi-random assignment of cases to prosecutors. *See supra* note 3. When prosecutors move across offices, their true causal effects likely persist while the selection of cases may change. Thus, if cases are quasi-randomly assigned, one would expect the forecast from one office to offer an unbiased prediction of the prosecutor's disparate effects in the next office. If, instead, the estimates reflect non-random case assignment, one would expect that the forecast from one office would be less predictive of the prosecutor's case outcomes in the other office.

As reported in Table C.2, a 1pp increase in a prosecutor's forecast disparity in one office translates into a 0.82pp higher realized prison disparity in another office, which is indistinguishable from a one-to-one mapping between the forecast and realized disparity. Accounting for drift in a prosecutor's impacts — by allowing the forecast to be less predictive the longer is the elapsed time between the prosecutor's work in the two offices — yields a coefficient of 1.02, suggesting an even tighter mapping between the forecasted and realized disparity.

---

<sup>206</sup>While Black defendants on average have .82 more prior points than white defendants (see column one row five), this disparity in prior points in cases of Black prosecutors is .55pp (.82-.27 = .55).

**Table C.1: BALANCE IN CASE CHARACTERISTICS ACROSS PROSECUTORS WITH DIFFERENT REPORTED BELIEFS AND DEMOGRAPHICS**

	Mean	Treatment minus Conduct (Z)	Liberal Politics (Z)	Black Prosecutor
Black	61.96	-0.63 (0.48)	0.56 (0.58)	-1.10 (1.55)
Past Felony	36.26	-0.51 (0.66)	0.34 (0.58)	0.66 (1.63)
Black x Past Felony	10.42	-0.69 (0.59)	-0.08 (0.51)	-2.62 (1.66)
# Prior Points	2.02	-0.06 (0.04)	0.02 (0.04)	0.12 (0.16)
Black x # Prior Points	0.82	-0.06 (0.05)	-0.01 (0.04)	-0.27** (0.14)
100 · Pr(Prison   X)	18.11	-0.28 (0.20)	0.19 (0.16)	0.60 (0.44)
Black x 100 · Pr(Prison   X)	2.50	-0.22 (0.19)	-0.20 (0.15)	-0.82 (0.58)
# Cases	66,603	63,500	62,157	63,500
# Defendants	55,349	52,872	51,916	52,872
# Prosecutors	174	160	158	160

*Notes:* This table tests how prosecutors’ reported beliefs and demographics in the 2020 survey predict the characteristics of defendants in their caseloads and the racial disparities in these characteristics. The first row tests balance in a prosecutor’s share of cases with Black defendants. The rest of the table tests balance in the characteristics of white defendants in prosecutors’ caseload (in even rows) and of Black defendants relative to white defendants (in odd rows). The final two rows collapses defendants’ observable characteristics into a linear prediction of the likelihood of a prison sentence. Column one shows the mean of each case characteristic for white defendants (in even rows) and the mean difference in the characteristic for Black relative to white defendants (in odd rows). The remaining columns consider how the prosecutor belief or demographic predicts the characteristic or racial disparity in the characteristic (in each row). The second column estimates balance across prosecutors’ reported beliefs about the primary source of racial disparities. See Appendix D; the third column prosecutors’ reported politics — from conservative (-50) to liberal (+50); and the fourth column prosecutors race. All balance estimates condition on the year and the district attorney office and unit handling the case. Standard errors are clustered by prosecutor. \*\*\*Significant at the 1% level; \*\*5% level; \*10% level.

**Table C.2: VALIDATION OF QUASI-RANDOM ASSIGNMENT USING PROSECUTOR MOVES ACROSS OFFICES**

	Realized Disparity in Jurisdiction $k$ ( $\bar{\omega}_{\text{Black},p,k} - \bar{\omega}_{\text{White},p,k}$ )			
	All Moves		Moves Across Judicial Districts	
Forecast Disparity from Jurisdiction $j$ ( $\hat{\rho}_{p,j}$ )	0.820** [0.294]	1.022** [0.536]	1.192*** [0.341]	0.907* [0.583]
$\hat{\rho}_{p,j} \times$ Years between Start in $j$ and $k$		-0.053 [0.052]		-0.008 [0.071]
Years between Start in $j$ and $k$		-0.004*** [0.001]		-0.002 [0.002]
Intercept	-0.013** [0.006]	0.017 [0.010]	-0.004 [0.008]	0.011 [0.013]
Mean Years between Start in $j$ and $k$	7.136	7.136	5.732	5.732
$R^2$	0.081	0.179	0.185	0.224
# Prosecutors	96	96	59	59
# Moves	103	103	66	66
# Cases	36,869	36,869	26,251	26,251

*Notes:* This table evaluates the persistence of prosecutors' estimated impacts on racial disparities when they move offices. Each observation is a distinct pair of offices, where a prosecutor handled at least twenty felony cases of Black defendants and twenty cases of white defendants in each jurisdiction between 1995 and 2019. The sample for the first two columns includes all moves between any of the thirty-nine offices in North Carolina. The next two columns limit to moves across the five judicial districts in North Carolina, which insures that prosecutors are bargaining in the shadow of a different set of judges when they move offices. (Superior court judges rotate every six months within judicial districts.) The dependent variable is the realized racial disparity in prosecutor  $p$ 's prison rate in office  $k$ , after residualizing for case characteristics. The independent variable,  $\hat{\rho}_{p,j}$ , is the Empirical Bayes forecast of prosecutor  $p$ 's racial disparities based on her cases in office  $j$ . To account for drift in prosecutors' true effects, columns two and four allow the forecast to be less predictive when more years have elapsed between the prosecutor's start years in the two offices. Standard errors are block-bootstrapped by prosecutor using 250 replications. \*\*\*Significant at the 1% level; \*\*5% level; \*10% level.

## D SURVEY QUESTION INTERFACE AND ROBUSTNESS

This Article links responses from the 2020 survey of North Carolina assistant district attorneys to the administrative court records of each respondent's cases from 2010 to 2019. This linkage allows me to examine how prosecutorial discretion has impacted racial disparities over the past decade. Specifically, my aim is to learn whether some prosecutors believe that the criminal process is racially biased and have therefore become increasingly skeptical of the signal-value of Black defendants' criminal records, causing them to discount the weight on the prior convictions of Black defendants relative to white defendants.

To characterize prosecutors' beliefs about the role of racial bias in prior-conviction disparities, I use a survey question that explicitly asked prosecutors to indicate the importance of five potential explanations for disparities in prison rates. The respondent was asked to weight the importance of each candidate explanation independently on a scale of 0 to 100. Figure D.1 Panel (A) includes the question as it appeared on the survey interface. I focused on prosecutors' responses to two explanations that best captured their beliefs about whether — and how much — racial bias is embedded in past conviction decisions.<sup>207</sup>

1. I use the question's first potential explanation for racial disparities in prison rates — "Black defendants tend to have more severe past criminal conduct" — to characterize prosecutors' beliefs that disparities in prior convictions are driven by differences in Black and white people's criminal conduct. I refer to this as the "different criminal conduct" question. Those prosecutors who believe that higher crime rates among Black civilians primarily explain observed sentencing disparities may be more likely to trust that the system made race-neutral decisions in past cases and so may be less likely to question the relative credibility of a Black defendant's prior record.
2. I use the question's fourth potential explanation for disparities in prison rates — "The current conduct of a Black defendant is often perceived to be more serious than the same conduct committed by a white defendant" — to characterize prosecutors' beliefs that disparities in prior convictions are driven by differences in the system's treatment of similar Black and white defendants. I refer to this as the "racial bias" question. Those prose-

---

<sup>207</sup>This survey question included five explanations (rather than two) because the question originally was part of a larger research objective to understand prosecutors' beliefs about the underlying causes of disparities more broadly.

cutors who perceive systemic anti-Black bias may be more likely to doubt the relative credibility of a Black defendants' prior record.

I categorize prosecutors according to the difference between their response to the importance of racial bias and different criminal conduct. For analyses estimating the linear relationship between a prosecutor's stated belief and the disparities in her cases (as in Table 2), I subtract the prosecutor's different criminal conduct response from her racial bias response, which I call the prosecutor's "bias gap" score. To ease the interpretation of these estimates, I transform these differences to a standard normal so that the mean bias gap score is zero and the standard deviation is one. For other specifications, I split prosecutors into two groups — those who indicate that differences in criminal conduct mattered more than racial bias and those who indicate that racial bias mattered as much or more than criminal conduct (see, e.g., Figure 5 and Table E.12).<sup>208</sup>

I use the first explanation in the survey question — "Black defendants tend to have more severe *past* conduct" — rather than the third — "Black defendants tend to have more severe *current* conduct" — to proxy for the belief that disparities in criminal records reflect heightened levels of criminal conduct among Black defendants since a prosecutor's stated belief about *past* conduct should better capture her belief about the extent of bias in past convictions.<sup>209</sup> Figure D.2 and columns seven and eight of Table D.1 show robustness to using current conduct (rather than past conduct) to characterize prosecutors.

Columns one through six of Table D.1 examine the predictiveness of prosecutor responses to the racial bias, different past conduct, and different current conduct measures separately. The estimates for racial bias (in columns one and two) indicate that prosecutors who report more systemic anti-Black bias have lower penalties for prior convictions, irrespective of race, relative to prosecutors who report less racial bias (see the coefficients in row two). Columns five and six indicate that prosecutors who report more racial bias relative to disparate current criminal conduct have relatively higher penalties for the prior convictions of white defendants (see the coefficients in row one).<sup>210</sup>

I do not use two of the survey question's explanations for racial disparities that are less relevant to the analysis. First, I do not use the second potential explanation — "Black defendants tend to have more prior points" — to characterize prosecutors. This sub-question may, on its face, appear to capture some-

---

<sup>208</sup>These results are robust to splitting prosecutors according to the mean of the bias gap distribution.

<sup>209</sup>Prosecutors' stated beliefs about racial differences in past and current conduct were highly correlated (correlation = .68).

<sup>210</sup>The point estimates for current conduct are not significant but are in the expected direction.

thing relevant about prosecutors' beliefs about prior convictions. However, a prosecutor's belief about the importance of priors does not obviously help to characterize her perception of *bias* in past convictions. It could be that prosecutors who are more aware of disparities in prior convictions are also more likely to think that the system treated Black defendants unfairly in the past. Yet it could also be that prosecutors who are more aware of prior disparities think that Black defendants simply have more severe past criminal conduct. Ultimately, this response most clearly captures beliefs about whether there are, in fact, disparities in prior convictions and whether these disparities drive prison rates.

Second, I do not use the survey question's final potential explanation for racial disparities — "Black defendants tend to have lower quality representation." This candidate explanation also less directly captures prosecutors' beliefs about racial disparities in defendant conduct and systemic bias.<sup>211</sup> Table D.2 shows that reported beliefs about the importance of prior points and representation do not significantly predict racial disparities in prosecutors' penalties for prior convictions.

---

<sup>211</sup>One might think that prosecutors who believe that Black defendants tend to have lower quality defense attorneys may be more likely to view the system as discriminatory.

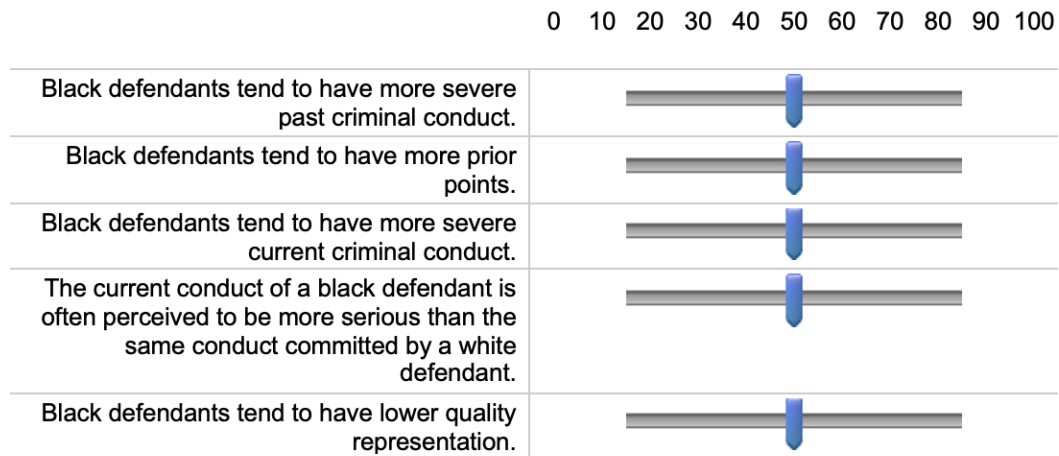
## Figure D.1: INTERFACE FOR 2020 SURVEY QUESTIONS

### INTRODUCTORY TEXT FOR QUESTIONS ABOUT RACIAL DISPARITIES

In North Carolina, and in the US more generally, an average black person is arrested more frequently and convicted of more felonies than an average white person. There are many theories about what drives gaps in sentencing outcomes for black and white defendants -- and everyone seems to have an opinion. We are interested in *your* perspective on what generates these aggregate differences.

### PANEL (A): DRIVERS OF RACIAL DISPARITIES QUESTION

Among all defendants who are arrested for any felony offense, an average black defendant receives an active sentence more frequently than an average white defendant. In your view, how important are the following potential explanations in generating this difference? (Note, if you believe a potential explanation is incorrect, please place the corresponding slider at 0.)



### PANEL (B): POLITICAL IDEOLOGY QUESTION

Generally speaking, how would you describe your political views?

