Gender Disparities in Plea Bargaining

Carlos Berdejo
Loyola Law School - Los Angeles, carlos.berdejo@lls.edu

Follow this and additional works at: https://www.repository.law.indiana.edu/ilj

Part of the Civil Rights and Discrimination Commons, Criminal Law Commons, Law and Gender Commons, Law and Race Commons, and the Law and Society Commons

Recommended Citation
Available at: https://www.repository.law.indiana.edu/ilj/vol94/iss4/1

This Article is brought to you for free and open access by the Law School Journals at Digital Repository @ Maurer Law. It has been accepted for inclusion in Indiana Law Journal by an authorized editor of Digital Repository @ Maurer Law. For more information, please contact rvaughan@indiana.edu.
GENDER DISPARITIES IN PLEA BARGAINING

CARLOS BERDEJÓ

Across wide-ranging contexts, academic literature and the popular press have identified pervasive gender disparities favoring men over women in society. One area in which gender disparities have conversely favored women is the criminal justice system. Most of the empirical research examining gender disparities in criminal case outcomes has focused on judges’ sentencing decisions. Few studies have assessed disparities in the steps leading up to a defendant’s conviction, where various actors make choices that constrain judges’ ultimate sentencing discretion. This Article addresses this gap by examining gender disparities in the plea-bargaining process. The results presented in this Article reveal significant gender disparities in this stage of the criminal justice system.

Female defendants are about twenty percent more likely than male defendants to have their principal initial charge dropped or reduced. These gender disparities are greater in cases involving misdemeanors and low-level felonies. In cases involving serious felonies, male and female defendants achieve similar outcomes. Defendants’ criminal histories also play a key role in mediating gender disparities. While female defendants with no prior convictions receive charge reductions more often than male defendants with no prior convictions, male and female defendants with prior convictions are afforded similar treatment. These patterns in gender disparities suggest that in these “low information” cases gender may be being used as a proxy for a defendant’s latent criminality and likelihood to recidivate.

Building upon these results and the existing literature documenting racial disparities in criminal case outcomes, the Article explores the intersection of gender and race in determining disparities in the plea-bargaining process. The results indicate that gender and racial disparities complement each other in a way that yields additive effects. The charge reduction rate for white female defendants is more than double that of black male defendants. White male and black female defendants experience similar charge reduction rates, in between those of white female and black male defendants. Consistent with the pattern of gender disparities documented in the Article, these intergroup disparities are greater in cases involving misdemeanor offenses and defendants with no prior convictions.

INTRODUCTION ........................................................................................................1248

I. GENDER, RACE, AND CRIMINAL CASE OUTCOMES ........................................1253
   A. THE CRITICAL ROLE OF PROSECUTORS ..............................................1253
   B. GENDER DISPARITIES IN CRIMINAL CASE OUTCOMES......................1255

* Professor of Law and J. Howard Ziemann Fellow, Loyola Law School, Los Angeles.
INTRODUCTION

The prevalence of gender disparities favoring men over women has been the subject of increased scrutiny in the academic literature and popular press. Much of the empirical literature examining these gender disparities has focused on labor market outcomes, finding that women are less likely to be hired than equally qualified men and that females earn lower wages than their male counterparts.1

1. See, e.g., Debra A. Barbezat & James W. Hughes, Salary Structure Effects and the Gender Pay Gap in Academia, 46 RES. HIGHER EDUC. 621, 628 (2005) (finding that male faculty earn 20.7% more than comparable female faculty); Marianne Bertrand, Claudia Goldin & Lawrence F. Katz, Dynamics of the Gender Gap for Young Professionals in the Financial and Corporate Sectors, 2 AM. ECON. J. 228, 236 (2010) (analyzing a sample of business school graduates and finding that “[w]omen earn $115K on average at graduation, and $250K nine years out; [while] men earn $130K on average at graduation, and $400K nine years out”); Marianne Bertrand & Kevin F. Hallock, The Gender Gap in Top Corporate Jobs, 55 INDUS.
Instances of various forms of gender-based discrimination in the workplace are well documented. There is also extensive work examining gender disparities that adversely impact women in many other areas including the sciences, sports, healthcare, and even in the purchase of a new car.

