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JUDICIAL POLITICS AND SENTENCING DECISIONS

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Judicial Politics and Sentencing Decisions*

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Abstract

Racial and gender disparities are prevalent in the criminal justice system, but the sources of these disparities remain largely unknown. This paper investigates whether judge political affiliation contributes to these disparities using data on over 500,000 federal defendants linked to sentencing judge. Exploiting random case assignment, we find that Republican appointed judges sentence black defendants to 3.0 more months than similar non-blacks and female defendants to 2.1 fewer months than similar males, compared to Democratic appointed judges. Disparities by judge political affiliation cannot be explained by other judge characteristics and grow substantially larger when judges are granted more discretion.

JEL Codes: H1, J15, J71, K0, K14
Keywords: racial and gender disparities, criminal sentencing, courts, judicial politics

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Introduction

In the United States, racial and gender disparities are prevalent in the criminal justice system. Black defendants receive significantly longer prison sentences than otherwise similar white offenders (United States Sentencing Commission 2012, Fischman and Schanzenbach 2012), with substantial across-judge variation in the racial sentencing gap (Abrams et al. 2012). This racial disparity in sentencing decisions contributes to the fact that black defendants comprise a disproportionate fraction of the prison population relative to their proportion in the overall population (Carson and Sabol 2012). Similarly, male defendants are sentenced to substantially longer time in prison than female defendants even after accounting for arrest offense and criminal history (Mustard 2001, Starr 2015). These large racial and gender disparities have long been the subject of heated debate, and thus, understanding the sources of these disparities is an important policy question.

Prior research has shown that Republican appointed judges reach different outcomes compared to Democratic appointed judges in a variety of settings (see Sunstein et al. 2006). In the context of criminal sentencing, Republican appointed judges give longer sentences for the same crime compared to their Democratic appointed counterparts (see Schanzenbach and Tiller 2007, 2008). However, virtually unexplored is the question of whether judges' political preferences are a source of the persistent and large disparities in federal criminal sentencing. In this study, we investigate whether judges' political preferences, as proxied by the appointing President's political affiliation, influence racial and gender gaps in sentencing decisions.

This question is of growing importance because of the increasing politicization of the federal judiciary where judges are appointed for lifetime terms, particularly among federal district court judges who "serve as the final arbiter of more than 99 percent of all federal court litigation" (Scherer 2005, Binder and Waltzman 2009, Wittes 2009). Today, the appointments process for lower court judges garners heightened interest, with senators regularly debating the qualification of nominees, such as whether nominees would bring with them ideological agendas or other disqualifying biases. Given the increasing politicization of the appointments process, in recent years, the Senate has confirmed fewer lower court judges by unanimous consent than historically and the average time from nomination to confirmation now exceeds several months compared to weeks historically (see Rutkus 2016), leading some to claim that "[j]udicial selection has been contentious at numerous junctures in U.S. history, but seldom has it seemed more acrimonious and dysfunctional than in recent years" (Binder and Maltzman 2009).

Estimating the impact of judge political affiliation on sentencing decisions has been complicated by the lack of data linking judge identifiers to defendant characteristics and case outcomes. Prior research on the subject has almost exclusively relied on court-level variation in the percent of Democratic or Republican appointed judges within a district court to study the impact of political affiliation on sentencing (see e.g. Schanzenbach and Tiller 2007). However, relying on aggregate court-level variation can lead to biased estimates if courts with different compositions differ in ways that affect all judges in the district court, or if the partisan composition of a court is correlated with unobservables that affect sentencing. Using only court-level variation, one prior paper finds

that racial disparities do not vary when a court is comprised of more Democratic appointed judges (Schanzenbach 2015). A few papers employ small samples of defendants linked to sentencing judge to explore the impact of political affiliation on sentencing in the aggregate in the federal system. For example, Schanzenbach and Tiller (2008) link approximately 2,200 sentencing decisions to the assigned judge, finding that Republican appointed judges giving longer sentences for the same crime compared to their Democratic appointed counterparts.

In this paper, we improve upon the prior literature by relying on individual judge-level variation in over half a million cases and controlling extensively for a full set of judge fixed effects to account for unobserved differences in sentencing across judges and prosecutors. Specifically, to investigate whether the political affiliation of the appointing President (henceforth "judge political affiliation") affects disparities in sentencing, we build a new dataset linking federal sentencing data with judge information for defendants sentenced between 1999 and 2015. In our sample, we observe the sentencing practices of approximately 1,400 unique judges. Using this data, we analyze whether judge political affiliation can explain the large racial and gender disparities in sentencing. Intuitively, we compare how judges appointed by a Republican President ("Republican appointed judges") sentence black versus non-black offenders, or female versus male offenders, relative to judges appointed by a Democratic President ("Democratic appointed judges").

The key assumption of our empirical design is that cases are randomly assigned to judges within the same district court, in particular to Republican appointed versus Democratic appointed judges. This assumption allows us to infer that any differences in disparities by political affiliation are not the product of differences in observed and unobserved case characteristics across judges. We document evidence consistent with random case assignment, finding that there is balance on a full set of observable case and defendant characteristics by judge characteristics such as race, gender, and political affiliation of the appointing president. As a result, any systematic differences in the sentencing outcomes of black versus non-black offenders, or female versus male offenders, can be attributed to judge political affiliation rather than case selection.

In sharp contrast to the prior literature relying on court-level variation, we find economically meaningful and statistically significant evidence that judge political affiliation is a source of disparities in federal sentencing. We find that Republican appointed judges give substantially longer prison sentences to black offenders versus observably similar non-black offenders compared to Democratic appointed judges within the same district court. The racial gap by political affiliation is 3.0 months, approximately 65 percent of the baseline racial sentence gap. We also find that Republican appointed judges give female defendants 2.1 months less in prison than similar male defendants compared to Democratic appointed judges, 16 percent of the baseline gender sentence gap.

These racial and gender gaps by judge political affiliation are largely driven by serious drug and property offenses, and cannot be fully explained by other observable judge characteristics such as judge race, gender, former prosecutorial experience, or proxies for racial bias. However, we also find significant relationships between racial and gender gaps in sentencing and other judge traits. For example, we find that racial and gender gaps in sentencing are larger among less experienced

judges, but diminish with more experience on the bench. We also find larger racial and gender gaps among judges who serve in courts from states with high racial bias, which are disproportionately located in the South.

We next analyze whether differences in disparities by political affiliation are driven by individual judge preferences. Specifically, we test whether sentencing differences by political affiliation expand when judges are granted more discretion, and thus when they are freer to exhibit their preferences. We exploit plausibly exogenous variation in the timing of the Supreme Court's decision in *United States v. Booker*, which greatly increased judicial discretion by making the prior mandatory Sentencing Guidelines advisory. We find that after *Booker*, racial and gender disparities by judge political affiliation expand. Specifically, we find that the racial gap in sentence length by judge political affiliation doubles in magnitude post-*Booker*, with Republican appointed judges sentencing blacks to 4.8 months longer compared to similar non-black defendants, relative to their Democratic appointed colleagues, a statistically significant increase from the pre-*Booker* period. While less statistically significant, we also find suggestive evidence that gender disparities by political affiliation are larger after *Booker*, with Republican appointed judges sentencing females to 1.7 months less than males compared to Democratic appointed judges, a more than doubling of the gender gap prior to *Booker*. Yet, we also find that sentence gaps by political affiliation, in particular increases in gaps post-*Booker*, cannot be solely explained by differences in the willingness of Republican appointed and Democratic appointed judges to adhere to the Federal Sentencing Guidelines, suggesting that gaps by political affiliation exist for reasons other than simply compliance with the Guidelines.

Finally, we consider the possibility that decisions made largely by federal prosecutors may explain our results. Because prosecutorial discretion can lead to differential treatment of defendants prior to sentencing (Rehavi and Starr 2014), we consider whether our main findings can be accounted for by differential decisions made by prosecutors that affect sentence length. Accounting for the charging and application of mandatory minimums and the application of government-sponsored substantial assistance motions, we find that our main findings are not solely driven by prosecutorial discretion, but rather judge-driven differences in sentencing that are associated with political ideology.

Overall, our findings suggest that judicial politics may be a source of the persistent racial and gender disparities in the federal criminal justice system and that politics may play an even larger role today under the current state of increased sentencing discretion. These results indicate that the appointment of federal judges can have profound distributional effects on the criminal justice system, in particular because the federal criminal justice system is the source of the largest and fastest growing prison population (Congressional Research Service 2013), with federal judges making tens of thousands of sentencing decisions a year. Our estimates suggest that a ten percentage point increase in the share of Republican appointed judges in each court would increase the racial sentencing gap by approximately five percent and the gender sentencing gap by roughly two percent. Alternatively, during an average four-year term, a Republican president has the potential to alter the partisan composition of the district courts by over 15 percentage points, potentially increasing

the racial and gender sentencing gap by 7.5 and 3 percent, respectively.[1]

Our paper contributes to a broad literature documenting the effects of judges' characteristics, including their political preferences, on their decisions.[2] Our paper is also related to a large literature on the presence of racial and gender disparities at various stages of the criminal justice process.[3] Like prior work, we document the presence of both racial and gender disparities in federal sentencing. However, we build on this prior work by showing that judge political affiliation is a large source of these disparities, with implications for federal sentencing and the judicial appointments process.

The remainder of the paper is structured as follows. Section I provides a brief overview of the federal sentencing system. Section II describes our data and provides summary statistics. Section III describes our empirical strategy. Section IV presents our results and Section V concludes.

I. Brief Background

A. Federal Judges

In the federal system, the judges that sentence criminal defendants are district court judges that are appointed by the President and confirmed by the Senate. As of 2016, there are a total of 677 authorized federal district court judgeships. The 94 district courts range in the number of authorized judgeships. The largest district court is the Southern District of New York, with 28 authorized judgeships. The majority of other district courts have between two and seven judgeships.