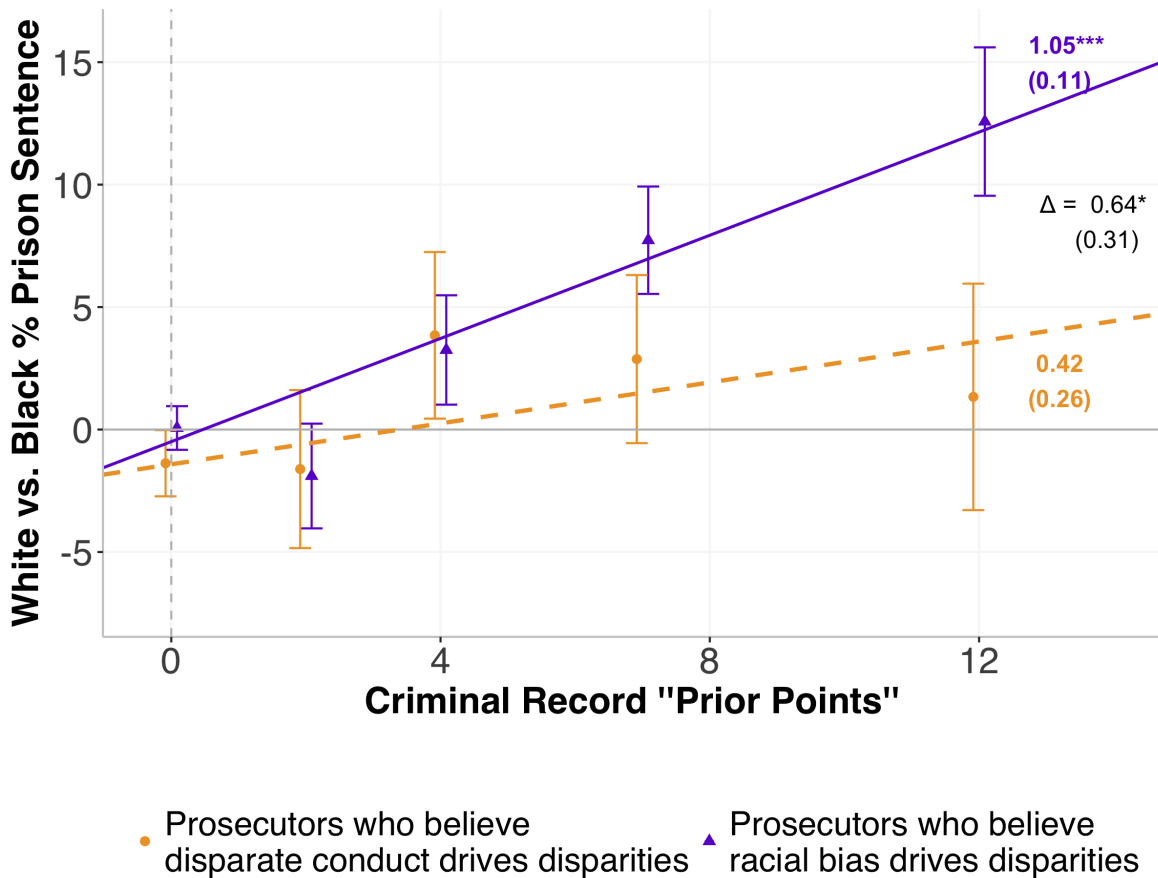


### PANEL (C): PROSECUTOR ETHNICITY QUESTION

How would you describe your ethnicity?

- White
- Black or African American
- Asian
- Hispanic
- Other

**Figure D.2: DISPARATE PENALTY FOR PRIORS AMONG PROSECUTORS WITH DIFFERENT BELIEFS: ROBUSTNESS TO USING CURRENT RATHER THAN PAST CONDUCT TO CLASSIFY PROSECUTORS**



*Notes:* This figure contrasts racial disparities in prison sentences for prosecutors with different beliefs about the source of prison disparities. It splits prosecutors into two groups based on their responses to the survey questions, how much do you believe (on a scale of 0 to 100) that racial disparities in sentencing are driven by differences in Black and White defendants' *current* conduct and differences in the system's treatment of Black and White defendants who exhibit the same conduct. See Figure D.1 Panel (A). Figure 5 illustrates the same comparison but using prosecutor responses about *past* disparate conduct. The x-axis is criminal history prior points, and the y-axis the percentage point difference in prison rates for white defendants relative to Black defendants who start in the same position under the sentencing guidelines in the same office-unit. The left-most points reflect defendants with no prior felony conviction. The other eight points reflect quartiles of prior points for defendants with felony records. The ten points were jointly estimated using equation 6 fully interacted with indicators for the racial bias and different criminal conduct groups. See Appendix B.ii. The error bars reflect the 95% confidence interval for white relative to Black prison rates. The fit lines and top and bottom annotated coefficients reflect the average change in prison disparities for each additional prior point. The middle annotation reflects the difference between this linear relationship for the two prosecutor groups. \*\*\*Significant at 1% level; \*\*5%; \*10%.



**Table D.1: ROBUSTNESS TO ALTERNATIVE CLASSIFICATIONS OF PROSECUTORS USING THE SURVEY QUESTION ON THE SOURCES OF RACIAL DISPARITIES**

	Prison Sentence							
	$\Theta = \text{Bias}$ (Z-Score)		$\Theta = \text{Past Conduct}$ (Z-Score)		$\Theta = \text{Current Conduct}$ (Z-Score)		$\Theta = \text{Bias - Curr Conduct}$ (Z-Score)	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
$\Theta \times \text{White} \times \text{Priors}$	0.62** (0.27)	0.57** (0.25)	-0.22 (0.19)	-0.31* (0.17)	-0.10 (0.19)	-0.19 (0.17)	0.48** (0.24)	0.51** (0.22)
$\Theta \times \text{Priors}$	-0.69*** (0.15)	-0.49*** (0.13)	0.07 (0.11)	0.16 (0.10)	-0.07 (0.11)	0.04 (0.10)	-0.37*** (0.13)	-0.32*** (0.12)
White $\times$ Priors	2.68*** (0.22)	2.16*** (0.20)	2.43*** (0.19)	1.91*** (0.18)	2.46*** (0.19)	1.94*** (0.18)	2.59*** (0.21)	2.09*** (0.19)
Priors	6.86*** (0.12)		7.13*** (0.11)		7.12*** (0.11)		7.01*** (0.11)	
Offense $\times$ Priors FE		✓		✓		✓		✓
Dependent Mean	21.07	21.07	21.07	21.07	21.07	21.07	21.07	21.07
Mean Bias	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5
Std Dev Bias	23.3	23.3	23.3	23.3	23.3	23.3	23.3	23.3
Mean Past Conduct	19.7	19.7	19.7	19.7	19.7	19.7	19.7	19.7
Std Dev Past Conduct	24.1	24.1	24.1	24.1	24.1	24.1	24.1	24.1
Mean Curr Conduct	14.6	14.6	14.6	14.6	14.6	14.6	14.6	14.6
Std Dev Curr Conduct	21.4	21.4	21.4	21.4	21.4	21.4	21.4	21.4
# Cases	66,603	66,603	66,603	66,603	66,603	66,603	66,603	66,603

*Notes:* This table investigates the relationship between prosecutors' reported beliefs about the drivers of sentencing disparities and the racial disparities in their cases. Columns one and two consider this relationship for prosecutors' response to racial bias, the fourth slider in Panel (A) of Figure D.1. Columns three and four consider prosecutors' responses to different past conduct, the first slider in Panel (A). Columns five and six consider prosecutors' responses to different current conduct, the third slider in Panel (A). Columns seven and eight consider the difference between prosecutors' responses to racial bias and different current conduct. All prosecutor beliefs are transformed to be standard normal distributions. The odd columns reflect the raw relationship between a prosecutor's belief and her racially disparate penalty for prior convictions. Even columns accounts for the defendant's initial starting position in the sentencing guidelines. \*\*\*Significant at 1% level; \*\*5%; \*10%.

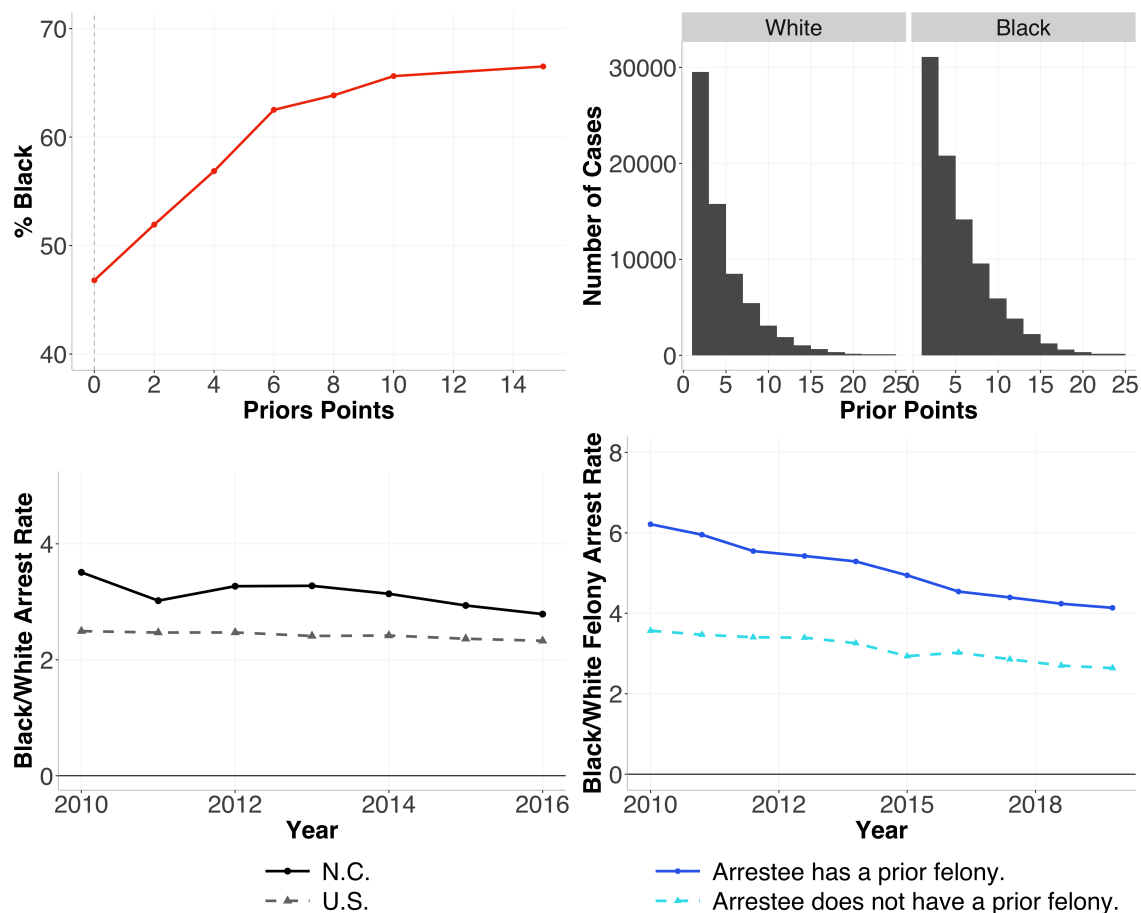
**Table D.2: THE RELATIONSHIP BETWEEN PROSECUTORS' BELIEFS ABOUT PRIOR POINTS AND DEFENSE REPRESENTATION AND DISPARITIES IN THEIR PENALTY FOR PRIORS**

	Prison Sentence			
	$\Theta$ = Priors (Z-Score)		$\Theta$ = Defense Aid (Z-Score)	
	(1)	(2)	(3)	(4)
$\Theta$ x White x Priors	-0.04 (0.18)	-0.06 (0.16)	0.33 (0.23)	0.31 (0.21)
$\Theta$ x Priors	-0.23** (0.11)	-0.18* (0.10)	-0.33** (0.13)	-0.22* (0.12)
White x Priors	2.20*** (0.20)	1.81*** (0.18)	2.28*** (0.21)	1.88*** (0.19)
Priors	6.42*** (0.11)		6.37*** (0.12)	
Offense x Priors FE		✓		✓
Dependent Mean	21.07	21.07	21.07	21.07
Mean Different Priors	-0.2	-0.2	-0.2	14.5
Std Dev Different Priors	1.1	1.1	1.1	1.1
Mean Different Defense Aid	-0.3	-0.3	-0.3	-0.3
Std Dev Different Defense Aid	0.9	0.9	0.9	0.9
# Cases	66,603	66,603	66,603	66,603

*Notes:* This table investigates the relationship between prosecutors' reported beliefs about the drivers of sentencing disparities and the racial disparities in their cases. Columns one and two consider this relationship for prosecutors' responses to prior points, the second slider in Panel (A) of Figure D.1. Columns three and four consider prosecutors' responses to representation quality, the fifth and final slider in Panel (A). All prosecutor beliefs are transformed to be standard normal distributions. The odd columns reflect the raw relationship between a prosecutor's belief and her racially disparate penalty of prior convictions. Even columns accounts for the defendant's initial starting position in the sentencing guidelines. \*\*\*Significant at 1% level; \*\*5%; \*10%.

## E TABLES AND FIGURES

**Figure E.1:** RACIAL DISPARITIES IN PRIOR CONVICTIONS AND ARRESTS



*Notes:* These panels depict racial disparities in criminal records and arrests in North Carolina between 2010 and 2019. The left figure of the top panel shows the relationship between criminal record prior points and the percent of defendants who are Black. For context, twenty percent of the North Carolina state population is Black. The right figure of the top panel shows the distribution of prior points among Black and white defendants with felony records. The left figure of the bottom panel shows the trend in arrest rates in North Carolina and the U.S. for Black people relative to white people. UNIFORM CRIME REPORTS, *supra* note 39. The right figure of the bottom panel shows the trend in disparities in felony arrests of North Carolinians. These statistics combine census population counts with the court records. *See supra* note 6. The solid blue line reflects the ratio of Black versus white felony arrest rates among arrestees with felony records. The dashed light blue line reflects the ratio for arrestees without felony records.