The criminal justice system is one area in which gender disparities have traditionally favored women relative to men. Studies examining federal and state criminal cases have documented the existence of sentencing disparities favoring

& LAB. REL. REV. 3, 5 (2001) (finding that females in top corporate positions earn thirty-three percent less than males); Dan A. Black, Amelia M. Haviland, Seth G. Sanders & Lowell J. Taylor, Gender Wage Disparities Among the Highly Educated, 43 J. HUM. RESOURCES 630, 656 (2008) (noting that well-educated females earn thirty percent less than similar males, but arguing that most of the gap is explained by premarket factors); Claudia Goldin & Cecilia Rouse, Orchestrating Impartiality: The Impact of “Blind” Auditions on Female Musicians, 90 AM. ECON. REV. 715, 737–38 (2000) (finding that the use of blind auditions increases the probability of female musicians being hired, evidence which suggests, according to the authors, that gender discrimination plays an important role in the hiring process).


3. See Phyllis L. Carr, Laura Szalacha, Rosalind Barnett, Cheryl Caswell & Thomas Inui, A “Ton of Feathers”: Gender Discrimination in Academic Medical Careers and How to Manage It, 12 J. WOMEN’S HEALTH 1009, 1010–11 (2003) (finding that forty percent of survey respondents ranked gender discrimination as the main factor hindering their career in academic medicine); Corinne A. Moss-Racusin, John F. Dovidio, Victoria L. Brescoll, Mark J. Graham & Jo Handelsman, Science Faculty’s Subtle Gender Biases Favor Male Students, 109 PROC. NAT’L ACAD. SCI. U.S. 16474, 16477 (2012) (finding that “both male and female faculty judged a female student to be less competent and less worthy of being hired than an identical male student, and also offered her a smaller starting salary and less career mentoring”).


female defendants (i.e., male defendants are more likely to be incarcerated and receive longer sentences than similarly situated female defendants.\textsuperscript{7} Fewer studies, however, have examined whether gender disparities exist in the plea-bargaining process\textsuperscript{8} and explored the role of race in mediating these gender disparities).\textsuperscript{9}

This Article fills these gaps in the literature by examining disparities in the plea-bargaining process that precede judges’ sentencing decisions and constrain judges’ sentencing discretion.\textsuperscript{10} Using data obtained from the Wisconsin circuit courts, this Article documents striking gender disparities in the plea-bargaining process. Female defendants are approximately twenty percent more likely than male defendants to have their most serious initial charge dropped or reduced to a less severe charge (i.e., male defendants are more likely than female defendants to be convicted of their highest initial charge).\textsuperscript{11}

More in-depth analyses reveal two patterns that shed light as to the underlying dynamics behind these gender disparities. First, disparities in plea-bargaining outcomes are driven by cases in which defendants have no prior convictions.\textsuperscript{12} In cases involving defendants with prior convictions there are no significant gender disparities in plea-bargaining outcomes.\textsuperscript{13} Second, gender disparities in plea-bargaining outcomes are greater in cases involving misdemeanors and low-level felonies relative to cases involving more serious offenses.\textsuperscript{14} These patterns suggest that prosecutors may be using gender as a proxy for a defendant’s latent criminality and recidivism risk in “low information” cases (i.e., cases in which observable characteristics of the defendant and the offense provide little information about the defendant’s inherent criminality).\textsuperscript{15}

Building upon these results and the existing literature documenting racial disparities in criminal case outcomes, this Article explores the intersection of gender and race in determining disparities in charge reductions.\textsuperscript{16} The results indicate that gender and racial disparities complement each other in a manner that yields additive effects. The charge reduction rate for white females (the group with the highest rate) is more than double that of black males (the group with the lowest rate).\textsuperscript{17} White males and black females experience similar charge reduction rates, which fall between those of white females and black males.\textsuperscript{18} Consistent with the pattern of