New appointments are generally made when a judge retires, takes senior status, or dies, leaving a vacancy in a district court. Historically, district court appointments occurred quickly and without much controversy. However, in recent decades, these lower court judgeships have created substantial interest and concern given that these judges decide a wide range of issues and are appointed for lifetime terms (Rutkus 2016). Indeed, the nomination process for lower court judges has involved substantially more Senate debate in recent years, in particular on whether nominees would be able to set aside any ideological biases, leading to a dramatic increase in the time from appointment to confirmation.

We follow the prior literature in using the most common measure of judge ideology in our preferred specifications: the political affiliation of the appointing President. A natural question

[1] According to the Brookings Institution, under reasonable assumptions about retirements and vacancies, the share of district court Republican appointees could increase from 34 percent of the judiciary in early 2017 to 50 percent by 2020. See https://www.brookings.edu/blog/fixgov/2016/11/17/trump-lower-courts/.

[2] See, e.g., Sunstein et al. (2006) and Epstein et al. (2013) for overviews of the literature, and a literature examining judge characteristics at the appellate level (e.g., Cox and Miles 2008, Chew and Kelley 2008) and trial court level (e.g., Schanzenbach and Tiller 2007, Tiede et al. 2010, Fischman and Schanzenbach 2012, Yang 2014, Kastellec 2016, Lim et al. 2016). In particular, scholars have focused on the political affiliation of the appointing president, which reflects the policy preferences of judges (Cross and Tiller 1998, George 2001), with judges appointed by Republican presidents tending to be more conservative than judges appointed by Democratic presidents (Brudney, Schiavoni, and Merritt 1999, Gottschall 1986). In a related literature, scholars have studied the impact of judge race, gender, tenure, and family background on case outcomes (see, e.g. Gruhl, Spohn, and Welch 1981, Eisenberg and Johnson 1991, Ashenfelter, Eisenberg, and Schwab 1995, Glynn and Sen 2015).

[3] See, e.g., Antonovics and Knight (2009), Ayres and Waldfogel (1994), Rehavi and Starr (2014), Anwar et al. (2012), Abrams et al. (2012), Alesina and La Ferrara (2014), Starr (2015), Arnold et al. (2017).

may be whether the party of the appointing President is a good proxy for the political affiliation or ideology of the sentencing judges. Indeed, judicial appointments may be influenced not only by the President but also the Senate. In the United States, under the norm of senatorial courtesy, a Senator of the same party as the President can exercise considerable influence on who is appointed to a judgeship. Nevertheless, prior researchers have found that in the context of federal district courts, the party of the appointing President is substantially correlated with other ideological proxies, such as the judge's own political affiliation or the political affiliation of same-party Senators (see Epstein, Landes, and Posner 2013). In robustness checks, we explore the sensitivity of our results to alternative measures of judge ideology.

B. Federal Sentencing Guidelines

Prior to the enactment of the Federal Sentencing Guidelines, federal judges had virtually unlimited discretion to sentence within broad statutory ranges of punishment. This large degree of discretion led to concerns about sentencing disparities (e.g. inter-judge, socioeconomic, and racial) and a lack of transparency in sentencing decisions (Frankel 1973). Some members of the public also argued that during this era of indeterminate sentencing, judges endangered public safety with lenient sentencing of offenders (Tonry 2005).

In order to eliminate unwarranted sentencing disparities "among defendants with similar records who have been found guilty of similar criminal conduct," Congress created the United States Sentencing Commission (USSC) to adopt and administer the Federal Sentencing Guidelines. Part of the Sentencing Reform Act of 1984, the Guidelines apply to all federal offenses committed after November 1, 1987, and prohibit courts from using race, sex, national origin, creed, religion, and socioeconomic status in sentencing decisions.

Under the Guidelines, each defendant is assigned to one of 43 offense levels and to one of six criminal history categories. The more serious the offense, the higher the base offense level. For instance, trespass offenses are assigned a base offense level of four, while kidnapping is assigned a base offense level of 32. From the base offense level, adjustments are made for applicable offense and defendant characteristics in order to obtain the final offense level. For example, adjustments are made based on characteristics such as the amount of loss involved in the offense, use of a firearm, and the age or condition of the victim. Further adjustments are made based on aggravating or mitigating factors, such as obstruction of justice or a defendant's acceptance of responsibility. The criminal history category reflects the frequency and severity of a defendant's prior criminal convictions, with points added for each prior offense. These points are then converted into a criminal history category that ranges from one to six. The combination of the final offense level and criminal history category yields a narrow Guidelines recommended sentencing range.

Exploiting the random assignment of cases to judges, early work documented that the adoption of the Guidelines reduced inter-judge sentencing disparities. Anderson, Kling, and Stith (1999) found that the difference in sentence length between two typical judges fell from 17 percent of the average sentence before the Guidelines to 11 percent in the several years after the Guidelines

were implemented. However, many scholars criticized the adoption of the mandatory Guidelines for shifting power to prosecutors in their charging and plea-bargaining decisions (see Stith and Cabranes 1998, Alschuler 1978, Nagel and Schulhofer 1992).

For almost two decades, the Guidelines were mandatory and a judge was only permitted to depart from the Guidelines if there were recognized aggravating or mitigating circumstances. A judge departing from the Guidelines sentencing range would also have to justify her reasons for departure to the appellate court. In *United States v. Booker*, decided in January of 2005, the Supreme Court held that the long-standing mandatory Guidelines were unconstitutional under the Sixth Amendment. The Court ruled that the Sixth Amendment right to a jury trial requires that, other than a prior conviction, only facts admitted by a defendant or proved beyond a reasonable doubt to a jury may be used to impose a sentence higher than the statutory maximum sentence. However, rather than invalidating the Guidelines altogether, the Supreme Court held that the Guidelines would be "effectively advisory," as opposed to mandatory. The Court explained that "district courts, while not bound to apply the Guidelines, must consult those Guidelines and take them into account when sentencing." Today, sentencing judges first calculate the recommended Guidelines range but are free to vary or depart from the range. As a result, *Booker* greatly increased the degree of judicial discretion afforded to judges.

Subsequent Supreme Court cases further increased judicial discretion by reducing the degree of appellate review for sentencing decisions (*Rita v. United States*, *Gall v. United States*), and by explicitly allowing sentencing judges to impose sentences outside the recommended Guidelines range because of policy disagreements with the USSC (*Kimbrough v. United States*). Since *Booker* and these subsequent cases were decided, researchers have found increases in both inter-judge sentencing disparities (Scott 2010, Yang 2014), as well as increases in racial disparities (USSC 2012, Fischman and Schanzenbach 2012, Yang 2015).

C. Federal Criminal Justice Process

Following arrest and the filing of initial charges, each defendant's case is assigned to a district court judge who presides over the trial, plea bargaining, and sentencing processes. In many courts, cases are randomly assigned to federal district court judges after charges are filed in order to "assure equitable distribution of caseloads and avoid judge shopping."[4] According to the Administrative Office of the US Courts, "[t]he majority of courts use some variation of a random drawing" as prescribed by local court orders.[5]

In the federal criminal justice system, prosecutors have enormous discretion in charging and plea bargaining. Because the identity of the judge is known to prosecutors during the plea bargaining process, prosecutors can endogenously adapt their initial charges and/or plea offers to dictate the sentencing range by bargaining in the "shadow of the judge" (see, e.g. Lacasse and Payne 1999).

[4] Administrative Office of the US Courts, Frequently Asked Questions: Federal Judges, available at http://www.uscourts.gov/faqs-filing-case.

[5] See http://www.uscourts.gov/faqs-filing-case.

We assess the potential contribution of prosecutors, rather than judges, to sentencing disparities in Section IV.E.

Today, over 95 percent of criminal convictions are the result of guilty pleas. Once a plea deal is reached and accepted by a judge, the case is scheduled for sentencing. To assist the judge in sentencing, a probation officer prepares a document known as the pre-sentence report (PSR) which contains detailed information on the offender's background and history, as well as facts about the crime that are either stipulated to as part of the plea agreement or relevant to sentencing. The probation officer often conducts an interview with the defendant in order to collect information on the offense, related but uncharged criminal conduct, criminal history, personal history such as family and employment, and other issues that might be relevant to sentencing.

From this information, the probation officer also calculates the base and final offense levels, the defendant's criminal history category, and the applicable Guidelines sentencing range. Both prosecution and defense are presented with a copy of this PSR prior to the sentencing hearing and permitted an opportunity to submit objections. Absent any objection, judges often directly follow the calculation of the criminal history category and final offense level prepared in the PSR and sentence the defendant accordingly. As documented by other scholars, the base and final offense levels may be endogenous to the judge if actors engage in differential fact-finding depending on which judge is assigned to the case, a phenomenon broadly known as "offense level manipulation" (Schanzenbach and Tiller 2008). For example, prosecutors may bargain with defense counsel over the facts of case in order to apply an offense level adjustment under the Guidelines, such as a mitigating role reduction in order to lower the recommended Guidelines sentence (Schulhofer and Nagel 1997).

II. Data

A. Data Sources

This paper utilizes data from three sources: (1) the United States Sentencing Commission, (2) the Transactional Records Access Clearinghouse, and (3) the Federal Judicial Center.

United States Sentencing Commission - We use publicly available data from the USSC on records of all federal offenders sentenced in fiscal years 1999-2015 (October 1, 1998 - September 30, 2015). These data include demographic, Guidelines application, and sentencing information on federal defendants. This information is obtained from numerous documents on every offender such as the indictment, pre-sentence report, plea agreement (if applicable), and judgment of conviction. However, judge identifiers are redacted in the USSC data.

Demographic variables include each defendant's race, gender, age, number of dependents, citizenship status, and educational attainment. Data is also provided on the primary offense type, with a total of 35 offense categories. Offense level variables include the base offense level and the final offense level after all adjustments. Criminal history variables include whether the defendant has a prior criminal record and the criminal history category.