**Table E.1: SUMMARY STATISTICS FOR SUPERIOR COURT RECORDS (2010-2019) AND CASES HANDLED BY SURVEYED PROSECUTORS**

	Full Sample	Analysis Sample	Survey Sample
<b><u>Charge &amp; Sentence</u></b>			
% Trial	2.4	2.0	1.8
% Felony Conviction	85.8	84.5	82.6
% Dismissal	26.7	27.4	28.3
% Charge Reduction	31.7	29.4	31.8
% Charge Enhancement	3.6	3.4	2.7
% Prison Sentence (Incarcerated $\geq$ 6mo)	24.4	21.1	19.6
Avg Length of Prison Sentence (mos)	36.6	24.3	22.3
<b><u>Criminal History</u></b>			
% Prior Felony Conviction	39.8	41.4	42.5
% Prior Conviction for Drug or Weapon Possession	18.4	18.9	19.9
Avg Felony Record "Prior Points"	2.3	2.4	2.5
25th pct Prior Points   Prior Felony	2	2	2
50th pct Prior Points   Prior Felony	4	4	4
75th pct Prior Points   Prior Felony	8	8	8
<b><u>Defendant Demographics</u></b>			
% Black	50.5	51.7	60.1
% Female	18.4	18.9	17.9
Avg Age	31.2	31.0	30.7
<b><u>Crime Type of Current Arrest</u></b>			
% Drug	28.5	25.1	24.1
% Possess Weapon	6.6	7.7	8.2
% Property	34.4	39.8	39.7
% Violent	20.9	18.5	19.3
<b><u>Prosecutor Characteristics</u></b>			
Politics from Conservative (-50) to Liberal (50)	-3.3	-3.1	-3.1
Belief that Disparities Driven by System Bias (0 - 100)	14.3	14.5	14.5
Belief that Disparities Driven by Defendant Conduct (0 - 100)	20.6	19.7	19.7
% Black Prosecutor	7.4	7.5	7.9
Prosecutor Tenure (Yrs)	15.1	14.9	14.9
# Cases	391,438	336,141	66,603
# Prosecutors	1,674	1,594	174
# Cases per Prosecutor	428	381	383
# District Attorney Offices	39	39	22
# Years	10	10	10

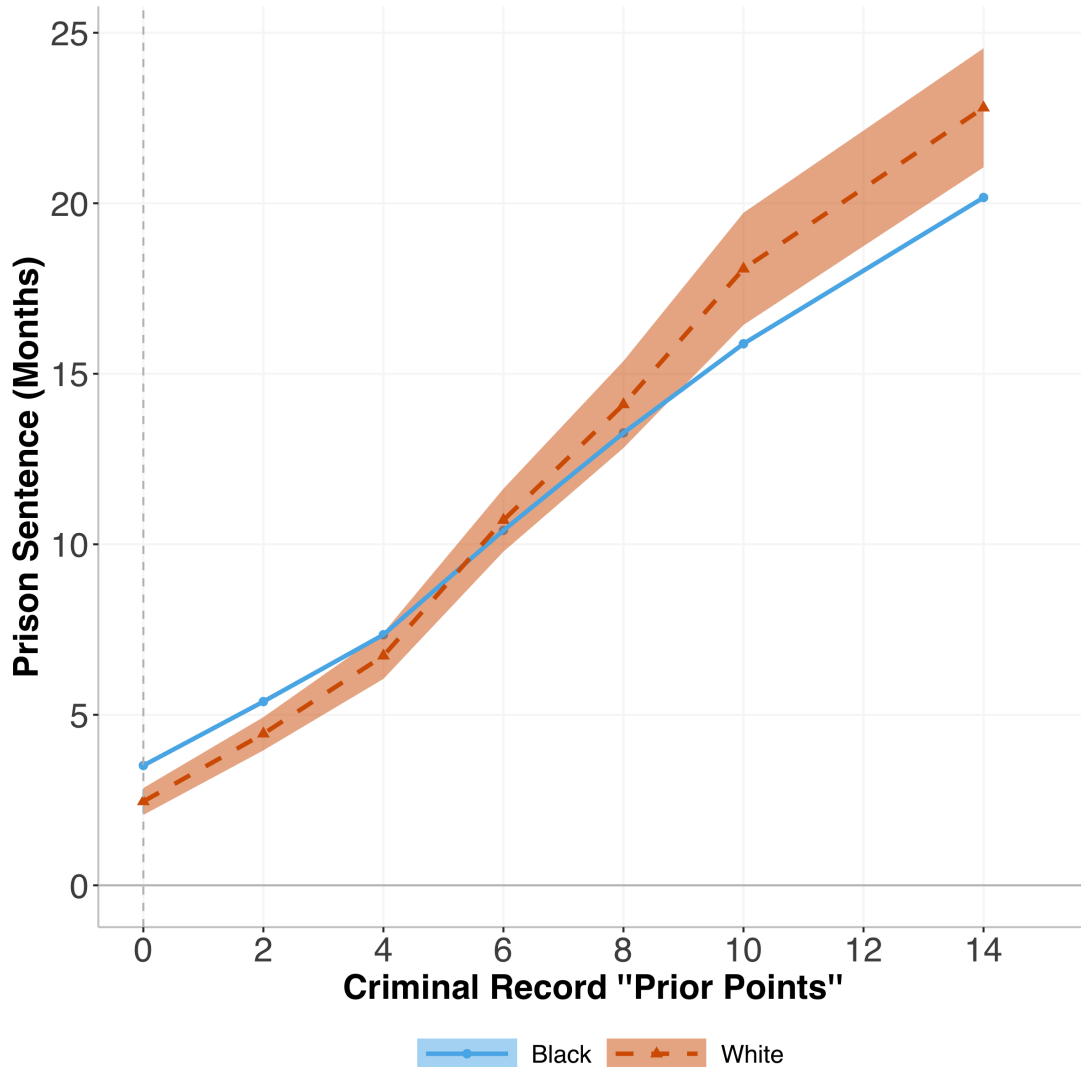
*Notes:* This table shows descriptive statistics for cases in North Carolina Superior Court between 2010 and 2019. Prosecutor characteristics reflect our 2020 survey of North Carolina assistant district attorneys. The full sample in column one includes all felony cases. The second column includes cases with arresting charges that initially fall within the felony guidelines, excluding murder, rape, or kidnapping. The third column restricts to cases handled by prosecutors who participated in the 2020 survey.

**Table E.2:** RACIAL DISPARITIES IN PRISON BY THE SEVERITY OF A DEFENDANT’S CRIMINAL RECORD (2010-2019)

	Prison Sentence					
	(1)	(2)	(3)	(4)	(5)	(6)
White x Q4 Record	9.15*** (1.17)	10.09*** (1.03)	7.63*** (1.14)	7.67*** (1.13)	4.31** (1.70)	4.49*** (1.71)
White x Q3 Record	5.81*** (1.18)	8.24*** (1.02)	6.42*** (0.79)	6.38*** (0.78)	4.97*** (0.91)	5.34*** (0.92)
White x Q2 Record	0.20 (1.11)	3.22*** (0.94)	1.97*** (0.69)	2.06*** (0.70)	1.06 (0.73)	1.32* (0.74)
White x Q1 Record	-2.17** (0.95)	0.72 (0.86)	-0.99 (0.69)	-1.02 (0.66)	-1.32* (0.72)	-1.02 (0.71)
White x No Felony Record	-2.58*** (0.65)	0.27 (0.53)	-0.95*** (0.24)	-1.02*** (0.23)	-0.96*** (0.24)	-0.92*** (0.22)
Q4 Record (>=9 pts)	53.95*** (1.52)					
Q3 Record (5-8 pts)	39.99*** (1.42)					
Q2 Record (3-4 pts)	30.43*** (1.35)					
Q1 Record (2 pts)	24.49*** (1.06)					
No Felony Record	12.42*** (0.96)					
SG FE (Offense Class x Priors x Year)		✓				
Office Unit x SG FE			✓	✓	✓	✓
Pros. X Race + Pros. X Priors FE				✓		
Priors Composition FE					✓	✓
X <sub>i</sub> + Arrest Charge FE						✓
Dependent Mean	21.07	21.07	21.07	21.17	21.07	21.07
# Cases	336,144	336,144	336,144	332,834	336,144	336,144

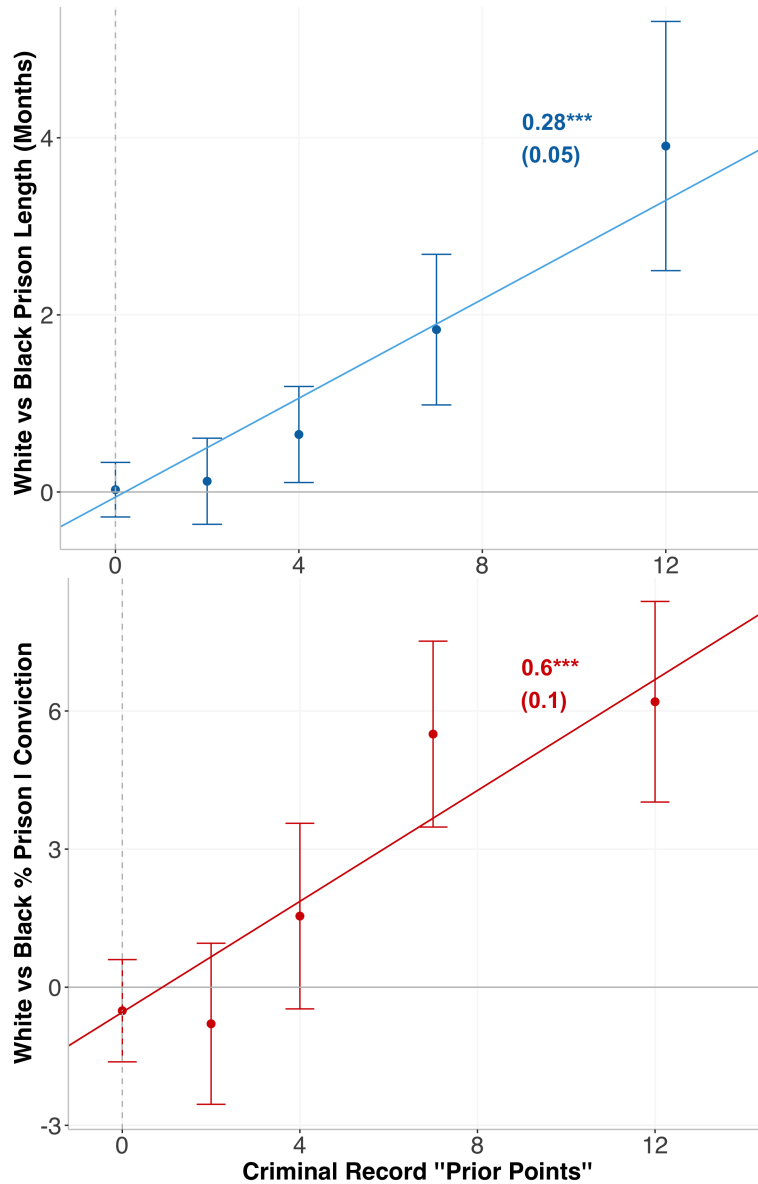
*Notes:* This table shows the relationship between a defendant’s criminal history and likelihood of receiving a prison sentence for felony cases in North Carolina between 2010 and 2019. All specifications estimate outcomes for defendants with no prior felony record and in four quantiles of prior points among those with felony records. *See infra* Appendix B.i. The first column estimates raw prison outcomes for white relative to Black defendants. The second column compares white and Black defendants who start in the same position in the guidelines using equation 5. The third column compares facially similar defendants within the same office and unit using equation 6. *See* Appendix B.ii. The fourth column adds controls for prior felony convictions in each offense class and within twelve broad crime types. The final column adds controls, X<sub>i</sub>, for defendant gender, age, and specific arresting charge. Standard errors are clustered by elected district attorney. \*\*\*Significant at the 1%; \*\*5%; \*10%.

**Figure E.2: THE RELATIONSHIP BETWEEN PRIOR CONVICTIONS AND DISPARITIES IN PRISON SENTENCE LENGTH (2010-2019)**



*Notes:* This figure shows the raw relationship between a defendant's criminal record "prior points" and his prison sentence length. The x-axis is prior points, which are the sum of a defendant's past convictions weighted by their severity. See N.C. GEN. STAT. § 15A-1340.14. The y-axis is the average state prison sentence in months. The points on the figure show prison length for Black defendants (in blue circles) and for white defendants (in orange triangles) for every two prior points from 0–11 points. The final point includes those with at least twelve points (the 97th percentile). The orange band reflects the 95% confidence intervals for white relative to Black prison outcomes.

**Figure E.3: THE RELATIONSHIP BETWEEN PRIORS AND DISPARITIES IN PRISON SENTENCES (2010-2019)**



*Notes:* These figures contrast racial disparities in prison sentences for Black and white defendants with similar arrest charges and criminal histories. The x-axis is criminal record prior points, and the y-axis the percentage point difference in sentence length (in the top figure) and prison rates conditional on conviction (in the bottom figure) for white relative to Black defendants. The left-most point on the figure reflects defendants without felony records. The other four points reflect quartiles of prior points among defendants with felony records. The five point-estimates in both figures are jointly estimated using equation 5. See *infra* Appendix B.ii. The error bars reflect the 95% confidence interval for white relative to Black sentencing outcomes. The lines and annotated coefficients indicate the average change in disparities for each additional prior point. Standard errors are clustered by elected district attorney. \*\*\*Significant at the 1% level; \*\*5%; \*10%.