\textsuperscript{7} See infra notes 40–43 and accompanying text.
\textsuperscript{8} See infra notes 44–56 and accompanying text.
\textsuperscript{9} See infra notes 96–100 and accompanying text.
\textsuperscript{10} See infra Section I.A.
\textsuperscript{11} See infra notes 141–42 and accompanying text.
\textsuperscript{12} See infra note 187 and accompanying text. Although existing studies have controlled for the prior criminal history of defendants when examining gender disparities in criminal case outcomes, these have not explored the interaction of this variable with the defendant’s gender. See infra Section I.B.1.
\textsuperscript{13} See infra note 188 and accompanying text.
\textsuperscript{14} See infra Section III.A.2.
\textsuperscript{15} See infra notes 66–73 and accompanying text.
\textsuperscript{16} See infra Section III.B.1.
\textsuperscript{17} See infra note 211 and accompanying text.
\textsuperscript{18} See infra note 212 and accompanying text.
gender disparities documented in this Article, these intergroup disparities are greater in cases involving misdemeanor offenses and defendants with no prior convictions.19

In addition to uncovering gender disparities in the plea-bargaining process, this Article contributes to a pair of current policy debates. First, the evidence presented in this Article sheds light on the question surrounding the role that the disparate impact theory should play in equal protection claims under the Fourteenth Amendment. Historically, courts have been reluctant to accept statistical evidence showing patterns of discrimination to establish an equal protection claim, instead requiring plaintiffs to show a discriminatory intent or purpose.20 Several scholars have been critical of the high burden placed on plaintiffs as a result of this requirement, which often renders the Equal Protection Clause an ineffectual tool for combating discrimination in the criminal justice system.21 If subconscious biases do contribute to disparities (e.g., by the use of gender and race as a proxy for a defendant’s latent criminality),22 there would be no constitutional means to address these under the evidentiary requirements articulated by the courts.23 The nature of the biases documented in this Article affirms the need to reexamine the role of evidence showing disparate impact in equal protection claims.

The evidence presented in this Article also touches upon a second current policy debate—the treatment of misdemeanors in the criminal justice system. Although


20. See, e.g., McCleskey v. Kemp, 481 U.S. 279, 292 (1987) (holding that evidence of the unjustified racially disparate impact was insufficient to support an equal protection claim against a state’s capital punishment regime); Pers. Adm’r of Mass. v. Feeney, 442 U.S. 256, 274 (1979) (holding that a discriminatory purpose was not established by a foreseeable disproportionate impact on women and that discriminatory intent must be proven in addition to discriminatory impact); Washington v. Davis, 426 U.S. 229, 242 (1976) (holding that statistical evidence of the unjustified racially disparate impact of an employment policy was insufficient to mount an equal protection challenge to the policy).


22. See infra notes 66–73, 86–91 and accompanying text; see also Timothy D. Wilson, Samuel Lindsey & Tonya Y. Schooler, A Model of Dual Attitudes, 107 PSYCHOL. REV. 101, 102 (2000) (explaining how individuals can harbor implicit biases distinct from their explicit attitudes).

23. See Arthur H. Garrison, Disproportionate Incarceration of African Americans: What History and the First Decade of Twenty-First Century Have Brought, 11 J. INST. JUST. & INT’L STUD. 87, 104 (2011) (“Each decision point of the criminal justice system: arrest by law enforcement; arraignment, release, and pre-adjudicatory hearings; pre-trial jail and prison custody; adjudication and sentencing; probation and community supervision; and parole decisions are all exercised with various levels of discretion and subject to covert, overt, and unconscious biases.”); Johnson, supra note 21, at 1019 (“The concept of purposeful discrimination, or at least its terminology, does not mesh well with unconscious race discrimination.”).
misdemeanors have traditionally been overlooked due to the low-level nature of the offenses and the shorter sentences involved, recent work has highlighted their significant role in generating disparities in criminal case outcomes. The fact that the disparities documented in this Article are greater in cases involving misdemeanors and the disproportionate impact suffered by black males adds urgency to the debate surrounding the deregulation and decriminalization of these offenses. In fact, according to scholars, it is in these misdemeanor cases where black men begin to be labeled as criminals.

The Article proceeds as follows. Part I summarizes the existing evidence on gender disparities in criminal case outcomes, highlighting the limited attention that has been devoted to the plea-bargaining process. Part II provides some background information on the criminal justice system in Wisconsin and describes the dataset and the construction of the variables used in the analyses. The results of these analyses are presented in Part III. The policy implications of these results and avenues for future research are discussed in the conclusion.