Sentencing characteristics include the district court in which sentencing occurred (94 total) and the sentencing month and year.[6] Data is also available on whether a case is settled by plea agreement or trial, probation length, and the amount of any fines imposed. In this paper, we rely on sentence length in months, including zeros, as our primary sentencing outcome. For sentence length, we top-code at the first and 99th percentiles to remove the influence of outliers. Additional outcomes of interest include non-government sponsored departures from the Guidelines, the application of mandatory minimums at sentencing, and the application of government-sponsored substantial assistance motions.

Transactional Records Access Clearinghouse - We also use proprietary data from the Transactional Records Access Clearinghouse (TRAC), which provides sentencing data obtained through Freedom of Information Act requests. The data do not contain defendant demographics or Guidelines application information, but defendants are linked to the sentencing judge. The TRAC data also provide basic information on the sentencing district, sentencing month and year, as well as the length of any probation and sentence imposed, and the amount of any fines imposed.

To link detailed defendant and crime characteristics to sentencing judge, we match sentencing records from the USSC to data provided by TRAC. Specifically, we match on district court, sentencing year, sentencing month, sentence length in months, probation length in months, amount of total monetary fines, whether the case ended by trial or plea agreement, and whether the case resulted in a life sentence. On the basis of these characteristics, we successfully match approximately 50 percent of all USSC cases from fiscal years 1999-2015. The final matched dataset consists of 549,604 cases during the sample period.

Because our matching variables are sometimes not unique, particularly for cases that result in no term of imprisonment, our matched sample is different in some dimensions from the full sample of USSC cases. Compared to unmatched cases, matched cases are more likely to be of defendants who received a longer prison sentence and those who received mandatory minimums. For example, in the full USSC data from 1999-2015, the average sentence length is 46.8 months, the average final offense level is 18.2, the average final criminal history of 2.4, and 26.8 percent of defendants have a mandatory minimum that applied at sentencing. In our matched dataset, the average sentence length is 59.0 months, the average final offense is 20.2, the average final criminal history is 2.5, and 31.4 percent of defendants have a mandatory minimum that applied. In the full USSC data, 26.5 percent of cases are sentenced at the Guidelines recommended minimum and 4.7 percent of cases are sentenced at the mandatory minimum, compared to 26.7 percent and 4.0 percent in the matched dataset. All our results are estimated on this matched sample and thus our results should be interpreted with this sample in mind.

While the sample of cases in our matched dataset is skewed towards more serious cases, we also explicitly test for the underlying assumption in our empirical design: that there are no statistically significant differences in case and defendant characteristics across judges, in particular by judge

[6]USSC data prior to 2004 includes information on the exact sentencing day, but this variable is not available in later years.

political affiliation. We empirically explore this assumption in Section II.B.

Federal Judicial Center - To provide information on judge characteristics, we further match the USSC and TRAC linked data to judge biographical data from the Federal Judicial Center.[7] From the Federal Judicial Center, we obtain information on judge race, gender, political affiliation of appointing President, commission year, birth year and region, and prior experience as a prosecutor. In our sample from 1999-2015, there are a total of 1,398 unique active judges. Among these judges, 43.8 percent were appointed by Democratic presidents, 82.2 percent are white, and 79.7 percent are male.

Table 1 presents summary statistics of the cases in our matched estimation sample. Column 1 presents summary statistics for cases assigned to Republican appointed judges, column 2 presents summary statistics for cases assigned to Democratic appointed judges, and column 3 presents summary statistics for the full estimation sample.

Panel A of Table 1 shows that in terms of offender characteristics, Republican appointed judges are assigned very similar cases to Democratic appointed judges. For example, 29.8 percent of defendants assigned to Republican appointed judges are black and 28.6 percent of defendants assigned to Democratic appointed judges are black. Similarly, 13.7 percent of defendants assigned to Republican appointed judges are female and 13.5 percent of defendants assigned to Democratic appointed judges are female. Republican and Democratic judges are also assigned defendants similar in age, the rate of pleading guilty, number of dependents, U.S. citizenship status, and educational attainment.

Panel B of Table 2 reveals a similar balance in terms of criminal history category, base offense level, and final offense level. Defendants assigned to Republican appointed and Democratic appointed judges have, on average, similar base offense levels, final offense levels, and criminal history category. Cases assigned to Republican appointed judges have an average criminal history category of 2.6, base offense level of 18.8, and final offense level of 20.5, compared to 2.5, 18.3, and 20.0 for cases assigned to Democratic appointed judges, respectively. In terms of our main outcome variable, sentence length, Republican appointed judges give average sentences of 61.8 months compared to 55.5 months by Democratic appointed judges.

Panel C of Table 1 presents summary statistics on other judge characteristics by judge political affiliation. In our sample, there are a total of 710 Republican appointed judges and 688 Democratic appointed judges. Panel C reveals that black judges are disproportionately appointed by Democratic presidents, with 14.5 percent of Democratic appointed judges being black compared to 4.8 percent among Republican appointed judges. Similarly, Democratic appointed judges are more likely to be female, with 26.5 percent being female compared to 15.6 percent among Republican appointed judges. However, Democratic and Republican appointed judges are qualitatively similar in terms of age at appointment, judge tenure, background experience as a former prosecutor, and region of birth.

[7]The Federal Judicial Center does not collect demographic information on judges in three districts: Guam, Virgin Islands, and Northern Mariana Islands.

B. Testing for Case Selection by Political Affiliation

In this section, we empirically test for whether there is random case assignment to Democratic versus Republican appointed judges within each district court. As described previously in Section I.C, cases are randomly assigned to federal district court judges after charges are filed in order to "assure equitable distribution of caseloads and avoid judge shopping."

Because our paper tests whether judge political affiliation is a source of disparities in sentencing, we rely on the assumption that there are no significant differences in offender characteristics by judge political affiliation. If this assumption holds, we can attribute differences in sentence length disparities to political affiliation itself, rather than observable and unobservable characteristics that affect sentencing outcomes. In order to formally test this assumption, we regress individual judge characteristics on a full set of exogenous case characteristics.

Table 2 verifies that assignment of cases to sentencing judges is random after we condition on sentencing year and district court fixed effects. In columns 1 and 2, the dependent variable is an indicator for being assigned to a Republican appointed versus Democratic appointed judge. In columns 3 and 4, the dependent variable is judge tenure (number of years the judge has served on the bench). In columns 5 and 6, the dependent variable is an indicator for being assigned to a judge who was a former prosecutor. In columns 7 and 8, the dependent variable is an indicator for being assigned to a judge who is female. Each row in Columns 1, 3, 5, and 7 displays the coefficient from running an ordinary least squares regression of each dependent variable on the defendant characteristic in that row. Columns 2, 4, 6, and 8 display the coefficients obtained from running the same specification controlling jointly for all defendant characteristics. Across each judge characteristic, we find that there is evidence consistent with random case assignment, with p-values of the joint F-test for each judge characteristic ranging from 0.20 to 0.68. These results indicate that any differences in racial or gender gaps in sentencing by political affiliation are unlikely to be due to differential case selection, but rather judge political affiliation.

III. Empirical Methodology

A. Estimation Specification

This paper estimates the impact of judge political affiliation on racial and gender disparities in sentencing. Intuitively, we compare how similar non-black and black defendants (or female and male defendants) are sentenced based on whether they are assigned to a Democratic appointed or Republican appointed judge within the same district court.

Our preferred specification is of the form:

$$\begin{aligned} Y_{ijtc} = {} & \beta_0 + \beta_1 * Republican_{j(i)} + \beta_2 * Black_i + \beta_3 * Female_i + \beta_4 * Republican_{j(i)} * Black_i \\ & + \beta_5 * Republican_{j(i)} * Female_i + \mathbf{X}_i + \gamma_t + \kappa_c + \sigma_j + \epsilon_{ijtc} \end{aligned} \tag{1}$$

where Y_{ijtc} is the outcome of interest for defendant i sentenced by judge j in year t and district court

c. $Republican_{j(i)}$ is an indicator variable for whether defendant i was sentenced by a Republican appointed judge j. $Black_i$ is an indicator for whether the defendant i is black, where the omitted category is non-black. In robustness checks presented in Section IV.D, we explore comparisons between blacks, whites, and Hispanics. $Female_i$ is an indicator for whether the defendant i is female, where the omitted category is male.

$\mathbf{X}_i$ comprises a vector of demographic characteristics including gender, age, age squared, whether the defendant pled guilty, number of dependents, education, and citizenship status. $\mathbf{X}_i$ also includes fixed effects for the most severe offense type (35 total) and fixed effects for each criminal history category (6 total). In our preferred specification, we exclude any controls for base offense level and final offense level because of the possibility that offense level may be endogenous if prosecutors/defense counsel engage in "offense level manipulation," as discussed previously.

Our preferred specification also includes sentencing year fixed effects (γ_t) and district court fixed effects (κ_c). σ_j represent a full set of judge fixed effects to capture time-invariant unobserved differences in sentencing across judges. These judge fixed effects also control for differential behavior of prosecutors in response to the particular identity of the sentencing judge. Note that with the addition of a full set of judge fixed effects, $Republican_{j(i)}$ is unidentified. All standard errors are bootstrap-stratified at the district court level.

In this preferred specification, β_1 estimates the difference in the average sentences imposed by Republican appointed versus Democratic appointed judges for observably similar offenders. β_2 captures the presence of any baseline racial disparities in sentence length and β_3 captures the presence of any baseline gender disparities in sentence length. The main coefficients of interest are β_4, which estimates whether racial disparities in sentence length are different across Republican appointed and Democratic appointed judges, and β_5, which estimates whether gender disparities in sentence length are different across Republican appointed and Democratic appointed judges.

IV. Results

A. Guidelines Fact-Finding

We begin by exploring the impact of judge political affiliation on Guidelines fact-finding to assess whether prosecutors and/or defense counsel engage in differential fact-finding depending on the assigned judge. Table 3 presents the results of our main specification where the dependent variables are criminal history category, base offense level, and final offense level. Each regression controls for district court fixed effects, judge fixed effects, sentencing year fixed effects, and primary offense type fixed effects. Bootstrapped standard errors stratified by district court are presented in parentheses.