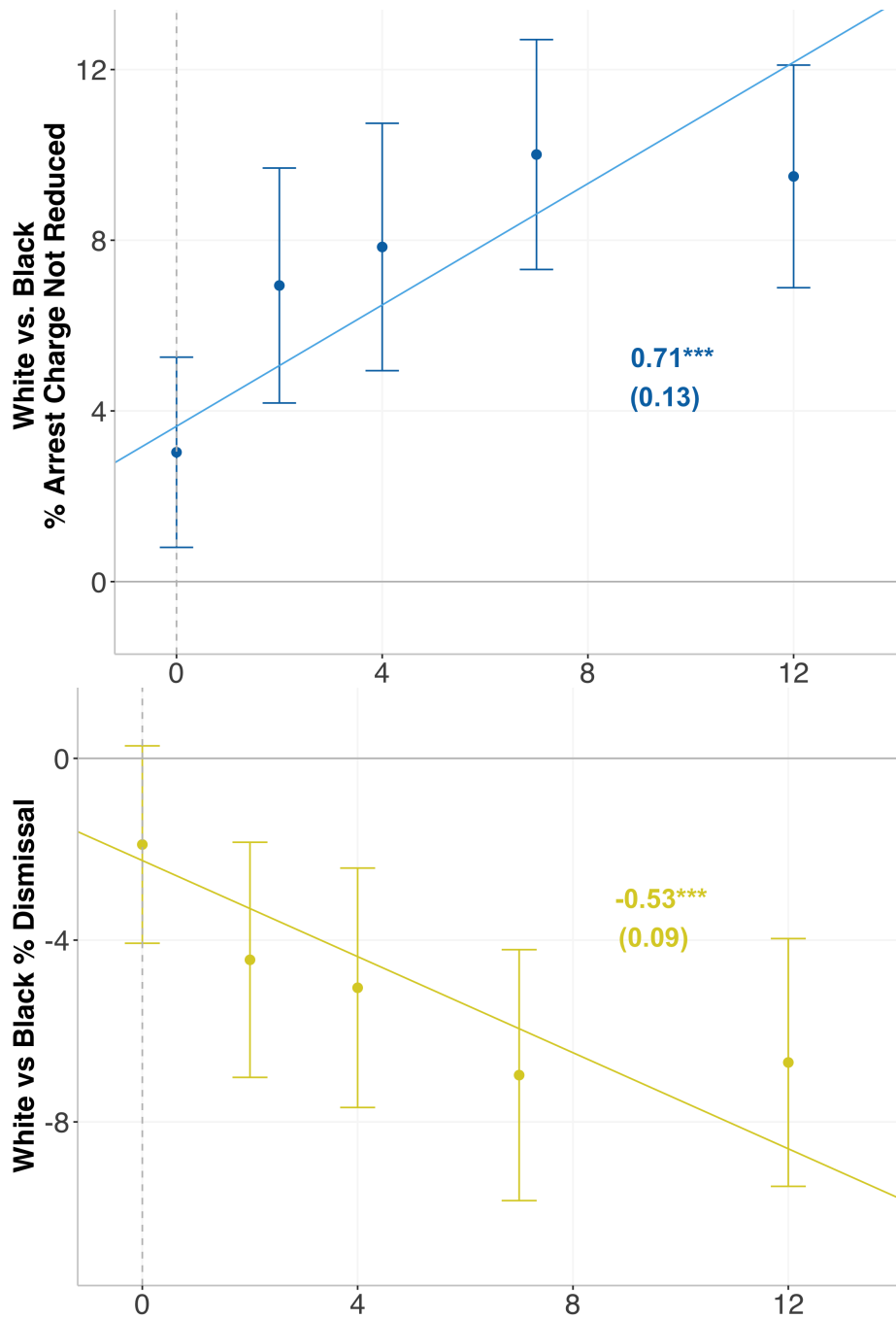
**Table E.3:** THE RELATIONSHIP BETWEEN PRIOR CONVICTIONS AND DISPARITIES IN PRISON SENTENCES (2010-2019)

	Prison Length (mo)		Prison   Conviction	
	(1)	(2)	(3)	(4)
Prior Points x White	0.56*** (0.09)	0.35*** (0.07)	1.20*** (0.20)	1.05*** (0.18)
White	-0.06 (0.16)	-0.40*** (0.08)	-0.54 (0.60)	-1.73*** (0.36)
SG FE (Offense Class x Priors x Year)	✓		✓	
Office Unit x SG FE		✓		✓
Dependent Mean	5.49	5.49	29.01	29.01
# Cases	336,144	336,144	244,024	244,024

*Notes:* This table analyzes the relationship between prior convictions and prison sentences of white and Black defendants. Columns one and two consider prison length and columns three and four the probability of prison conditional on conviction. The estimates on prior points reflect the average increase in prison for each additional low-level prior felony, the equivalent of two prior points. The odd columns consider the relationship between criminal record prior points and prison for white relative to Black defendants with similar arresting charges and criminal records using equation 1. The even columns estimate disparities within office-units using equation 2. Standard errors are clustered by elected district attorney. \*\*\*Significant at the 1% level; \*\*5%; \*10%.



**Figure E.4: THE RELATIONSHIP BETWEEN PRIOR CONVICTIONS AND CHARGING DISPARITIES (2010-2019)**



Notes: These figures contrast disparities in charge reductions and dismissals for Black and white defendants with similar arrest charges and criminal histories. The x-axis is criminal record prior points, and the y-axis the percentage point difference in any charge reduction (in the top figure) and dismissals (in the bottom figure), for white relative to Black defendants. The left-most point on the figure reflects defendants without felony records. The other four points reflect quartiles of prior points among defendants with felony records. The five point-estimates in all figures are jointly estimated using equation 5. See *infra* Appendix B.ii. The error bars reflect the 95% confidence interval for white relative to Black charging outcomes. The lines and annotated coefficients indicate the average change in disparities for each additional prior point. Standard errors are clustered by elected district attorney. \*\*\*Significant at the 1% level; \*\*5%; \*10%.

**Table E.4:** THE RELATIONSHIP BETWEEN PRIOR CONVICTIONS AND CHARGING DISPARITIES (2010-2019)

	Any Reduction		Dismissal		Reduction   Conviction	
	(1)	(2)	(3)	(4)	(5)	(6)
Prior Points x White	-1.40*** (0.25)	-1.28*** (0.13)	-1.06*** (0.18)	-1.17*** (0.14)	-0.61*** (0.21)	-0.50*** (0.14)
White	-3.66*** (1.17)	-0.39 (0.34)	-2.25** (1.13)	-0.64* (0.33)	-3.65** (1.42)	-0.14 (0.40)
SG FE (Offense Class x Priors x Year)	✓		✓		✓	
Office Unit x SG FE		✓		✓		✓
Dependent Mean	56.84	56.84	27.40	27.40	40.54	40.54
# Cases	336,144	336,144	336,144	336,144	244,024	244,024

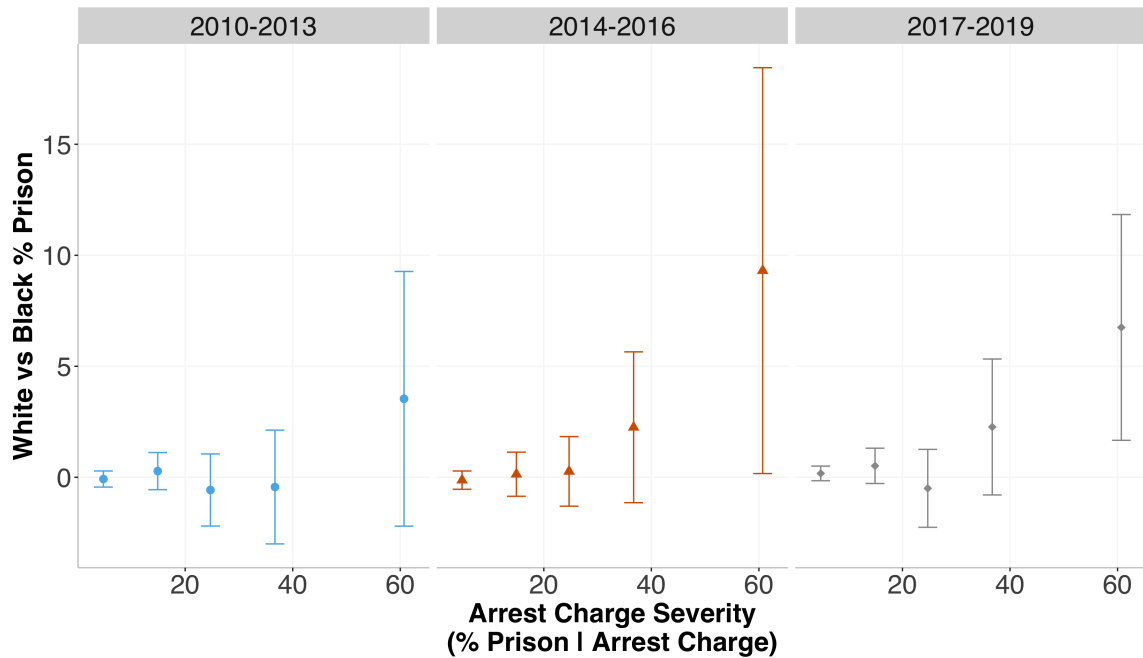
*Notes:* This table analyzes the relationship between prior convictions and charging outcomes of white and Black defendants. Columns one and two consider charge reductions or dismissals; columns three and four dismissals; and columns five and six charge reductions that still result in a conviction. The estimates on prior points reflect the average increase in prison for each additional low-level prior felony, the equivalent of two prior points. The odd columns consider the relationship between criminal record prior points and prison for white relative to Black defendants with similar arresting charges and criminal records using equation 1. The even columns estimate disparities within office-units using equation 2. Standard errors are clustered by elected district attorney. \*\*\*Significant at the 1% level; \*\*5%; \*10%.

**Table E.5:** RACIAL DISPARITIES IN PRISON RATES BY NUMBER OF PAST FELONIES (2010-2019)

	Prison Sentence				
	(1)	(2)	(3)	(4)	(5)
White x >=5 Felonies	6.64*** (1.22)	7.37*** (1.14)	4.18*** (1.49)	3.67** (1.60)	4.21*** (1.58)
White x 3-4 Felonies	3.54** (1.42)	5.99*** (1.14)	4.34*** (1.05)	4.18*** (1.07)	4.50*** (1.06)
White x 2 Felonies	2.30* (1.19)	5.75*** (0.94)	4.07*** (0.79)	4.05*** (0.82)	4.39*** (0.81)
White x 1 Felony	-2.61** (1.10)	1.20 (0.91)	-0.13 (0.51)	-0.09 (0.51)	0.20 (0.50)
White x No Felony	-2.66*** (0.63)	0.22 (0.51)	-1.00*** (0.24)	-0.99*** (0.24)	-0.94*** (0.22)
>=5 Prior Felonies	57.80*** (1.52)				
3-4 Prior Felonies	48.10*** (1.57)				
2 Prior Felonies	35.35*** (1.43)				
1 Prior Felony	26.30*** (1.39)				
No Felony Record	12.72*** (0.95)				
SG FE (Offense Class x Priors x Year)		✓			
Office Unit x SG FE			✓	✓	✓
Prior Offense Class FE				✓	✓
X <sub>i</sub> + Arrest Charge FE					✓
Dependent Mean	21.07	21.07	21.07	21.07	21.07
# Cases	336,141	336,141	336,141	336,141	336,141

*Notes:* This table traces the relationship between a defendant's number of prior felony convictions and likelihood of receiving a prison sentence. The first column estimates raw prison disparities. The second column compares white and Black defendants who start in the same position in the guidelines and therefore have similar arresting charges and criminal records. The third column estimates disparities within the same unit. The fourth column adds controls for defendants' specific composition of criminal records. The final column adds controls,  $X_i$ , for defendant gender, age, and arresting charge. Standard errors are clustered by elected district attorney. \*\*\*Significant at the 1%; \*\*5%; \*10%.

**Figure E.5: THE RELATIONSHIP BETWEEN ARREST CHARGE SEVERITY AND PRISON DISPARITIES AMONG DEFENDANTS WITHOUT RECORDS**



*Notes:* These figures shows the relationship between arrest charge severity and prison rates for Black relative to white defendants who do not have criminal records and were charged in the same three-year time period. The x-axis is arrest charge severity, which is estimated by the percent of cases with a given lead arresting charge that result in a prison sentence. For instance, if 60% of cases with a lead arrest charge of burglary result in a prison sentence, then cases with a lead arrest charge of burglary would have an arrest charge severity of 60 in this figure. The y-axis the percentage point difference in the likelihood of a prison sentence for white relative to Black defendants. The error bars reflect the 95% confidence interval for white relative to Black prison outcomes. Standard errors are clustered by elected district attorney. \*\*\*Significant at the 1% level; \*\*5%; \*10%.

**Table E.6: RELATIONSHIP BETWEEN PRIOR CONVICTIONS AND RACIAL DISPARITIES IN PRISON RATES INCLUDING MURDER, RAPE, AND KIDNAPPING**

	Prison Sentence					
	(1)	(2)	(3)	(4)	(5)	(6)
Prior Points x White	2.01*** (0.15)	1.69*** (0.12)	1.57*** (0.16)	1.56*** (0.17)	1.28*** (0.19)	1.35*** (0.19)
Prior Points	6.80*** (0.17)					
White	-2.81*** (0.72)	0.59 (0.59)	-0.82*** (0.24)		-0.91*** (0.24)	-0.85*** (0.22)
Intercept	16.71*** (1.06)					
SG FE (Offense Class x Priors x Year)		✓				
Office Unit x SG FE			✓	✓	✓	✓
Pros. X Race + Pros. X Priors FE				✓		
Priors Composition FE					✓	✓
$X_i$ + Arrest Charge FE						✓
Dependent Mean	23.52	23.52	23.52	23.62	23.52	23.52
# Cases	359,840	359,840	359,840	358,238	359,840	359,840

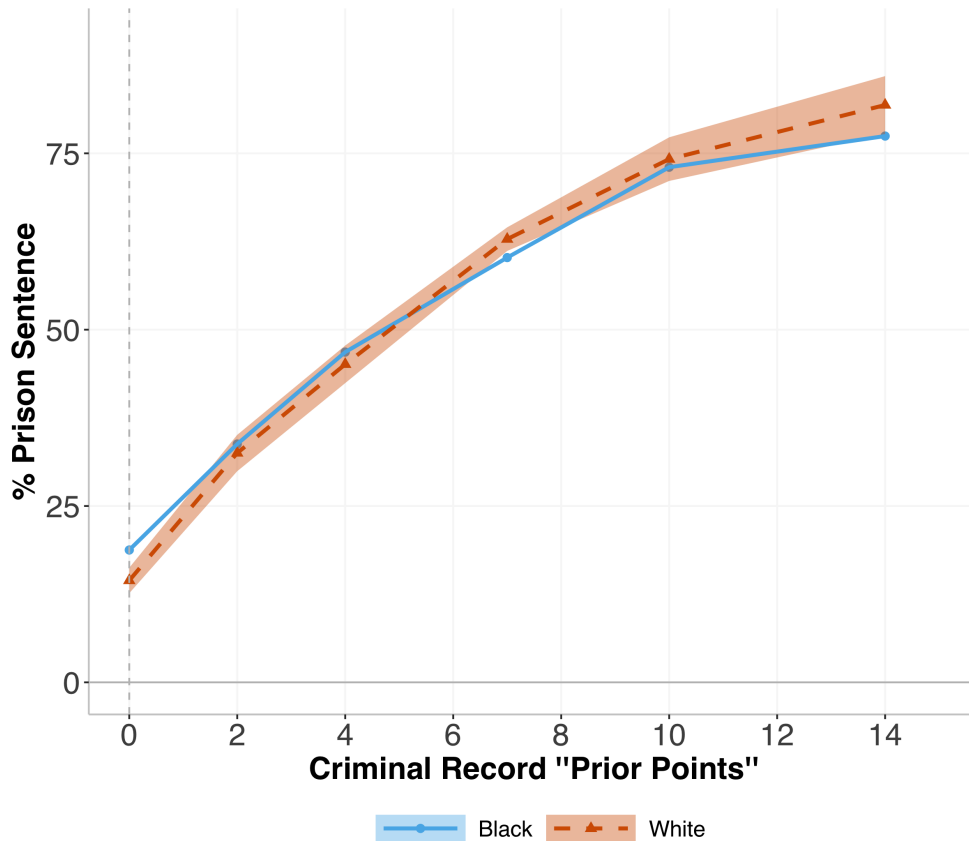
*Notes:* This table replicates Table 1 but includes the 6.1% of felonies with lead charges that are murder, rape, or kidnapping. All specifications show the relationship between prior convictions and prison for white relative to Black defendants. The first column considers the raw relationship between prior points and prison. The estimates on prior points reflect the increase in prison for each additional low-level prior felony, the equivalent of two prior points. The second column compares defendants who start in the same position in the sentencing guidelines using equation 1. The third column estimates disparities within office crime-units using equation 2. The fourth column adds fixed effects for the specific composition of prior felonies in each offense class and for twelve crime types. The final column further controls for the specific arrest charge and defendant gender and age,  $X_i$ . Standard errors are clustered by elected district attorney. \*\*\*Significant at the 1% level; \*\*5%; \*10%.