Column 1 of Table 3 reveals that black offenders have higher criminal histories than non-black offenders, and that female offenders have lower criminal histories than otherwise similar male offenders. Older offenders have more extensive criminal histories than younger offenders. Offenders with more children, non-citizens, and more educated offenders have lower criminal histories than their counterparts. However, there is no economically meaningful or statistically significant difference in

racial or gender differences in criminal history by judge political affiliation, consistent with prior work.

In contrast, we find statistically significant differences in racial gaps in base offense level (column 2) and final offense level (column 3) by judge political affiliation. Black defendants assigned to Republican appointed judges have a 0.12 higher base offense level relative to non-black defendants compared to black defendants assigned to Democratic appointed judges, suggesting that "offense level manipulation" may be endogenous to the sentencing judge. While the magnitude of this difference is economically small (relative to a mean base offense level of 18.6), the difference is statistically significant. Black defendants assigned to Republican appointed judges also have a 0.17 higher final offense level relative to non-black defendants compared to black defendants assigned to Democratic appointed judges, 0.8 percent of the mean final offense level of 20.2. Given these findings, our preferred specification for sentence length excludes any control for base or final offense level. We also note that these results suggest that we are likely to underestimate the magnitude of true racial gaps in sentence length by judge political affiliation if we control for measures of offense level.

B. Sentence Length

We now turn to our main results on sentence length in months. Our main outcome variable includes sentence lengths of zero and is winsorized at the one percent level. Table 4 presents these results. In column 1, we begin by presenting baseline results without judge fixed effects. We find that black offenders are sentenced to 4.8 months more in prison compared to similar non-black offenders. Female offenders receive 12.1 fewer months compared to similar male offenders. Older offenders receive longer sentences than younger offenders and defendants who are non-U.S. citizens receive longer sentences than U.S. citizens. Defendants who plead guilty, defendants who have a greater number of dependents, and defendants with higher education receive lower sentences than their respective counterparts. These results are largely consistent with the demographic differences reported in prior papers (see, e.g. Mustard 2001), although we note that our demographic results should be interpreted with caution as we are not controlling for any measure of offense severity given our findings from Table 3.

Column 1 also indicates that black judges impose lower sentences on average than non-black judges and that judges with more years of experience on the bench impose slightly longer sentences relative to their less experienced counterparts. Regarding political affiliation, we find that controlling for defendant and case characteristics, Republican appointed judges give defendants an average of 2.4 months longer in prison than Democratic appointed judges, four percent of the mean sentence length. We also find that part of the racial and gender gaps in sentencing are driven by judge political affiliation. Our interaction of Republican judge and defendant race indicates that Republican appointed judges give black offenders an additional 2.8 months in prison compared to non-black offenders, relative to Democratic appointed judges in the same district court, over half of

the baseline racial sentence gap and five percent of the mean sentence length.[8] We also find that, relative to Democratic appointed judges, Republican appointed judges give female offenders 1.8 fewer months in prison compared to males, 15 percent of the baseline gender gap in sentence length and three percent of the mean sentence length. These results are similar with the addition of final offense level fixed effects in column 2, although the magnitude of the estimates on the Republican judge indicator interacted with defendant race/gender is somewhat smaller with this control, likely due to our findings of "offense level manipulation" in Table 3.

In columns 3 and 4, we estimate our preferred specification with the addition of a full set of judge fixed effects. We continue to find that Republican appointed judges give black offenders an additional 3.0 months in prison compared to non-black offenders, relative to Democratic judges in the same district court. We also find that Republican judges give female offenders 2.1 fewer months in prison compared to males, relative to Democratic judges. Once again, these results are robust, but somewhat smaller, with the inclusion of final offense level fixed effects in column 4. Overall, these results suggest that Republican appointed judges exhibit larger racial and gender disparities in sentencing compared to Democratic appointed judges.

Next, we explore the potential for judges to exhibit differential sentencing behavior due to other judge characteristics, rather than political affiliation per se. For example, Republican appointed judges are more likely to be male. If male judges are more likely to give fewer months in prison to female defendants compared to male defendants, this could explain our main finding that Republican appointed judges exhibit smaller gender disparities than Democratic appointed judges. Similarly, Republican appointed judges are more likely to be white. If white judges impose higher sentence lengths for black defendants compared to non-black defendants, judge race may explain our previous finding that Republican appointed judges exhibit larger racial disparities than their Democratic appointed counterparts.

In Table 5, we test for the impact of other judge characteristics on racial and gender disparities in sentencing. Specifically, we test for the impact of judge race, judge gender, judge experience as a prosecutor, judge tenure as measured by years of experience,[9] and a measure of racial bias. In each column of Table 5, we add double interactions between an additional judge characteristic and defendant race and defendant gender, in addition to triple interactions between the judge characteristic, judge political affiliation, and defendant race and defendant gender.

We continue to find, even after controlling for these judge characteristics, that there is a large and significant effect of judge political affiliation on racial and gender gaps in sentencing. As before,

[8]Republican appointed judges also sentence black defendants more harshly relative to Democratic appointed judges compared to non-black defendants when the coefficients from Table 4 are expressed relative to race-specific baselines. Relative to the unconditional mean sentence for non-black defendants (52 months), Republican appointed judges sentence non-black defendants to 4.6 percent longer sentences compared to Democratic appointed judges. Relative to the unconditional mean sentence for black defendants (79 months), Republican appointed judges sentence black defendants to 6.6 percent longer sentences compared to Democratic appointed judges.

[9]In these tenure results, we limit cases to a balanced panel of judges with at least ten years of experience who we can observe in the first five years of experience. Given the time span of our study and the life tenure of district court judges, the majority of cases in our sample are decided by judges with at least ten years of experience on the federal bench.

Republican appointed judges exhibit larger racial and gender disparities compared to Democratic appointed judges, and the magnitudes of these effects are almost identical to those in our main results (Table 4). These results suggest that other judge characteristics correlated with political affiliation are unlikely to explain our main findings.

However, we also find some evidence that other judge characteristics impact racial and gender gaps in sentencing. For example, black judges exhibit smaller gender disparities than white judges (column 1), female judges exhibit smaller racial disparities compared to male judges (column 2), and judges with former experience as a prosecutor show smaller gender disparities (column 3). These results suggest that the appointment of more diverse judicial candidates could lead to lower disparities in sentencing.

Column 4 shows that judge tenure also has a significant effect on disparities, with more experienced judges exhibiting smaller racial and gender gaps compared to less experienced judges. In other words, with greater experience on the bench, Republican appointed and Democratic appointed judges become more similar in their sentencing patterns. These results suggest that judges may learn with experience (see Epstein et al. 1998, Kaheny et al. 2008), potentially from their peers, and/or that the impact of the political affiliation of the appointing President may dissipate over time, perhaps because any "loyalty" effect diminishes when the appointing President is no longer in office (Sharma and Glennon 2013, Epstein and Posner 2016).

In column 5, we control for an indicator for judges in states with high racial bias. We follow Mas and Moretti (2009) who measure racial bias in a state based on the proportion of white respondents who answer affirmatively to a question about support for laws against anti-interracial marriage from the General Social Survey. Following Mas and Moretti (2009), we then classify certain states as having high racial bias, with Southern states overrepresented in this group. We find that judges in high racial bias states exhibit substantially larger racial disparities and gender disparities than judges in other states. These results are roughly consistent with Alesina and La Ferrara (2014) who find that racial bias in capital sentencing is driven exclusively by capital sentences from Southern states.

Tables 6 and 7 present subsample results. In Table 6, we present our main results by primary offense type for the most common federal offenses. We find evidence that gender disparities by political affiliation are largely driven by violent offenses and drug offenses. We find that racial disparities by political affiliation are largely driven by drug offenses and property offenses. In Table 7, we divide the sample of cases by various measures of offense severity. In columns 1 and 2, we follow Schanzenbach (2015) and divide our sample into more serious crime categories (e.g. violent offenses, sex crimes, drug trafficking, firearms), which have substantially higher sentences, versus less serious offenses. We find evidence of racial and gender disparities by political affiliation across both subsample splits, but the magnitudes of the gaps are twice as large among the more serious offenses. In columns 3 and 4, we divide our sample into offenses that fall within Zones A, B, and C of the Guidelines grid, which recommend lower sentences, and offenses that fall within Zone D, which recommends higher sentences and requires that the minimum term must be served in prison.

We find evidence that while racial and gender disparities by political affiliation are present in cases in all zones, the gaps are largest among the most severe cases that fall within Zone D.

C. Increased Judicial Discretion

In this next section, we further explore whether racial and gender disparities driven by judge political affiliation are the result of judge-specific preferences. Specifically, if these disparities in sentencing by political affiliation reflect preferences, we might expect to see larger or more pronounced differences when judges are given more discretion. Recall that prior to 2005, the Federal Sentencing Guidelines were mandatory, such that judges were generally constrained to the sentence length recommended by the intersection of the offense level and criminal history. The Supreme Court's January 2005 decision in *Booker* rendered the Guidelines advisory, such that judges could sentence outside of the Guidelines-recommended range. As a result, one might expect judges to be more free in exhibiting their true sentencing preferences in the aftermath of *Booker*. Indeed, the rate of departures from the Guidelines-recommended range increased sharply in the aftermath of *Booker* (USSC 2012, Yang 2014).

Table 8 presents these results limiting our sample to defendants sentenced between 2002 and 2008 to explore the immediate effects of *Booker*. In column 1 of Table 8, we present results from our main specification using cases decided before *Booker* (2002-2005) and in column 2 we present results using cases decided after *Booker* (2005-2008). Column 3 reports p-values of the differences in the coefficients between columns 1 and 2. In all specifications, we control for district court fixed effects, judge fixed effects, sentencing year fixed effects, offense type and criminal history category fixed effects. Again, we do not control for any measure of offense level severity given that this control may be endogenous.

In the sample of cases decided before *Booker* (column 1), we find that in general, black defendants are sentenced to 7.4 months longer than observably similar non-black defendants. We also find evidence that Republican appointed and Democratic appointed judges exhibit different racial gaps in sentencing, with Republican appointed judges issuing sentences that are 2.3 months longer for black defendants relative to non-black compared to their Democratic appointed counterparts. In contrast, we find more limited evidence of differences in gender disparities by judge political affiliation in this pre-*Booker* period.

Among cases decided after *Booker* (column 2), racial and gender disparities by judge political affiliation expand relative to pre-*Booker*. According to column 2, Republican appointed judges sentence black defendants to 4.8 months longer in prison relative to non-blacks compared to their Democratic counterparts in the post-*Booker* period, a doubling of the gap prior to *Booker*. The difference in this racial gap by political affiliation across the two time periods is statistically significant (p-value = 0.018). Gender disparities by political affiliation are also larger and highly significant after *Booker*, with Republican appointed judges sentencing females to 1.7 months less than males compared to Democratic appointed judges, a 118 percent increase from the gender gap prior to *Booker*, although the difference across the two time periods is not statistically significant (p-value

= 0.35). These results indicate that disparities by judge political affiliation, in particular racial disparities, are larger after judges are granted substantially more discretion after *Booker*. Our evidence is consistent with the hypothesis that judges may learn to sentence more equitably under the constraining effect of the mandatory Guidelines. In a world in which the Guidelines are simply advisory, disparities by judge political affiliation expand.[10]

In Appendix Tables A1 and A2, we also explore whether sentence disparities by judge political affiliation are driven by differences in the propensity of Republican appointed versus Democratic appointed judges to depart or vary from the Guidelines. In Appendix Table A1, we find that black offenders are less likely to receive non-government sponsored below range departures and more likely to receive above range departures relative to similar non-black offenders. In contrast, female offenders are much more likely to receive below range departures and less likely to receive above range departures relative to similar male offenders. However, in terms of racial and gender gaps in departures, we find minimal evidence of any substantial differences depending on whether the defendant is assigned to a Republican appointed judge or Democratic appointed judge. In Appendix Table A2, we find that racial gaps in below and above range departures are larger post-*Booker* but that there is no significant change by judge political affiliation before and after *Booker*. These results suggest that our main findings on sentence length are not driven solely by differences in the propensity of Republican appointed and Democratic appointed judges to adhere to the Guidelines, either before or after increases in judicial discretion.

D. Robustness to Alternative Specifications

Table 9 presents a series of robustness checks for our main results. Column 1 excludes immigration offenses which often carry no prison sentence. Column 2 excludes a small subset of life sentences. Column 3 excludes border districts, which disproportionately use "fast-track" or early disposition programs for low-level immigration and drug offenses. We find very similar evidence of racial and gender disparities by political affiliation under these sample restrictions.

In column 4, we use standardized sentence length as a dependent variable following Rhodes et al. (2015), where sentence length is normalized by the mean and standard deviation of sentence length in each Guidelines cell for each sentencing year. We continue to find evidence that Republican appointed judges exhibit larger racial and gender gaps in standardized sentences compared to Democratic appointed judges.

Finally, in columns 5 and 6, we use alternative measures of judge ideology in the literature. Column 5 measures judge ideology using the judicial common space score from Bonica and Sen (2017). Column 6 measures judge ideology using the imputed common-space CFscore by Bonica and Sen (2017), computed using data on political contributions from the Database on Ideology, Money in Politics, and Elections. Both alternative measures of ideology are highly correlated with

[10]Recall that we also find that as judges become more experienced, they converge in their sentencing of different offenders (Table 5). In unreported results, we find that judge tenure has a smaller impact on convergence in sentencing outcomes when judges are granted more discretion after *Booker*, potentially because the Guidelines have less of a constraining effect when they become advisory.

the political affiliation of the appointing President. Under both alternative proxies for judge ideology, we continue to find that more conservative judges exhibit larger racial and gender disparities relative to more liberal judges within the same court.

In Appendix Table A3, we also test the robustness of our results to alternative comparisons of defendant race. In our main results, we compare black offenders to all white and non-black offenders, including those who are of Hispanic ethnicity. In Appendix Table A3, we present alternative measures of racial disparities by comparing blacks to Hispanics, blacks to non-Hispanic whites, and Hispanics to non-Hispanic whites. Interestingly, we find that racial gaps by political affiliation are present regardless of the comparison group by which black offenders are measured against (columns 1 and 2), but that there are no significant gaps in the sentencing of Hispanics versus non-Hispanic whites by judge political affiliation (column 3), although Hispanic defendants receive longer sentences on average than whites (Yang 2015, McConnell and Rasul 2017). These results suggest that black offenders are treated differently relative to both non-Hispanic whites and Hispanics by Republican appointed judges compared to Democratic appointed judges.

E. Accounting for Prosecutorial Discretion

Because prosecutors have an enormous amount of discretion in the criminal justice system, we also consider whether our main findings can be accounted for by differential decisions made by prosecutors that might affect sentence length. In particular, we consider three important decision margins made largely by prosecutors, although in combination with judges. First, we assess whether a mandatory minimum applies at sentencing given that this decision yields large racial disparities (Rehavi and Starr 2014). A mandatory minimum applies at sentencing to the extent that prosecutors have charged a mandatory minimum and judges have made findings of fact that trigger a mandatory minimum (such as drug weight or use of a firearm). Second, we assess whether a mandatory minimum binds the Guidelines recommended range such that it exceeds the lower end of the Guidelines recommended range. Finally, we assess whether the government has applied a substantial assistance departure on the basis of significant cooperation of the defendant with the government, a decision that could result in a sentence below an applicable mandatory minimum (see Fischman and Schanzenbach 2012, Yang 2015).

Appendix Table A4 regresses each of these three decisions on our preferred set of controls, and our interactions between defendant race/gender and judge political affiliation. Consistent with prior research, we find that mandatory minimums are more likely to apply at sentencing against observably similar black defendants compared to non-black offenders. In contrast, prosecutors are significantly less likely to offer substantial assistance motions to black defendants relative to non-black defendants, while they are more likely to offer substantial assistance motions to female defendants relative to male defendants. We also find some evidence that the racial gap in the application of mandatory minimums is larger for Republican appointed judges compared to Democratic appointed judges (column 1), potentially because Republican appointed judges may be more likely to find facts that invoke the application of a mandatory minimum at sentencing. However, we find no difference

in the application of a Guidelines-binding mandatory minimum or the application of a substantial assistance motion by judge political affiliation (columns 2 and 3).

To explore how much these decisions could explain our findings, Appendix Table A5 presents robustness checks of our main results on sentence length controlling for these decisions. In each specification, we control for the relevant decision margin and its full set of interactions with defendant race and gender and judge political affiliation. Even after accounting for these additional controls, we continue to find larger racial and gender disparities in sentencing among Republican appointed judges versus Democratic appointed judges.[11] In sum, these results suggest that our main findings are robust to accounting for decisions that are largely influenced by prosecutors.

V. Conclusion

In this paper, we explore the impact of judge political affiliation on racial and gender disparities in federal sentencing. Linking approximately half a million defendants to their sentencing judges, we find that Republican appointed judges sentence black defendants to longer prison terms than non-black defendants compared to Democratic appointed judges, with the difference by political affiliation approximately two-thirds of the baseline racial gap in sentence length. Republican appointed judges also sentence female defendants to shorter prison terms than males compared to Democratic appointed judges, with this difference representing roughly one-sixth of the baseline gender gap in sentencing. These results are robust to controlling for other judge characteristics, such as judge race, gender, and proxies for racial attitudes.

We also find that differences in disparities by political affiliation, particularly racial gaps in sentence length, expand when judges were given more discretion after the mandatory Guidelines were rendered advisory. Moreover, these enlarged differences cannot be solely explained by differences in the willingness of Republican appointed and Democratic appointed judges to depart from the Guidelines. These results suggest that a consequence of the advisory Guidelines system is an expansion of sentencing disparities by judge political affiliation.

Overall, these results indicate that judicial ideology may be a source of the persistent and large racial and gender disparities in the criminal justice system. The precise reasons why Republican appointed and Democratic appointed judges treat defendants differently by race or gender remain unknown but are consistent with bias against black defendants and bias in favor of female defendants. For instance, some have suggested in the context of defendant gender, that judges may sentence females more leniently than males because of a perception that women are mere accessories to male partners, or that women are primary caregivers to children (see Goulette et al. 2015, Starr 2015).[12] Our results suggest that a judge's political ideology may affect how they view the dangerousness or blameworthiness of different defendants.

[11] We note that the magnitude of our main result is halved when we control for the application of a mandatory minimum. We view this result as an underestimate of the true racial gap in sentencing given the potential endogeneity of this decision (Appendix Table A4.)

[12] In unreported results, we find that female defendants with more dependents receive shorter sentences than females with fewer dependents, although this relationship does not differ by judge political affiliation.

According to our findings, racial disparities in sentencing would be almost halved if federal district courts were comprised of all Democratic appointed judges, and reduced by more than five percent if courts were comprised of ten percent more judges appointed by Democratic presidents. In recent decades, the typical president has appointed roughly 160 district court judges in a four-year term.[13] Under the current composition of the federal court system, these appointments could change the partisan composition of district courts by 15 to 20 percentage points, which could substantially alter gender and racial disparities in the criminal justice system depending on the political affiliation of the appointing President. The potential to affect disparities is even larger for two-term Presidents.