**Table E.7:** THE RELATIONSHIP BETWEEN COUNTY POLITICS AND URBANITY AND RACIALLY DISPARITIES IN THE PENALTY FOR PRIOR CONVICTIONS (2010-2019)

	Prison Sentence			
	$\tau = \% \text{ Democrat}$ (Z-Score)		$\tau = \% \text{ Urban}$ (Z-Score)	
	(1)	(2)	(3)	(4)
$\tau \times \text{White} \times \text{Priors}$	0.03 (0.17)	0.04 (0.19)	0.19 (0.16)	-0.08 (0.18)
White $\times$ Priors	1.75*** (0.14)	1.59*** (0.15)	1.70*** (0.11)	1.61*** (0.15)
$\tau \times \text{Priors}$	-0.08 (0.12)	-0.81** (0.39)	-0.25* (0.13)	0.11 (0.34)
$\tau \times \text{White}$	-0.47 (0.74)	0.23 (0.26)	0.68 (0.48)	0.47** (0.22)
White	0.37 (0.43)	-1.05*** (0.23)	0.07 (0.37)	-1.06*** (0.23)
$\tau$	0.62 (0.99)		-0.54 (0.64)	
SG FE (Offense Class $\times$ Priors $\times$ Year)	✓		✓	
Office Unit $\times$ SG FE		✓		✓
Dependent Mean	21.07	21.07	21.07	21.07
# Cases	336,144	336,144	336,144	336,144
# District Attorney Offices	39	39	39	39

*Notes:* This table contrasts the racially disparate penalty for prior convictions across counties in North Carolina. Columns one and two consider heterogeneity across county politics, and the second two columns across county population density. The odd columns consider the raw relationship between criminal record prior points and prison for white relative to Black defendants. The estimates on prior points reflect the average increase in prison for each additional low-level prior felony, the equivalent of two prior points. The even columns compares defendants with similar arresting charges and criminal records within office units. Standard errors are clustered by elected district attorney. \*\*\*Significant at the 1% level; \*\*5%; \*10%.

**Figure E.6: THE RELATIONSHIP BETWEEN PRIOR CONVICTIONS AND DISPARITIES IN PRISON (2005-2009)**



*Notes:* This figure shows the raw relationship between a defendant's criminal record "prior points" and his likelihood of receiving a prison sentence from 2005 to 2009. The x-axis is prior points, the sum of a defendant's past convictions weighted by their severity. *See* N.C. GEN. STAT. § 15A-1340.14. The y-axis is the share of defendants who receive a prison sentence. The points on the figure reflect prison percentages for Black defendants in blue circles and white defendants in orange triangles for every two prior points from 0–11 points. The final point includes those with at least twelve points (the 97th percentile). The orange band reflects the 95% confidence intervals for white relative to Black prison rates. Standard errors are clustered by elected district attorney.

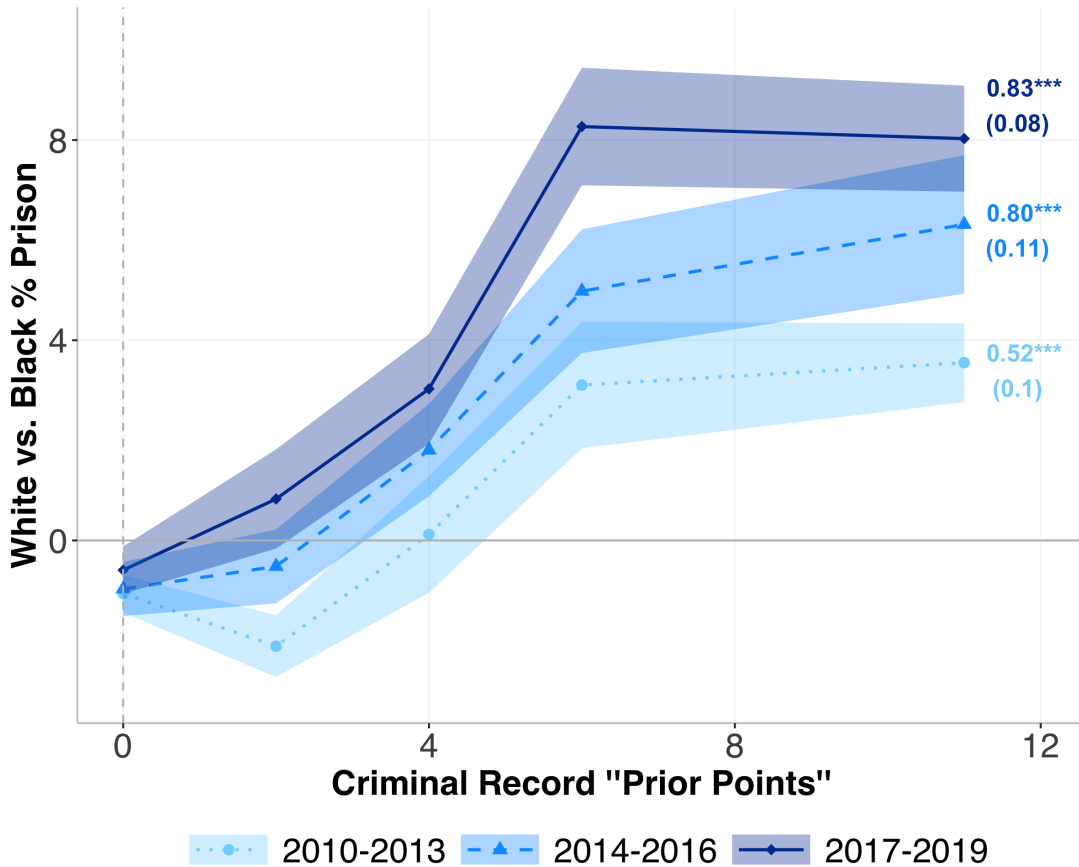
**Table E.8:** CHANGE OVER TIME IN THE DISPARATE PENALTY OF PRIOR CONVICTIONS (2010 – 2019)

	Prison Sentence				
	(1)	(2)	(3)	(4)	(5)
Year x White x Priors	0.042 (0.039)	0.078** (0.038)	0.112*** (0.034)	0.197*** (0.047)	0.201*** (0.052)
Year x White	0.128 (0.152)	0.227** (0.108)	0.118** (0.051)	0.093* (0.054)	0.087 (0.056)
White x Priors	1.788*** (0.270)	1.293*** (0.264)	0.910*** (0.207)	0.056 (0.269)	0.085 (0.297)
Year x Priors	-0.180*** (0.029)				
White	-3.797*** (0.834)	-0.742 (0.655)	-1.429*** (0.316)	-1.346*** (0.323)	-1.313*** (0.309)
Priors	7.473*** (0.235)				
Year	-0.351* (0.207)				
SG FE (Offense Class x Priors x Year)		✓			
Office Unit x SG FE			✓	✓	✓
Priors Composition FE				✓	✓
$X_i$ + Arrest Charge FE					✓
Dependent Mean	21.07	21.07	21.07	21.07	21.07
# Cases	336,144	336,144	336,144	336,144	336,144
# Years	10	10	10	10	10

*Notes:* This table analyzes the trend in the relationship between prior convictions and the percentage of white and Black defendants who receive prison sentences. The prior point estimates in all specifications reflect the average increase in prison for every additional low-level felony prior conviction, the equivalent of two additional prior points. The year estimates reflect the average increase in prison each year. The first column consider the trend in the raw relationship between criminal history prior points and prison for white relative to Black defendants over time. Column two accounts for the defendant's initial starting position in the sentencing guidelines, which depends on his arresting charges and criminal record, as in equation 1 fully interacted with the year the case was disposed. Column three look within office units, as in equation 2 fully interacted with the year the case was disposed. The fourth column adds controls for the defendant's number of prior felony convictions in each offense class and within twelve broad crime types. The final column adds controls,  $X_i$ , for defendant gender, age, and specific arresting charge. Standard errors are clustered by elected district attorney. \*\*\*Significant at 1% level; \*\*5%; \*10%.



**Figure E.7: THE CHANGE OVER TIME IN THE RACIALLY DISPARATE PENALTY FOR PRIOR CONVICTIONS**



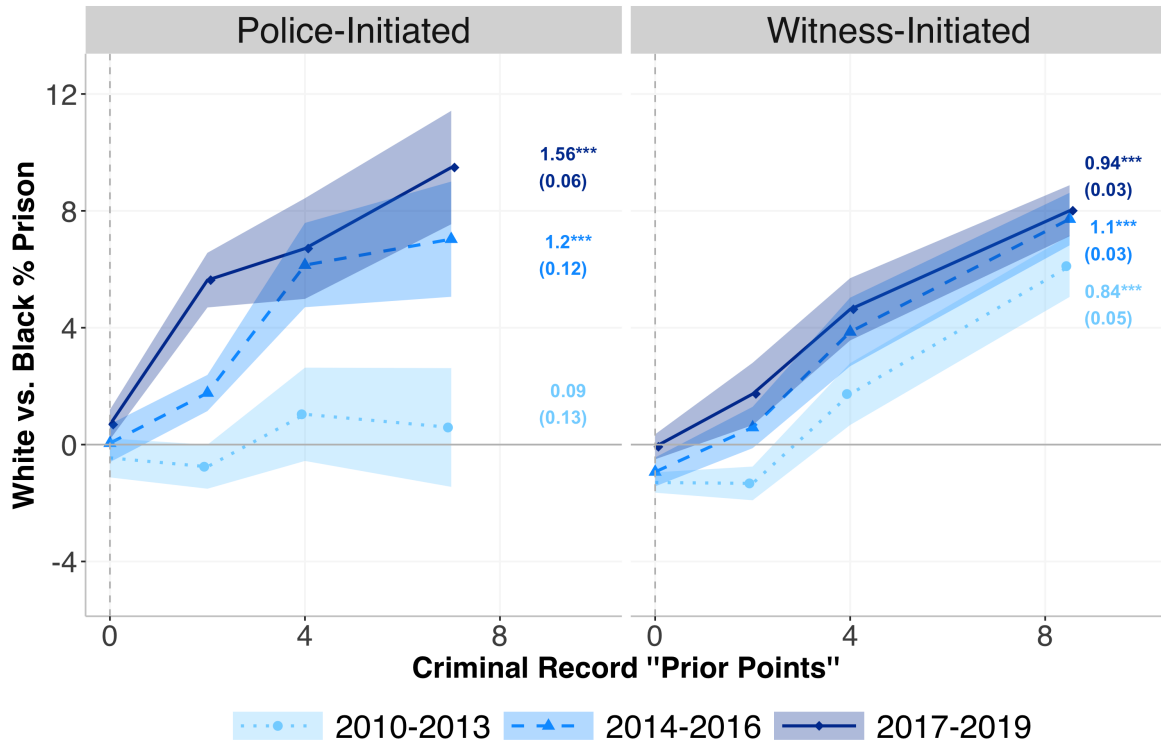
*Notes:* This figure contrasts the racially disparate responses to prior convictions in three periods of the sample. The first third of the sample period (2010-2013) is in light blue circles; the second third (2014-2016) is in medium blue triangles; the final third (2017-2019) is in dark blue diamonds. The three left-most points include defendants with no felony record. The remaining points include defendants in four quantiles of the felony record prior point distribution. Each point shows the percentage point difference in prison rates for Black defendants relative to white defendants with similar arresting charges and criminal records in the same district attorney office and crime-unit for a given felony record group and sample period. The fifteen points on the graph are jointly estimated using equation 6 fully interacted with the time period of the case. The blue bands show the 95% confidence interval for Black relative to white prison rates in a given felony record group and sample period. The linear fit lines and annotated coefficients reflect the average linear change in prison disparities for each additional prior point. Standard errors are clustered by elected district attorney. \*\*\*Significant at 1% level; \*\* 5% level; \* 10% level.