Our results also have implications for the appointments process of federal judges, potentially suggesting the importance of more rigorous and non-partisan selection and vetting procedures. Historically, the American Bar Association (ABA) Standing Committee on the Federal Judiciary has played a large role in providing evaluations of federal judicial candidates, noting that they rate candidates not based on political affiliation or ideology, but rather "strictly on ... integrity, professional competence and judicial temperament" (American Bar Association 2009). However, our results suggest that political ideology does, in fact, infuse the federal judiciary, consistent with Bonica and Sen (2017) who document the presence of ideologically-based selection in federal courts. This politicization of the judiciary may in fact get worse given the position of the current administration to disregard the long-standing practice of inviting the ABA Standing Committee to review the professional qualifications of candidates.[14] Indeed, our results caution against recent reforms to reduce the votes needed for confirming federal judges,[15] and the elimination of the use of blue-slips that allow home-state senators to block judicial nominations, which commentators have claimed would allow Presidents to "prioritize ideology over experience or legal talent."[16]

Ultimately, our results indicate that the selection and appointment of federal district court judges is important not only for administering the legal system, but also has important distributional consequences, particularly in the current system where judges are granted considerable discretion and where they hold lifetime tenure.[17] We view exploring the impact of the selection of public officials on disparities in the criminal justice system as an important area for future research.

[13] See, e.g., https://fas.org/sgp/crs/misc/R43058.pdf.

[14] See, for example, https://www.americanprogress.org/issues/courts/news/2017/05/12/432340/trump-disregarding-senate-norms-get-judges-bench/.

[15] See https://www.wsj.com/articles/reid-moves-to-dilute-senate-filibuster-rules-1385050841.

[16] https://www.wsj.com/articles/checks-on-trumps-court-picks-fall-away-1511119789.

[17] See, for example, George Soros' mission to "find, prepare and finance criminal justice reform-oriented candidates for jobs that have been held by longtime incumbents and serve as pipelines to the federal courts..." See http://www.politico.com/story/2016/08/george-soros-criminal-justice-reform-227519.

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Table 1: Summary Statistics

	Republican Appointed (1)	Democratic Appointed (2)	All Judges (3)
Panel A: Offender Characteristics			
Offender Black	0.298	0.286	0.293
	(0.457)	(0.452)	(0.455)
Offender Female	0.137	0.135	0.136
	(0.343)	(0.341)	(0.342)
Offender Age	36.019	36.094	36.052
	(11.173)	(11.218)	(11.193)
Guilty Plea	0.940	0.943	0.942
	(0.237)	(0.232)	(0.235)
Offender # of Dependents	1.532	1.531	1.532
	(1.707)	(1.720)	(1.713)
Offender Non-Citizen	0.232	0.261	0.245
	(0.422)	(0.439)	(0.430)
High School Degree	0.336	0.325	0.331
	(0.472)	(0.468)	(0.471)
Some College	0.185	0.183	0.184
	(0.389)	(0.387)	(0.388)
College	0.069	0.073	0.071
	(0.253)	(0.261)	(0.256)
Panel B: Case Characteristics			
Criminal History Category	2.570	2.499	2.539
	(1.793)	(1.774)	(1.785)
Base Offense Level	18.796	18.252	18.557
	(10.226)	(10.165)	(10.203)
Final Offense Level	20.451	19.989	20.248
	(8.958)	(8.795)	(8.890)
Sentence Length (Months)	61.760	55.530	59.027
	(71.730)	(66.591)	(69.592)
Panel C: Judge Characteristics			
Judge Age	62.067	61.400	61.774
	(9.229)	(9.124)	(9.189)
Judge Tenure	13.607	11.722	12.780
	(8.172)	(8.303)	(8.283)
Judge Former Prosecutor	0.065	0.062	0.064
	(0.247)	(0.241)	(0.244)
Judge Born in South	0.401	0.365	0.385
	(0.490)	(0.481)	(0.487)
Judge Black	0.048	0.145	0.090
	(0.214)	(0.352)	(0.287)
Judge Female	0.156	0.265	0.204
	(0.363)	(0.441)	(0.403)
N	308,569	241,035	549,604

Note: This table presents summary statistics on defendant characteristics, case characteristics, and judge characteristics, by political affiliation of judges' appointing President. Standard deviations are presented in parentheses.

Table 2: Test of Random Case Assignment to Judges

	Republican	Republican	Tenure	Tenure	Prosecutor	Prosecutor	Female	Female
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Offender Black	0.004	-0.002	0.032	0.033	-0.001	-0.001	0.004	0.005
	(0.008)	(0.008)	(0.127)	(0.133)	(0.002)	(0.002)	(0.005)	(0.005)
Offender Female	-0.001	-0.003	-0.064	-0.065	-0.002*	-0.002^t	0.005**	0.004*
	(0.003)	(0.003)	(0.048)	(0.050)	(0.001)	(0.001)	(0.002)	(0.002)
Offender Age	-0.000	-0.000	0.004*	0.003^t	0.000*	0.000**	0.000	0.000
	(0.000)	(0.000)	(0.002)	(0.002)	(0.000)	(0.000)	(0.000)	(0.000)
Guilty Plea	-0.003	-0.002	-0.099	-0.081	-0.001	-0.001	0.003	0.004
	(0.006)	(0.006)	(0.090)	(0.085)	(0.002)	(0.002)	(0.004)	(0.004)
Offender # of Dependents	-0.001	-0.000	-0.002	-0.000	-0.001*	-0.001*	0.000	0.000
	(0.001)	(0.001)	(0.010)	(0.009)	(0.000)	(0.000)	(0.000)	(0.000)
Offender Non-Citizen	-0.022**	-0.023**	-0.090	-0.080	0.001	0.001	-0.002	0.003
	(0.011)	(0.009)	(0.111)	(0.097)	(0.002)	(0.002)	(0.005)	(0.005)
High School	0.006^t	0.003	0.002	0.017	0.000	-0.001	-0.001	0.002
	(0.004)	(0.004)	(0.038)	(0.043)	(0.001)	(0.001)	(0.001)	(0.002)
Some College	0.001	-0.000	0.009	0.023	-0.002^t	-0.003*	0.005^t	0.006^t
	(0.004)	(0.005)	(0.053)	(0.066)	(0.001)	(0.002)	(0.003)	(0.004)
College	0.001	0.001	0.104	0.090	-0.001	-0.003	0.008**	0.010**
	(0.005)	(0.007)	(0.099)	(0.127)	(0.001)	(0.002)	(0.004)	(0.005)
N		527,519		527,325		527,519		527,519
R^2		0.139		0.101		0.212		0.096
Joint F-test		[0.411]		[0.676]		[0.251]		[0.203]

Note: This table reports tests of random case assignment to judges. Each row in Columns 1, 3, 5, and 7 display the coefficient from running an OLS regression of each dependent variable on the defendant characteristic in that row, controlling for sentencing year and district court fixed effects. Columns 2, 4, 6, and 8 display the coefficients obtained from running the same specification controlling jointly for all defendant characteristics. In columns 1 and 2, the dependent variable is an indicator for being assigned to a Republican versus Democratic judge. In columns 3 and 4, the dependent variable is the number of years the judge has served on the bench. In columns 5 and 6, the dependent variable is an indicator for being assigned to a judge who was a former prosecutor. In columns 7 and 8, the dependent variable is an indicator for being assigned to a judge who is female. The p-value reported at the bottom of columns 2, 4, 6, and 8 is for a F-test of the joint significance of the variables listed in the rows with the standard errors clustered at the district court level. *** = significant at 1 percent level, ** = significant at 5 percent level, * = significant at 10 percent level, ^{t} = significant at 15 percent level.

Table 3: Guidelines Fact-Finding

	Criminal History	Base Offense Level	Final Offense Level
	(1)	(2)	(3)
Offender Black	0.706***	0.313***	0.649***
	(0.007)	(0.028)	(0.029)
Offender Female	-0.771***	-0.709***	-2.055***
	(0.009)	(0.031)	(0.030)
Offender Age	0.128***	0.056***	0.189***
	(0.001)	(0.004)	(0.005)
Guilty Plea	-0.041***	-1.898***	-5.982***
	(0.010)	(0.037)	(0.040)
Offender # of Dependents	-0.024***	0.109***	0.112***
	(0.001)	(0.004)	(0.006)
Offender Non-Citizen	-0.794***	0.526***	-0.009
	(0.006)	(0.023)	(0.028)
High School	-0.066***	-0.159***	-0.116***
	(0.005)	(0.018)	(0.026)
Some College	-0.553***	-0.457***	-0.418***
	(0.005)	(0.021)	(0.026)
College	-0.899***	-0.583***	-0.095**
	(0.007)	(0.031)	(0.042)
Judge Age	0.013***	0.135***	0.227***
	(0.005)	(0.018)	(0.018)
Judge Age Sq.	-0.000	-0.001***	-0.001***
	(0.000)	(0.000)	(0.000)
Judge Rep x Off Black	0.009	0.117***	0.174***
	(0.009)	(0.038)	(0.034)
Judge Rep x Off Female	-0.017	0.007	-0.019
	(0.013)	(0.037)	(0.039)
N	527,319	526,220	527,319
R^2	0.276	0.746	0.490
Mean of Dep. Variable	2.539	18.557	20.248

Note: This table presents OLS results for criminal history category and offense level. The dependent variable in column 1 is criminal history category (1-6), the dependent variable in column 2 is base offense level (1-43), and the dependent variable in column 3 is final offense level (1-43). Each regression controls for district court fixed effects, judge fixed effects, sentencing year fixed effects, and primary offense type fixed effects. Bootstrapped standard errors stratified by district court are presented in parentheses. *** = significant at 1 percent level, ** = significant at 5 percent level, * = significant at 10 percent level, ^{t} = significant at 15 percent level.