**Table E.9:** TREND IN THE DISPARATE PENALTY OF PRIOR CONVICTIONS WITHIN TERMS OF ELECTED DISTRICT ATTORNEYS

	Prison Sentence		
	Aggregate	Within Elected DA	
	(1)	(2)	(3)
Year x White x Priors	0.112*** (0.034)	0.146*** (0.050)	0.229*** (0.071)
Year x White	0.118** (0.051)	0.107* (0.058)	0.094 (0.068)
White x Priors	0.910*** (0.207)		
White	-1.429*** (0.316)		
Office Unit x SG FE (Offense x Priors x Year)	✓	✓	✓
Elected DA x White x SG FE		✓	✓
$X_i$ + Arrest Charge FE			✓
Dependent Mean	21.07	21.07	21.07
# Cases	336,144	336,144	336,144
# Years	10	10	10

*Notes:* This table investigates whether the trend in the racial disparities in the penalty for prior convictions is driven by changes in the elected district attorneys. All specifications estimate the increase in prison rates for white versus Black defendants for every additional low-level felony prior conviction, the equivalent of two additional prior points. The first column shows the aggregate trend in the disparate penalty for prior convictions. Columns two and three introduce fixed effects for the average penalty for prior points for Black and white defendants under each elected district attorney. The trend in racial disparities is then identified off of changes within the term of a given elected district attorney. All columns compare defendants with similar arresting charges and prior criminal histories. Columns one and two look within office units. Column three adds controls,  $X_i$ , for defendant gender, age, specific arresting charge, and the specific composition of prior convictions. Standard errors are clustered by elected district attorney. \*\*\*Significant at the 1% level; \*\*5%; \*10%.

**Figure E.8: TREND IN THE DISPARATE PENALTY FOR PRIOR CONVICTIONS LIKELY INITIATED BY POLICE VERSUS WITNESSES**



*Notes:* This figure contrasts the racially disparate responses to prior convictions for drug possession and weapon possession offenses ("police-initiated priors" in the left panel) and prior convictions for violent, property, or sex offenses ("witness-initiated priors" in the right panel) and how these relationships have evolved over three periods of the sample: 2010-2013 (in light blue circles); 2014-2016 (in medium blue triangles); and 2017-2019 (in dark blue diamonds). The x-axis is criminal record prior points accrued from police-initiated prior convictions and witness-initiated prior convictions. The y-axis is the percentage point difference in prison rates for white relative to Black defendants who start in the same position under the state sentencing guidelines (and so have similar arresting charges and criminal records) in the same district attorney office and unit. The left-most points on the figures reflect the percentage point difference in prison-rates for defendants with no prior felony convictions. The other three points on each figure reflect even thirds of the prior point distribution for police-initiated and witness-initiated prior convictions respectively. The twenty-four point-estimates reflect the coefficients  $\beta_{n,\Delta}$  (from equation 6) fully interacted with indicators for the time period of the case. See Appendix B.ii. The error bars reflect the 95% confidence interval for white relative to Black prison rates. The linear fit lines and annotated coefficients reflect the average linear change in prison rate disparities for every additional prior point in a given sample period. Standard errors are clustered by elected district attorney. \*\*\*Significant at 1% level; \*\*5% level; \*10% level.

**Table E.10:** TREND IN THE DISPARATE PENALTY FOR PRIOR CONVICTIONS LIKELY INITIATED BY POLICE

	Prison Sentence			
	(1)	(2)	(3)	(4)
Police Priors x Year x White	0.31*** (0.11)	0.33*** (0.11)	0.44*** (0.15)	0.42*** (0.15)
All Priors x Year x White	-0.03 (0.05)	0.001 (0.05)	0.06 (0.06)	0.08 (0.08)
Police Priors x White	-2.03*** (0.68)	-1.95*** (0.67)	-2.68*** (1.03)	-1.70* (0.97)
Year x White	0.10 (0.15)	0.24** (0.11)	0.08 (0.06)	0.07 (0.06)
Police Priors x Year	-0.05 (0.07)			
All Priors x Year	-0.22*** (0.04)			
All Priors x White	2.30*** (0.34)	1.82*** (0.34)	1.35*** (0.40)	0.70 (0.48)
White	-3.53*** (0.84)	-1.16* (0.65)	-1.40*** (0.37)	-1.22*** (0.37)
SG FE (Offense Class x Priors x Year)		✓		
Office Unit x SG FE			✓	✓
Priors Composition FE				✓
$X_i$ + Arrest Charge FE				✓
Dependent Mean	21.07	21.07	21.07	21.07
# Cases	336,144	336,144	336,144	336,144
# Years	10	10	10	10

*Notes:* This table analyzes the trend in the relationship between racial disparities in prison rates and prior convictions for drug and weapon possession offenses ("police-initiated priors"). All specifications estimate the increase in prison rates for white versus Black defendants as they accumulate more police-initiated prior convictions and how this relationship has evolved between 2010 and 2019 in North Carolina Superior Court. The coefficient estimates on "police priors" reflect the average increase in prison for every additional prior low-level drug or weapon possession felony offense, the equivalent of two prior points. The first column considers the trend in the raw relationship between police-initiated priors and prison rates for white relative to Black defendant. Column two accounts for the defendant's initial starting position in the sentencing guidelines, as in equation 1 fully interacted with the year the case was disposed. Column three look within office units, as in equation 2 fully interacted with the year the case was disposed. Column four adds controls for the number of prior felony convictions in each offense class and within twelve broad crime types. The final column adds controls,  $X_i$ , for defendant gender, age, and specific arresting charge. Standard errors are clustered by elected district attorney. \*\*\*Significant at 1%; \*\*5%; \*10%.

**Table E.11: SUMMARY STATISTICS OF THE COURT RECORDS AND SURVEY SAMPLE IN 2019: SURVEY REPRESENTATIVENESS**

	Analysis Sample in 2019	Participating Offices in 2019	Participating Prosecutors in 2019
<b><u>Charge &amp; Sentence</u></b>			
% Dismissal	34.4	37.2	36.9
% Charge Reduction	61.7	65.5	65.1
% Prison Sentence (Incarcerated $\geq$ 6mo)	19.7	19.0	18.6
Avg Length of Prison Sentence (mos)	24.1	22.9	23.5
<b><u>Criminal History</u></b>			
Avg Felony Record “Prior Points”	2.7	2.8	2.8
% Prior Felony Conviction	42.3	42.2	42.3
<b><u>Defendant Race &amp; Current Crime-Type</u></b>			
% Black	47.7	57.4	57.6
% Drug	27.8	25.6	26.2
<b><u>Prosecutor Politics</u></b>			
% Democrat Line Prosecutor	-	-	48.6
<b><u>Local Urbanity and Politics</u></b>			
% Urban (2010 Census)	62.2	67.4	68.4
% Democrat Votes (2016 Presidential)	43.3	47.6	48.1
# Cases	35,500	18,114	9,592
# Prosecutors	774	432	159
# Prosecutors in Survey	159	155	159
# Cases per Prosecutor	61	59	60
# Jurisdictions	39	16	20

*Notes:* This table provides descriptive statistics for the analysis sample compared to the sample of cases handled by participants in the 2020 survey of North Carolina prosecutors. The analysis sample in column one includes all defendants in North Carolina in 2019, who start with arresting charges that placed them within the felony guidelines, excluding murder, rape, and kidnapping cases. The second column limits to the sixteen offices that participated in the survey. The third column limits to the cases of participating prosecutors.

**Table E.12: DISPARATE PENALTY FOR PRIORS AMONG PROSECUTORS WITH DIFFERENT BELIEFS: BIAS VERSUS CONDUCT GROUPS**

	Prison Sentence					
	(1)	(2)	(3)	(4)	(5)	(6)
Bias Gap > 0 x White x Priors	0.90** (0.39)	1.15** (0.46)	1.78*** (0.55)	1.65** (0.81)	1.88*** (0.60)	1.86*** (0.57)
Bias Gap > 0 x White	-0.71 (1.30)	-1.46 (1.08)	0.10 (0.81)	-0.59 (0.88)	-0.46 (0.73)	-0.56 (0.73)
Bias Gap > 0 x Priors	-0.33 (0.41)	-0.37 (0.41)	-0.40 (0.51)	-0.43 (0.47)		
White x Priors	1.95*** (0.41)	1.33*** (0.40)	0.53 (0.46)	-1.34 (1.13)	0.27 (0.49)	0.35 (0.48)
White	-1.84* (1.07)	1.56 (0.95)	-0.74 (0.60)	0.23 (2.33)	-0.44 (0.54)	-0.29 (0.53)
SG FE (Offense Class x Priors x year)		✓				
Office Unit x SG FE			✓		✓	✓
Office Unit x SG x White FE				✓		
Prosecutor x Priors FE					✓	✓
Priors Composition FE						✓
$X_i$ + Charge FE						✓
Dependent Mean	19.62	19.62	19.62	19.62	19.62	19.62
Mean Bias Gap	-5.2	-5.2	-5.2	-5.2	-5.2	-5.2
Std Dev Bias Gap	34.8	34.8	34.8	34.8	34.8	34.8
# Cases	66,602	66,602	66,602	66,602	66,602	66,602
# Prosecutors	174	174	174	174	174	174
# District Attorney Offices	22	22	22	22	22	22

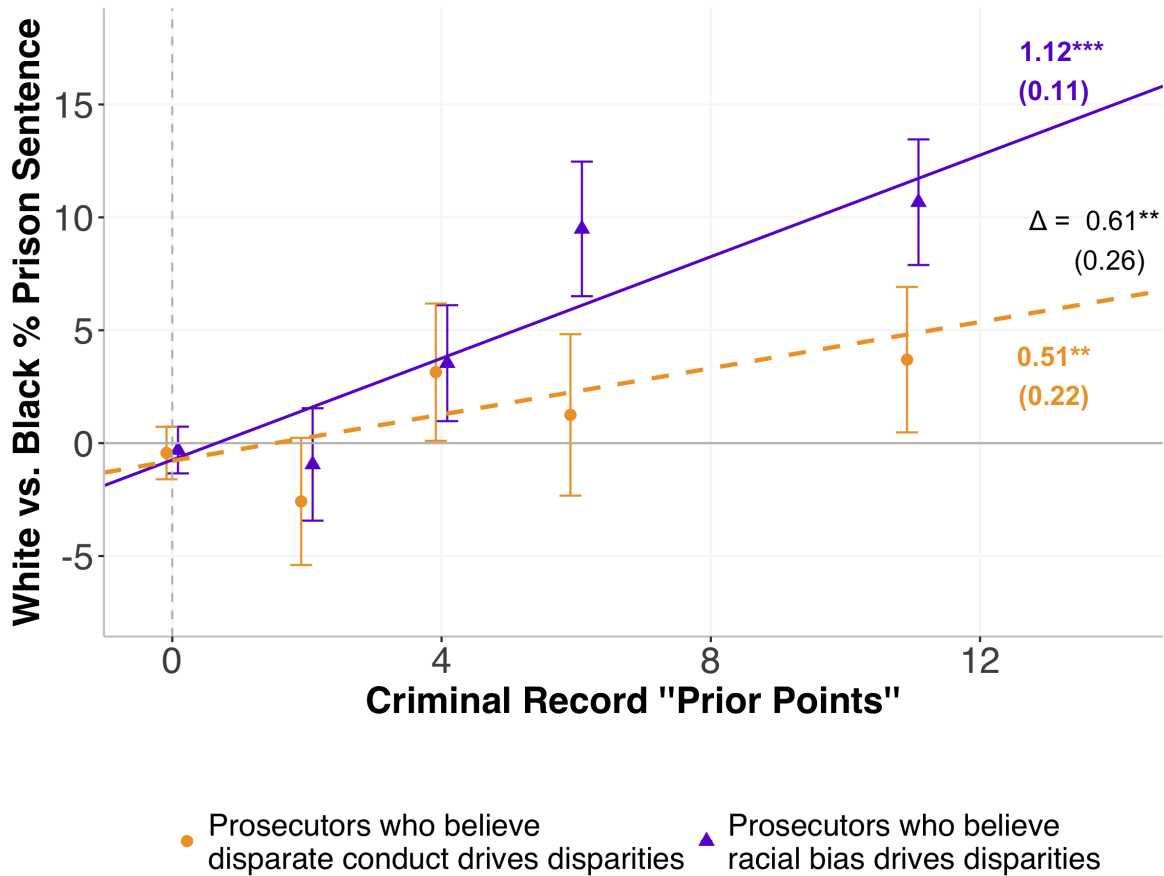
*Notes:* This table investigates the relationship between prosecutors' reported beliefs about the drivers of racial disparities in prison rates and the actual racial disparities in their cases from 2010 to 2019. All columns show how prosecutors who indicate that racial bias was more important than racial differences in criminal conduct differ from prosecutors who indicate that disparate conduct was as or more important than bias. The estimated coefficients on priors reflect the increase in prison for every additional low-level felony prior conviction, the equivalent of two additional prior points. Column one reflects the raw relationship between a prosecutor's belief and her disparate penalty for Black and white defendants' priors. Column two accounts for the defendant's initial starting position in the sentencing guidelines, which depends on their arresting charges and criminal record. Column three further controls for the district attorney office and crime-unit handling the case. Column four looks within unit, and column five within prosecutors. The final column adds controls,  $X_i$ , for defendant gender, age, and specific arresting charge. Standard errors are clustered by prosecutor. \*\*\*Significant at 1% level; \*\*5%, \*10%.