Table 4: Sentence Length in Months

	(1)	(2)	(3)	(4)
Offender Black	4.828***	3.312***	4.612***	3.540***
	(0.277)	(0.150)	(0.294)	(0.182)
Offender Female	-12.053***	-4.197***	-11.802***	-4.137***
	(0.248)	(0.163)	(0.234)	(0.205)
Offender Age	0.811***	0.219***	0.798***	0.230***
	(0.043)	(0.022)	(0.038)	(0.025)
Guilty Plea	-72.274***	-24.426***	-71.827***	-24.303***
	(0.458)	(0.349)	(0.419)	(0.250)
Offender # of Dependents	0.871***	-0.168***	0.881***	-0.173***
	(0.063)	(0.030)	(0.049)	(0.033)
Offender Non-Citizen	5.260***	2.035***	5.483***	2.214***
	(0.244)	(0.090)	(0.240)	(0.131)
High School	-1.316***	-0.722***	-1.318***	-0.702***
	(0.180)	(0.075)	(0.161)	(0.132)
Some College	-3.115***	-2.279***	-3.267***	-2.255***
	(0.214)	(0.159)	(0.226)	(0.122)
College	-3.129***	-3.990***	-3.246***	-3.839***
	(0.321)	(0.205)	(0.287)	(0.197)
Judge Age	0.349***	-0.130***	0.815***	-0.475***
	(0.097)	(0.039)	(0.151)	(0.047)
Judge Age Sq.	-0.003***	0.001***	-0.005***	0.002***
	(0.001)	(0.000)	(0.001)	(0.000)
Judge Black	-0.807***	-0.377*		
	(0.286)	(0.223)		
Judge Female	0.314^{t}	0.109		
	(0.191)	(0.122)		
Judge Tenure	0.029**	-0.041***		
	(0.014)	(0.005)		
Judge Former Prosecutor	-0.627*	-0.263^{t}		
	(0.338)	(0.161)		
Judge Born in South	-0.138	0.092		
	(0.254)	(0.173)		
Judge Rep	2.390***	1.547***		
	(0.170)	(0.083)		
Judge Rep x Off Black	2.778***	1.728***	3.029***	1.645***
	(0.355)	(0.222)	(0.349)	(0.240)
Judge Rep x Off Female	-1.839***	-1.517***	-2.056***	-1.678***
	(0.317)	(0.131)	(0.284)	(0.215)
N	526,862	526,862	526,862	526,862
R^2	0.427	0.774	0.436	0.777
Judge FE?	No	No	Yes	Yes

Note: This table presents OLS results where the dependent variable is sentence length in months winsorized at the top and bottom one percent. Each regression controls for district court fixed effects, sentencing year fixed effects, primary offense type fixed effects, and criminal history category fixed effects. Columns 2 and 4 add final offense level fixed effects. Columns 3 and 4 add judge fixed effects. Bootstrapped standard errors stratified by district court are presented in parentheses. *** = significant at 1 percent level, ** = significant at 5 percent level, * = significant at 10 percent level, ^{t} = significant at 15 percent level.

Table 5: Sentence Length Controlling for Other Judge Characteristics

Judge Characteristic:	Black	Female	Prosecutor	Tenure	Racial Bias
	(1)	(2)	(3)	(4)	(5)
Offender Black	4.544***	5.012***	4.597***	10.941***	4.480***
	(0.303)	(0.414)	(0.318)	(0.708)	(0.274)
Offender Female	-11.987***	-11.905***	-11.914***	-13.052***	-10.973***
	(0.235)	(0.263)	(0.292)	(0.530)	(0.255)
Judge Rep x Off Black	3.265***	3.037***	3.404***	1.501	2.569***
	(0.408)	(0.523)	(0.432)	(1.240)	(0.347)
Judge Rep x Off Female	-2.106***	-2.036***	-2.185***	-2.865***	-1.876***
	(0.316)	(0.306)	(0.376)	(1.016)	(0.337)
Judge Char x Off Black	0.402	-1.484**	0.224	-0.576***	3.521***
	(0.680)	(0.629)	(1.202)	(0.066)	(0.401)
Judge Char x Off Female	2.941***	0.398	1.829**	0.094*	-1.592***
	(0.617)	(0.495)	(0.888)	(0.056)	(0.310)
Judge Rep x Judge Char x Off Black	-3.590**	-1.053	-4.692***	-0.309**	0.519
	(1.494)	(0.896)	(1.507)	(0.137)	(0.501)
Judge Rep x Judge Char x Off Female	0.981	0.114	1.966^t	0.263**	-2.097***
	(1.036)	(0.816)	(1.292)	(0.120)	(0.313)
N	526,862	526,862	526,862	247,507	495,192
R^2	0.436	0.436	0.436	0.430	0.437

Note: This table presents OLS results where the dependent variable is sentence length in months winsorized at the top and bottom one percent. Each column adds controls for the full set of interactions between judge political affiliation, the judge characteristic listed above, and defendant race and gender. Column 1 controls for whether the judge is black, column 2 controls for whether the judge is female, column 3 controls for whether the judge was a former prosecutor, column 4 controls for judge tenure (limited to a balanced panel of judges with at least ten years of experience who we can observe in the first five years of experience), and column 5 controls for an indicator variable for judges in district courts with high racial bias following Mas and Moretti (2009). Each regression controls for district court fixed effects, judge fixed effects, sentencing year fixed effects, primary offense type fixed effects, and criminal history category fixed effects. Bootstrapped standard errors stratified by district court are presented in parentheses. *** = significant at 1 percent level, ** = significant at 5 percent level, * = significant at 10 percent level, ^{t} = significant at 15 percent level.

Table 6: Sentence Length by Offense Type

	Violent	Drugs	Firearms	Property	Immig.	Sex	White Collar
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Offender Black	7.433***	5.139***	7.656***	0.524	0.131	-8.004*	-1.946***
	(1.436)	(0.501)	(0.738)	(0.699)	(0.695)	(4.218)	(0.334)
Offender Female	-16.929***	-20.065***	-19.828***	-2.240***	-4.748***	-3.183	-5.593***
	(1.907)	(0.468)	(1.460)	(0.607)	(0.479)	(11.512)	(0.255)
Judge Rep x Off Black	1.219	3.940***	0.183	1.501^{t}	0.496	-1.013	0.397
	(1.854)	(0.661)	(0.985)	(0.950)	(0.954)	(5.352)	(0.431)
Judge Rep x Off Female	-4.393*	-1.629***	1.141	-0.868	-0.344	0.466	-0.440
	(2.326)	(0.599)	(1.932)	(0.815)	(0.647)	(12.081)	(0.379)
N	27,781	195,747	75,150	16,136	61,794	17,168	101,949
R^2	0.455	0.409	0.346	0.406	0.421	0.328	0.260

Note: This table presents OLS results where the dependent variable is sentence length in months winsorized at the top and bottom one percent. Column 1 includes violent crimes such as murder, manslaughter, kidnapping, sexual abuse, assault, and bank robbery. Column 2 includes drug crimes. Column 3 includes firearms offenses. Column 4 includes theft and larceny offenses. Column 5 includes immigration offenses. Column 6 includes sex offenses such as child pornography. Column 7 includes white collar offenses. Each regression controls for district court fixed effects, judge fixed effects, sentencing year fixed effects, primary offense type fixed effects, and criminal history category fixed effects. Bootstrapped standard errors stratified by district court are presented in parentheses. *** = significant at 1 percent level, ** = significant at 5 percent level, * = significant at 10 percent level, ^{t} = significant at 15 percent level.

Table 7: Sentence Length by Offense Severity

	Less Serious	More Serious	Zone A,B, and C	Zone D
	(1)	(2)	(3)	(4)
Offender Black	-1.033***	6.559***	0.510***	5.141***
	(0.289)	(0.481)	(0.108)	(0.329)
Offender Female	-5.179***	-21.169***	-0.991***	-15.728***
	(0.197)	(0.533)	(0.082)	(0.303)
Judge Rep x Off Black	0.948**	2.106***	0.267*	3.058***
	(0.409)	(0.600)	(0.151)	(0.384)
Judge Rep x Off Female	-0.460**	-1.177^t	-0.432***	-1.456***
	(0.230)	(0.725)	(0.120)	(0.390)
N	216,181	310,681	96,629	430,423
R^2	0.327	0.359	0.200	0.380

Note: This table presents OLS results where the dependent variable is sentence length in months winsorized at the top and bottom one percent. Column 1 includes less serious offenses with lower Guidelines sentences following Schanzenbach (2015) as described in the main text. Column 2 includes the remaining more serious offenses. Column 3 includes cases with Guidelines sentences in Zones A, B, and C. Column 4 includes cases with Guidelines sentences in Zone D. Each regression controls for district court fixed effects, judge fixed effects, sentencing year fixed effects, primary offense type fixed effects, and criminal history category fixed effects. Bootstrapped standard errors stratified by district court are presented in parentheses. *** = significant at 1 percent level, ** = significant at 5 percent level, * = significant at 10 percent level, ^{t} = significant at 15 percent level.

Table 8: Sentence Length - *Booker*

	Before *Booker*	After *Booker*	p-value
	(1)	(2)	(3)
Offender Black	7.377***	3.844***	0.000
	(0.466)	(0.636)	
Offender Female	-12.892***	-12.605***	0.705
	(0.481)	(0.565)	
Judge Rep x Off Black	2.327***	4.769***	0.018
	(0.759)	(0.700)	
Judge Rep x Off Female	-0.778	-1.742**	0.349
	(0.734)	(0.714)	
N	100,876	120,777	
R^2	0.461	0.456	

Note: This table presents OLS results where the dependent variable is sentence length in months winsorized at the top and bottom one percent. The before *Booker* sample includes cases sentenced from the beginning of 2002 to January 11, 2005. The after *Booker* sample includes cases sentenced from January 12, 2005 to the end of 2008. Column 3 presents p-values of the difference in the coefficients between column 1 and column 2. Each regression controls for district court fixed effects, judge fixed effects, sentencing year fixed effects, primary offense type fixed effects, and criminal history category fixed effects. Bootstrapped standard errors stratified by district court are presented in parentheses. *** = significant at 1 percent level, ** = significant at 5 percent level, * = significant at 10 percent level, ^{t} = significant at 15 percent level.