**Table E.13:** DISPARATE PENALTY FOR PRIORS AMONG PROSECUTORS WITH DIFFERENT BELIEFS: BY QUANTILES OF PRIORS

	Prison Sentence					
	(1)	(2)	(3)	(4)	(5)	(6)
Bias Gap x White x Q4 Record	3.78** (1.51)	5.06** (2.07)	8.24*** (1.86)	6.14* (3.43)	6.68** (2.85)	5.27* (3.04)
Bias Gap x White x Q3 Record	0.75 (1.23)	1.05 (1.67)	1.58 (1.70)	2.46 (2.33)	2.64 (2.54)	2.20 (2.86)
Bias Gap x White x Q2 Record	-0.86 (1.03)	0.25 (1.36)	0.54 (1.31)	2.02 (1.81)	1.89 (1.92)	3.30 (2.44)
Bias Gap x White x Q1 Record	-0.51 (1.92)	-0.41 (1.49)	2.19 (1.42)	2.19 (1.69)	2.45 (1.70)	2.08 (1.88)
Bias Gap x White x No Felony Record	-0.75 (0.55)	-0.70 (0.53)	0.26 (0.40)	-0.04 (0.50)	-0.02 (0.52)	-0.09 (0.55)
Bias Gap x Q4 Record (>=9 pts)	-3.42 (2.10)	-3.78** (1.70)	-4.60** (1.81)	-4.22** (1.84)	-5.70*** (1.38)	-4.56*** (1.47)
Bias Gap x Q3 Record (5-8 pts)	-2.20 (1.38)	-1.92 (1.60)	-1.94** (0.64)	-2.32** (1.06)	-1.70 (1.21)	-1.35 (1.39)
Bias Gap x Q2 Record (3-4 pts)	-1.75 (1.17)	-1.81 (1.32)	-1.32 (1.08)	-1.34 (1.39)	-1.40 (1.46)	-1.15 (1.64)
Bias Gap x Q1 Record (2 pts)	-0.59 (1.27)	-0.31 (0.73)	-0.43 (1.10)	-0.70 (0.97)	-0.70 (0.96)	-0.58 (1.04)
Bias Gap x No Felony Record	-0.45 (0.71)	-0.57 (0.67)	-0.74 (0.41)	-0.66* (0.34)	-0.66* (0.34)	-0.64* (0.37)
SG FE (Offense Class x Priors x Year)		✓				
Office Unit X SG FE			✓			
Office Unit X SG x White FE				✓	✓	✓
Prior Offense Class FE					✓	✓
$X_i$ + Arrest Charge FE						✓
Mean Bias Gap	-5.2	-5.2	-5.2	-5.2	-5.2	-5.2
Std Dev Bias Gap	34.8	34.8	34.8	34.8	34.8	34.8
# Cases	63,499	63,499	63,499	63,499	63,499	63,499

Notes: This table investigates the relationship between prosecutors' reported beliefs about the source of racial disparities and the disparities in their cases from 2010 to 2019. Prosecutors are characterized as in Table 2 *supra*. See Figure D.1 for details about the survey question. All columns estimate racial disparities in prison rates for defendants with no prior felony record and for defendants in four quartiles of prior points among those with a felony record. Column one reflects the raw relationship between a prosecutor's belief and the disparities within each felony record group. Column two accounts for defendants' initial starting position in the sentencing guidelines, which depends on their arresting charges and criminal record. Column three further controls for the district attorney office and crime-unit handling the case. Column four looks *within* the same office crime-unit by allowing units to vary in their racial disparities within each felony group. Column five adds controls for the specific composition of the defendant's prior record. Column six adds controls,  $X_i$ , for defendant gender, age, and specific arresting charge. Standard errors are clustered by prosecutor. \*\*\*Significant at 1% level; \*\*5%; \*10%.

**Figure E.9:** DISPARATE PENALTY FOR PRIORS AMONG PROSECUTORS WITH DIFFERENT BELIEFS: ROBUSTNESS TO WITHIN PROSECUTOR ESTIMATION



*Notes:* This figure contrasts racial disparities in prison sentences for prosecutors with different beliefs about the source of prison disparities. This figure illustrates the same relationship as Figure 5 but with controls for the identity of the assigned prosecutor and that prosecutor's average prison rates for white relative to Black defendants. It splits prosecutors into two groups using responses to a question from the 2020 survey. See *supra* Figure D.1 Panel (A) for the question interface. The two left-most points on the figure include defendants with no prior felony conviction. The other eight points reflect quartiles of prior points for defendants with felony records. The ten point-estimates were jointly estimated using equation 6 fully interacted with indicators for the racial bias and criminal conduct groups and with fixed effects for Prosecutor ID X White. See Appendix B.ii. The error bars reflect the 95% confidence interval for white relative to Black prison rates. The fit lines and top and bottom annotated coefficients reflect the average change in prison disparities for each additional prior point. The middle annotation reflects the difference between this linear relationship for the two prosecutor groups. \*\*\*Significant at 1% level; \*\*5%; \*10%.

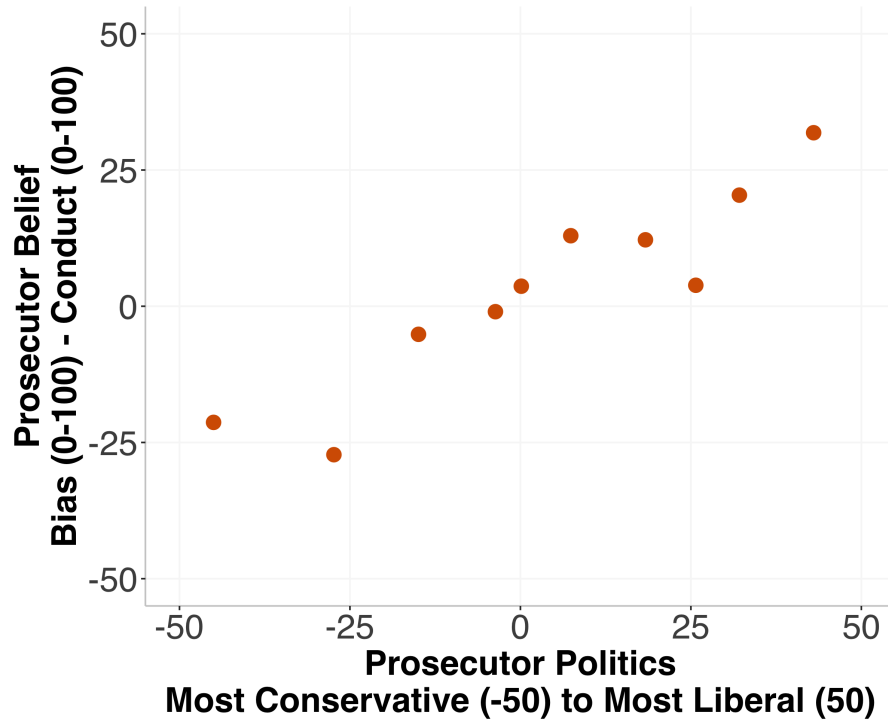


**Table E.14: DISPARATE PENALTY OF PRIORS BY PROSECUTOR RACE, POLITICS, AND BELIEFS ABOUT RACIAL DISPARITIES**

	Prison Sentence					
	(1)	(2)	(3)	(4)	(5)	(6)
Bias Gap (Z) x White x Priors	0.59*** (0.22)	0.52*** (0.20)	0.93*** (0.35)	0.98** (0.41)	0.91** (0.39)	0.92** (0.40)
Prosecutor Black x White x Priors		0.34 (0.87)		-0.06 (1.17)		0.30 (1.04)
Prosecutor Liberal (Z) x White x Priors		0.23 (0.22)		-0.17 (0.24)		-0.07 (0.22)
Office Unit x SG FE (Offense x Priors x Year)			✓	✓	✓	✓
Prosecutor x Priors FE					✓	✓
Dependent Mean	19.62	19.62	19.62	19.62	19.62	19.62
Mean of Bias Gap	-5.2	-5.2	-5.2	-5.2	-5.2	-5.2
Std Dev in Bias Gap	34.8	34.8	34.8	34.8	34.8	34.8
% Prosecutor Black	7.9	7.9	7.9	7.9	7.9	7.9
Mean Prosecutor Politics	-3.1	-3.1	-3.1	-3.1	-3.1	-3.1
Std Dev in Prosecutor Politics	27.6	27.6	27.6	27.6	27.6	27.6
# Cases	66,602	66,602	66,602	66,602	66,602	66,602
# Prosecutors	174	174	174	174	174	174
# District Attorney Offices	22	22	22	22	22	22

*Notes:* This table investigates the relationship between prosecutors' reported beliefs about the drivers of sentencing disparities and the racial disparities in their cases. Prosecutors are classified according to their reported "bias gap" score — i.e., their survey response to the racial bias question minus their survey response to the racial difference in criminal conduct question — transformed to a standard normal. All specifications estimate the increase in prison rates for white versus Black defendants for every additional low-level felony prior conviction, the equivalent of two additional prior points. The even columns introduce controls for prosecutor race and prosecutor politics on a standardized scale from conservative to liberal. See Figure D.1 for the question interface. Columns one and two reflect the raw relationship between prosecutor characteristics and the racially disparate penalty of priors. Columns three and four estimate heterogeneity within office units for defendants with similar arresting charges and criminal records. Columns five and six look within prosecutors. Standard errors are clustered by prosecutor. \*\*\*Significant at 1% level; \*\*5%; \*10%.

**Figure E.10:** RELATIONSHIP BETWEEN PROSECUTOR POLITICS AND BELIEFS ABOUT RACIAL DISPARITIES



*Notes:* This figure illustrates the relationship between prosecutors' politics and their beliefs about the drivers of prison disparities among the 203 prosecutors who participated in the 2020 survey. The x-axis is the prosecutors' reported political views from -50 (most conservative) to 50 (most liberal), and the y-axis is prosecutors' bias gap score: the response to the racial bias question (from 0 to 100) minus the response to the difference in criminal conduct question (from 0 to 100). See Figure D.1 for the text of both survey questions. The ten points reflect ten quantiles of prosecutor politics.

**Table E.15:** DISPARATE PENALTY FOR PRIORS BY PROSECUTOR POLITICS INTERACTED WITH BELIEFS ABOUT DISPARITIES

	Prison Sentence		
	(1)	(2)	(3)
Conservative (Z) x Bias Gap (Z) x White x Priors	0.28 (0.21)	-0.24 (0.32)	-0.14 (0.30)
Conservative (Z) x White x Priors	-0.19 (0.22)	0.10 (0.21)	0.04 (0.31)
Bias Gap (Z) x White x Priors	0.63** (0.31)	0.97*** (0.36)	0.96*** (0.25)
Conservative (Z) x Bias Gap (Z) x Priors	-0.27 (0.26)	-0.04 (0.22)	
Conservative (Z) x Priors	0.30* (0.16)	-0.13 (0.21)	
Bias Gap (Z) x Priors	-0.49* (0.27)	-0.43** (0.21)	
White x Priors	2.63*** (0.25)	1.86*** (0.33)	1.80*** (0.26)
Office Unit x SG FE(Offense x Priors x Year)		✓	✓
Prosecutor x Priors FE			✓
Dependent Mean	19.62	19.62	19.62
Mean Bias Gap	-5.2	-5.2	-5.2
Std Dev Bias Gap	34.8	34.8	34.8
Mean Prosecutor Politics	-3.1	-3.1	-3.1
Std Dev Prosecutor Politics	27.6	27.6	27.6
# Cases	66,602	66,602	66,602

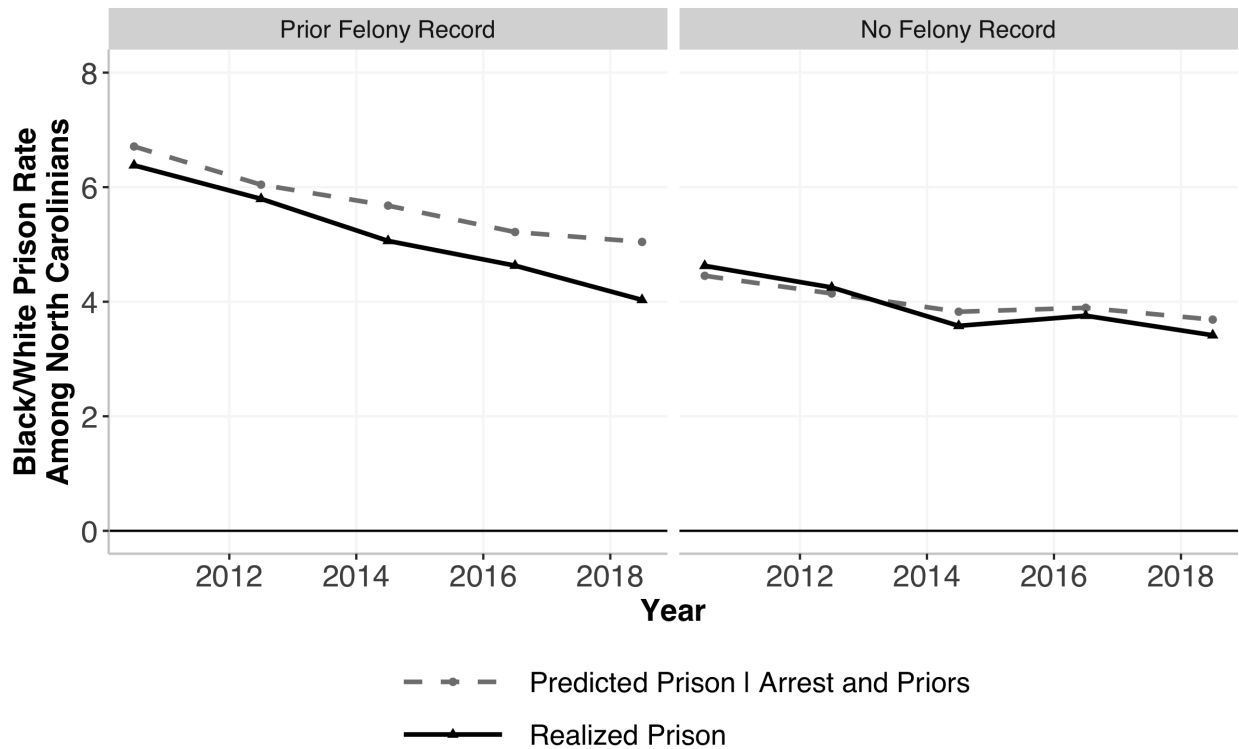
*Notes:* This table investigates whether prosecutor politics changes the relationship between prosecutors' reported beliefs about the drivers of sentencing disparities and the racial disparities in their cases. Prosecutors are classified according to the standardized difference between their responses to racial bias and different criminal conduct in the 2020 survey of North Carolina prosecutors. Prosecutor politics is standardized on a scale from liberal to conservative. See Figure D.1 for the survey question interface. All specifications estimate the increase in prison rates for white versus Black defendants for every additional low-level felony prior conviction, the equivalent of two additional prior points. Column one reflects the raw relationship between prosecutor characteristics and the racially disparate penalty of priors. Column two looks within office units for defendants with similar arresting charges and criminal records. Column three look within prosecutors. Standard errors are clustered by prosecutor. \*\*\*Significant at 1% level; \*\*5%; \*10%.

**Table E.16:** DISPARATE PENALTY FOR PRIOR CONVICTIONS ACROSS PROSECUTORS INCLUDING MURDER, RAPE, AND KIDNAPPING

	Prison Sentence					
	(1)	(2)	(3)	Within Unit (4)	Within Prosecutor (5)	(6)
Bias Gap (Z) x White x Priors	0.56** (0.26)	0.68*** (0.24)	0.93** (0.40)	0.94** (0.46)	0.89** (0.41)	0.85* (0.46)
Bias Gap (Z) x White	-0.82 (0.65)	-0.58 (0.53)	0.32 (0.51)	-0.18 (0.45)	-0.01 (0.40)	-0.05 (0.43)
Bias Gap (Z) x Priors	-0.38 (0.24)	-0.48** (0.20)	-0.39 (0.24)	-0.44* (0.24)		
White x Priors	2.21*** (0.24)	2.00*** (0.22)	1.79*** (0.32)		1.74*** (0.30)	1.61*** (0.33)
White	-1.90*** (0.67)	1.06** (0.51)	-0.32 (0.42)		-0.39 (0.37)	-0.38 (0.40)
Priors	6.70*** (0.23)					
SG FE (Offense Class x Priors x Year)		✓				
Office Unit x SG FE			✓		✓	✓
Office Unit x SG x White FE				✓		
Prosecutor x Priors FE					✓	✓
Priors Composition FE						✓
$X_i$ + Arrest Charge FE						✓
Dependent Mean	21.91	21.91	21.91	21.91	21.91	21.91
Mean Bias Gap	-5.4	-5.4	-5.4	-5.4	-5.4	-5.4
Std Dev Bias Gap	35.1	35.1	35.1	35.1	35.1	35.1
# Cases	71,011	71,011	71,011	71,011	71,011	71,011
# Prosecutors	175	175	175	175	175	175
# District Attorney Offices	22	22	22	22	22	22

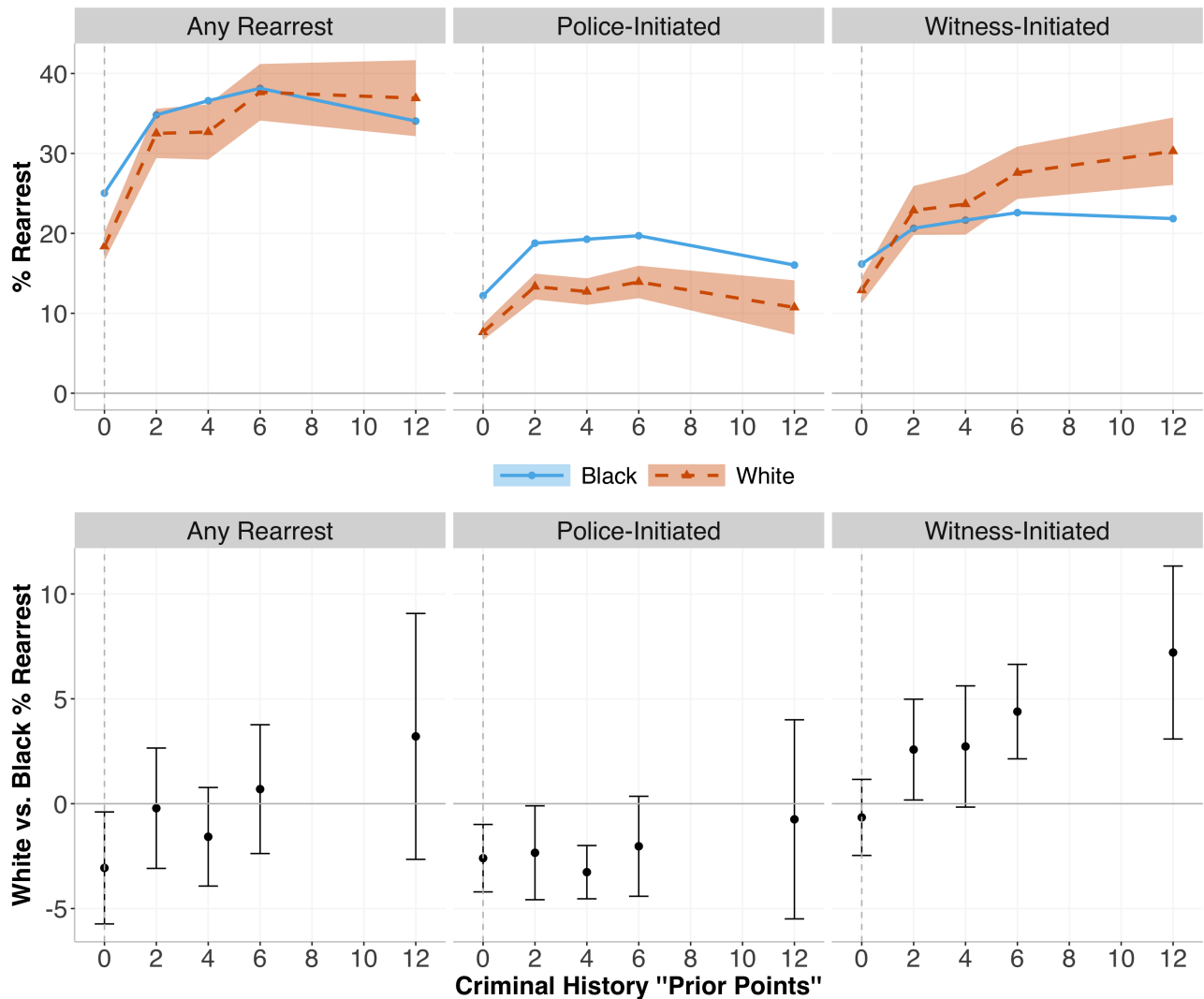
*Notes:* This table replicates Table 2 but includes the 6.1% of felonies with lead charges that are murder, rape, or kidnapping. Prosecutors are characterized according to their reported importance of racial bias minus disparate criminal conduct (their "bias gap" score). See Figure D.1 for the question interface. All specifications normalize the bias gap scores to have a mean of zero and a standard deviation of one. Column one estimates the raw relationship between a prosecutor's bias gap score and her racially disparate penalty of priors. Column two accounts for the defendant's initial position in the sentencing guidelines, which depends on the arresting charges and criminal record. Column three further controls for the office and unit handling the case. Column four looks *within* office units, and column five *within* prosecutor. The final column adds controls,  $X_i$ , for defendant gender, age, and specific arresting charge. Standard errors are clustered by prosecutor. \*\*\*Significant at 1% level; \*\*5%; \*10%.

**Figure E.11: IMPACT OF AN EQUAL TREATMENT POLICY ON PRISON DISPARITIES**



*Notes:* This figure considers the impact of a hypothetical regulation that required Black defendants to receive the same punishment as white defendants with similar arresting charges and criminal records. The black solid line shows the ratio of the realized prison rate among Black North Carolinians to the realized prison rate among white North Carolinians. To construct Black and white prison rates, I use North Carolina Superior Court Records from 2010 to 2019 and decadal Census population counts, with linear extrapolations between Census years. IPUMS, *supra* note 6. The grey dashed line shows the ratio of the predicted prison rate among Black North Carolinians to the predicted prison rate among white North Carolinians. For North Carolinians who do not enter Superior Court, the predicted prison is zero. For North Carolinians who do enter Superior Court, predicted prison is based on the defendant's initial cell in the North Carolina sentencing guidelines, which is jointly determined by his prior convictions and the offense class of his arrest charge.

**Figure E.12: PRIOR CONVICTIONS AND REARREST DISPARITIES AMONG RELEASED DEFENDANTS**



*Notes:* These figures show disparities in rearrest rates for any offense (left panels), drug and weapon possession offenses (middle) and property, violent, and sex offenses (right) for the 78% of defendants who do not receive a prison sentence. The left-most points reflect defendants without felony records, and the other four points reflect quartiles of prior points for defendants with records. The top three figures trace the raw relationship between priors and rearrest. The bottom three figures show the percentage point difference between white and Black rearrest rates among defendants with similar prior records and current offenses of the same age and gender with a current case in the same year and office. The black bars reflect the 95% confidence interval of white relative to Black rearrest. Standard errors are clustered by elected district attorney. \*\*\*Significant at 1%; \*\*5%; \*10%.

**Table E.17: DISPARITIES IN THE RELATIONSHIP BETWEEN PRIOR CONVICTIONS AND REARREST**

	Rearrest					
	(1)	(2)	(3)	(4)	(5)	(6)
Prior Points x White	1.93*** (0.28)	2.80*** (0.28)	1.30*** (0.28)	2.28*** (0.27)	0.69*** (0.24)	1.06*** (0.28)
Prior Points	2.56*** (0.24)	3.84*** (0.21)	3.43*** (0.24)	4.66*** (0.21)		
White	-6.97*** (0.97)	-6.83*** (1.00)	-3.66*** (0.91)	-3.62*** (0.90)	-2.85*** (0.82)	-2.71*** (0.83)
Intercept	29.96*** (0.66)	28.99*** (0.72)				
Released Subsample		X		X		X
$X_i$ + DA Office Unit x Year FE			✓	✓	✓	✓
Priors Composition + Charge FE					✓	✓
Dependent Mean	29.93	29.08	29.93	29.08	29.93	29.08
# Cases	163,360	127,912	163,360	127,912	163,360	127,912

*Notes:* This table analyzes the relationship between prior convictions and rates of rearrest. All specifications estimate the increase in rearrest rates within five years of the current case for white versus Black defendants for every additional low-level felony prior conviction, the equivalent of two additional prior points. The first two columns considers the raw relationship between priors and rearrest. Columns three and fourth consider the relationship for defendants of the same gender and age who were arrested for similar offense types and had their case handled by the same office crime-unit. Columns five and six further control for the specific composition of the defendant's prior convictions — i.e., the number of prior convictions in each offense class of the state sentencing guidelines and within twelve broad crime types — and the defendant's specific arresting charge. Odd columns include all defendants and even columns restrict to the 78% of defendants who are not sentenced to prison. Standard errors are clustered by elected district attorney.

\*\*\*Significant at 1%; \*\*5%, \*10%.

**Table E.18: PRIOR CONVICTIONS AND REARREST DISPARITIES: WITNESS- VS. POLICE-INITIATED REARREST**

	Rearrest Initiated By:					
	Police (1)	Witness (2)	Police (3)	Witness (4)	Police (5)	Witness (6)
Prior Points x White	0.06 (0.18)	2.20*** (0.22)	0.35** (0.18)	0.65*** (0.19)	0.41* (0.23)	1.04*** (0.31)
Prior Points	0.72*** (0.13)	1.05*** (0.15)				
White	-5.27*** (0.50)	-3.31*** (0.92)	-2.50*** (0.46)	-0.73 (0.64)	-2.52*** (0.51)	-0.75 (0.62)
Intercept	13.50*** (0.45)	17.40*** (0.73)				
Released Subsample					X	X
$X_i$ + DA Office Unit x Yr FE			✓	✓	✓	✓
Priors Composition + Charge FE			✓	✓	✓	✓
Dependent Mean	11.81	17.66	11.81	17.66	11.91	16.96
# Cases	163,360	163,360	163,360	163,360	127,912	127,912

*Notes:* This table analyzes the relationship between prior convictions and rates of rearrest within five years of the current case, separately for arrests likely initiated by the police (i.e., drug and weapon possession offenses) and arrests likely initiated by victims or witnesses (i.e., violent, property, and sex offenses). The odd columns are for police-initiated rearrests and the even columns for witness-initiated rearrest. All specifications estimate the increase in rearrest rates for white versus Black defendants for every additional low-level felony prior conviction, the equivalent of two additional prior points. The first two columns considers the raw relationship between priors and rearrest. Columns three and four controls for  $X_i$ , which includes defendant gender and age, the year, the office crime-unit, the specific composition of the defendant's prior convictions — i.e., the number of prior convictions in each offense class of the state sentencing guidelines and within twelve broad crime types — and the specific arresting charge. The final two columns restrict to the 78% of defendants who do not receive a prison sentence. Standard errors are clustered by elected district attorney. \*\*\*Significant at 1%; \*\*5%; \*10%.



**Table E.19:** WITNESS- VS. POLICE-INITIATED PRIORS AND DISPARITIES IN WITNESS- VS. POLICE-INITIATED REARREST

	Rearrest Initiated By:					
	Police (1)	Witness (2)	Police (3)	Witness (4)	Police (5)	Witness (6)
Police Priors x White	0.59*** (0.21)	1.88*** (0.25)	0.05 (0.20)	1.10*** (0.25)	-0.09 (0.27)	1.43*** (0.32)
Witness Priors x White	0.19** (0.08)	0.42*** (0.12)	0.22** (0.09)	0.10 (0.10)	0.30** (0.13)	0.21 (0.18)
Police Priors	1.74*** (0.15)	-0.89*** (0.10)				
Witness Priors	0.01 (0.06)	1.41*** (0.10)				
White	-5.15*** (0.49)	-3.30*** (0.91)	-2.52*** (0.46)	-0.59 (0.66)	-2.53*** (0.51)	-0.60 (0.63)
Witness Priors x Police Priors	-0.19*** (0.03)	-0.11*** (0.04)	-0.08* (0.05)	-0.06 (0.05)	-0.17** (0.07)	-0.14* (0.09)
Constant	13.21*** (0.44)	17.37*** (0.71)				
Released Subsample					X	X
$X_i$ + DA Office Unit x Yr FE			✓	✓	✓	✓
Priors Composition + Charge FE			✓	✓	✓	✓
Dependent Mean	11.81	17.66	11.81	17.66	11.91	16.96
# Cases	163,360	163,360	163,360	163,360	127,912	127,912

*Notes:* This table analyzes the relationship between prior convictions and rates of rearrest within five years of the current case, separately for prior convictions and rearrests likely initiated by the police (i.e., drug and weapon possession offenses) and prior convictions and rearrests likely initiated by victims or witnesses (i.e., violent, property, and sex offenses). The odd columns are for police-initiated rearrests and the even columns for witness-initiated rearrest. All specifications estimate the increase in rearrest rates for white versus Black defendants for every additional low-level witness- or police-initiated felony conviction, the equivalent of two additional prior points. The first two columns considers the raw relationship between police and witness priors and police and victim rearrest. Columns three and fourth controls for  $X_i$ , which includes defendant gender and age, the year, the office crime-unit, the specific composition of the defendant's prior convictions — i.e., the number of prior convictions in each offense class of the state sentencing guidelines and within twelve broad crime types — and the specific arresting charge. The final two columns restrict to the 78% defendants who do not receive a prison sentence. Standard errors are clustered by elected district attorney. \*\*\*Significant at 1%; \*\*5%; \*10%.