Table 9: Robustness Tests

	Excluding Immigration Offenses	Excluding Life Sentences	Excluding Border Districts	Sentence Z-Score	Common Space Scores	Political Contribution Scores
	(1)	(2)	(3)	(4)	(5)	(6)
Offender Black	4.096***	4.737***	4.085***	0.104***	6.092***	5.744***
	(0.295)	(0.243)	(0.279)	(0.005)	(0.220)	(0.203)
Offender Female	-11.841***	-11.621***	-11.830***	-0.239***	-12.787***	-12.684***
	(0.278)	(0.255)	(0.253)	(0.005)	(0.163)	(0.185)
Judge Rep x Off Black	2.643***	3.098***	3.441***	0.025***	2.154***	2.549***
	(0.414)	(0.362)	(0.386)	(0.006)	(0.208)	(0.293)
Judge Rep x Off Female	-2.477***	-2.077***	-2.158***	-0.016**	-1.560***	-1.684***
	(0.398)	(0.239)	(0.385)	(0.007)	(0.190)	(0.251)
N	465,068	524,011	453,837	526,610	526,514	509,096
R^2	0.430	0.435	0.443	0.117	0.436	0.436

Note: This table presents robustness checks for our main results. Column 1 uses sentence length as a dependent variable but excludes immigration offenses. Column 2 uses sentence length as a dependent variable but excludes life sentences. Column 3 uses sentence length as a dependent variable but excludes border districts. Column 4 uses a standardized sentence length as a dependent variable, which is normalized by the mean and standard deviation in each Guidelines cell in each sentencing year. Column 5 uses sentence length as a dependent variable and measures judge ideology using the judicial common space score from Bonica and Sen (2017). Column 6 uses sentence length as a dependent variable and measures judge ideology using the imputed common-space CFscore computed using data on political contributions from the Database on Ideology, Money in Politics, and Elections by Bonica and Sen (2017). Each regression controls for district court fixed effects, judge fixed effects, sentencing year fixed effects, primary offense type fixed effects, and criminal history category fixed effects. Bootstrapped standard errors stratified by district court are presented in parentheses. *** = significant at 1 percent level, ** = significant at 5 percent level, * = significant at 10 percent level, ^{t} = significant at 15 percent level.

Table A1: Departures from the Guidelines

	Below Range	Above Range
	(1)	(2)
Offender Black	-0.013***	0.007***
	(0.002)	(0.001)
Offender Female	0.037***	-0.007***
	(0.002)	(0.001)
Offender Age	-0.008***	0.000**
	(0.000)	(0.000)
Guilty Plea	-0.068***	-0.032***
	(0.003)	(0.001)
Offender # of Dependents	0.001*	-0.001***
	(0.000)	(0.000)
Offender Non-Citizen	-0.014***	0.007***
	(0.002)	(0.001)
High School	0.003***	-0.001^t
	(0.001)	(0.001)
Some College	0.012***	0.000
	(0.002)	(0.001)
College	0.027***	-0.007***
	(0.003)	(0.001)
Judge Rep x Off Black	-0.000	-0.002
	(0.002)	(0.001)
Judge Rep x Off Female	0.002	-0.003**
	(0.003)	(0.001)
N	526,862	526,862
R^2	0.112	0.032
Mean of Dep. Variable	0.177	0.031

Note: This table presents OLS results for departures from the Sentencing Guidelines recommended range. The dependent variable in column 1 is an indicator variable for a non-government sponsored below range sentence, and the dependent variable in column 2 is an indicator variable for an above range sentence. Each regression controls for district court fixed effects, judge fixed effects, sentencing year fixed effects, primary offense type fixed effects, and criminal history category fixed effects. Bootstrapped standard errors stratified by district court are presented in parentheses. *** = significant at 1 percent level, ** = significant at 5 percent level, * = significant at 10 percent level, ^{t} = significant at 15 percent level.

Table A2: Departures from the Guidelines - *Booker*

	Below Range		Above Range	
	Before *Booker*	After *Booker*	Before *Booker*	After *Booker*
	(1)	(2)	(3)	(4)
Offender Black	-0.011***	-0.014***	0.001	0.004**
	(0.003)	(0.003)	(0.001)	(0.002)
Offender Female	0.042***	0.030***	-0.006***	-0.011***
	(0.005)	(0.005)	(0.002)	(0.002)
Judge Rep x Off Black	0.001	-0.003	0.002	0.000
	(0.004)	(0.004)	(0.002)	(0.002)
Judge Rep x Off Female	-0.015***	0.006	-0.002	-0.002
	(0.006)	(0.007)	(0.002)	(0.003)
N	100,876	120,777	100,876	120,777
R^2	0.181	0.088	0.038	0.037
Mean of Dep. Variable	0.109	0.157	0.022	0.036

Note: This table presents OLS results for departures from the Sentencing Guidelines recommended range. The dependent variable in column 1 and column 2 is an indicator variable for a non-government sponsored below range sentence, and the dependent variable in column 3 and column 4 is an indicator variable for an above range sentence. The before *Booker* sample includes cases sentenced from the beginning of 2002 to January 11, 2005. The after *Booker* sample includes cases sentenced from January 12, 2005 to the end of 2008. Each regression controls for district court fixed effects, judge fixed effects, sentencing year fixed effects, primary offense type fixed effects, and criminal history category fixed effects. Bootstrapped standard errors stratified by district court are presented in parentheses. *** = significant at 1 percent level, ** = significant at 5 percent level, * = significant at 10 percent level, ^{t} = significant at 15 percent level.

Table A3: Sentence Length by Defendant Race

	Blacks v. Hisp Off Race = 1(Black) (1)	Blacks v. Non-Hisp Whites Off Race = 1(Black) (2)	Hisp v. Non-Hisp Whites Off Race = 1(Hisp) (3)
Offender Race	-0.501	6.590***	8.134***
	(0.384)	(0.346)	(0.309)
Offender Female	-12.988***	-10.880***	-10.748***
	(0.341)	(0.294)	(0.323)
Judge Rep x Off Race	2.330***	2.998***	0.204
	(0.414)	(0.406)	(0.409)
Judge Rep x Off Female	-2.096***	-2.709***	-1.381***
	(0.468)	(0.415)	(0.336)
N	316,855	342,497	343,416
R^2	0.453	0.451	0.402

Note: This table presents OLS results where the dependent variable is sentence length in months winsorized at the top and bottom one percent. Column 1 includes blacks and hispanic defendants where the race indicator is equal to 1 for black defendants. Column 2 includes blacks and white defendants where the race indicator is equal to 1 for black defendants. Column 3 includes hispanic and white defendants where the race indicator is equal to 1 for hispanic defendants. Each regression controls for district court fixed effects, judge fixed effects, sentencing year fixed effects, primary offense type fixed effects, and criminal history category fixed effects. Bootstrapped standard errors stratified by district court are presented in parentheses. *** = significant at 1 percent level, ** = significant at 5 percent level, * = significant at 10 percent level, ^{t} = significant at 15 percent level.

Table A4: Prosecutorial Discretion

	Mand Min (MM) (1)	Binding Mand Min (BMM) (2)	Sub Assistance (SA) (3)
Offender Black	0.042***	0.013***	-0.028***
	(0.002)	(0.001)	(0.002)
Offender Female	-0.032***	-0.001	0.032***
	(0.002)	(0.002)	(0.003)
Judge Rep x Off Black	0.008***	0.001	0.004^{t}
	(0.002)	(0.002)	(0.003)
Judge Rep x Off Female	-0.001	0.001	0.005^{t}
	(0.003)	(0.003)	(0.004)
N	526,722	527,319	519,655
R^2	0.442	0.204	0.143

Note: This table presents OLS results. The dependent variable in Column 1 is an indicator equal to 1 for any mandatory minimum. The dependent variable in Column 2 is an indicator equal to 1 for any "binding" mandatory minimum, defined as if the mandatory minimum exceeds the lower end of the Guidelines recommended sentence. The dependent variable in Column 3 is an indicator equal to 1 for any government-sponsored substantial assistance motion. Each regression controls for district court fixed effects, judge fixed effects, sentencing year fixed effects, primary offense type fixed effects, and criminal history category fixed effects. Bootstrapped standard errors stratified by district court are presented in parentheses. *** = significant at 1 percent level, ** = significant at 5 percent level, * = significant at 10 percent level, ^{t} = significant at 15 percent level.

Table A5: Sentence Length Controlling for Prosecutorial Discretion

	Control MM	Control BMM	Control SA
	(1)	(2)	(3)
Offender Black	-2.759***	1.380***	4.547***
	(0.205)	(0.329)	(0.309)
Offender Female	-2.252***	-8.726***	-11.156***
	(0.216)	(0.273)	(0.222)
Control	61.925***	8.740***	-14.313***
	(0.356)	(0.380)	(0.307)
Control x Off Black	13.491***	19.633***	-1.844***
	(0.455)	(0.815)	(0.566)
Control x Off Female	-32.181***	-19.709***	-0.607
	(0.710)	(0.707)	(0.482)
Judge Rep x Off Black	1.255***	3.011***	3.153***
	(0.289)	(0.414)	(0.352)
Judge Rep x Off Female	-0.809***	-2.004***	-2.086***
	(0.257)	(0.352)	(0.318)
N	526,266	526,862	519,208
R^2	0.552	0.443	0.442

Note: This table presents OLS results where the dependent variable is sentence length in months winsorized at the top and bottom one percent. Column 1 controls for a full set of interactions between MM (any mandatory minimum), offender gender and race, and judge political affiliation. Column 2 controls for a full set of interactions between BMM (any binding mandatory minimum), offender gender and race, and judge political affiliation. Column 3 controls a full set of interactions between SA (any substantial assistance motion), offender gender and race, and judge political affiliation. Each regression controls for district court fixed effects, judge fixed effects, sentencing year fixed effects, primary offense type fixed effects, and criminal history category fixed effects. Bootstrapped standard errors stratified by district court are presented in parentheses. *** = significant at 1 percent level, ** = significant at 5 percent level, * = significant at 10 percent level, ^{t} = significant at 15 percent level.