24. Although certainly less serious and severe than felony convictions, misdemeanor convictions can carry major consequences for individuals. For one, a defendant can be incarcerated, even if it is not for a long period of time. Even defendants receiving a fine or probation as punishment for their misdemeanor convictions are likely to be eventually imprisoned if they are unable to pay their fines or if they violate a condition of their probation. Alexandra Natapoff, Misdemeanor Decriminalization, 68 Vand. L. Rev. 1055, 1081–82 (2015) [hereinafter Natapoff, Misdemeanor Decriminalization]. Misdemeanor convictions can also affect a person’s future interaction with the criminal justice system and other public institutions. A misdemeanor conviction becomes part of the defendant’s criminal history and can be considered by a judge in a future case when determining bail and sentencing. Irene Oritseweyinmi Joe, Rethinking Misdemeanor Neglect, 64 UCLA L. Rev. 738, 758 (2017). Moreover, there can also be collateral consequences for a defendant convicted of a misdemeanor offense, such as loss of eligibility for student loan assistance or public housing. Id. at 763–66.

25. Misdemeanor cases provide defendants fewer structural and procedural protections than felony cases, creating a system with lower evidentiary standards, prone to higher rates of wrongful convictions and where appellate review and scrutiny is limited. See Joe, supra note 24, at 761 (“Misdemeanor convictions also receive less rigorous appellate review than felony convictions.”); Alexandra Natapoff, Misdemeanors, 85 S. Cal. L. Rev. 1313, 1315–17 (2012) [hereinafter Natapoff, Misdemeanors] (arguing that misdemeanor convictions are “generated in ways that baldly contradict the standard due process model of criminal adjudication” and that “the lack of procedural integrity in petty offense processing generates wrongful convictions”); Natapoff, Misdemeanor Decriminalization, supra note 24, at 1063–64 (“Unlike its felony counterpart, the misdemeanor arena is severely underregulated, informal, and sloppy.”). This is particularly problematic since misdemeanors comprise the vast majority of criminal cases and for most individuals represent the first point of contact with the criminal justice system. Natapoff, Misdemeanor Decriminalization, supra note 24, at 1063 (noting that misdemeanors comprise “around eighty percent of most state dockets” and that the “misdemeanor process is the gateway to the criminal system”).

26. Natapoff, Misdemeanors, supra note 25, at 1368 (“It is here that high-volume convictions of questionable evidentiary validity are generated against young black men . . . .”).
I. GENDER, RACE, AND CRIMINAL CASE OUTCOMES

The first Section of this Part describes the critical role of prosecutorial discretion and the plea-bargaining process in determining criminal case outcomes, highlighting the limited attention that has been devoted in the empirical literature to this particular stage. The second Section summarizes the empirical literature that has explored gender disparities in criminal case outcomes and describes the various theories that have been proffered to explain these disparities. The third and last Section of this Part discusses the role played by defendants’ race in mediating gender disparities in criminal case outcomes.

A. The Critical Role of Prosecutors

Most of the literature exploring gender and racial disparities in criminal case outcomes has focused on judges’ sentencing decisions.27 However, the sentencing hearing is the last stage of a process in which many other actors in the criminal justice system make decisions that have a substantial impact on a defendant’s ultimate fate. For example, police officers choose whether or not to stop and arrest a suspect.28 And prosecutors decide which charges (if any) to initially file against a defendant and whether to subsequently drop or amend a charge, often as part of a plea-bargaining agreement negotiated with the defendant’s counsel.29 The judge sitting at the end of this process takes the choices made by these actors—for example, the

27. See infra note 37–38 and accompanying text.
28. Existing studies have found that policing practices disproportionately target black individuals, who are also more likely to be arrested and charged than white individuals. See, e.g., Shima Baradaran, Race, Prediction, and Discretion, 81 Geo. Wash. L. Rev. 157, 187–90 (2013) (finding that police arrests black individuals more often for drug crimes than white individuals); Andrew Gelman, Jeffrey Fagan & Alex Kiss, An Analysis of the New York City Police Department’s “Stop-and-Frisk” Policy in the Context of Claims of Racial Bias, 102 J. Am. Stat. Ass’n 813, 813–14 (2007) (finding that black individuals were stopped more frequently than white individuals even after controlling for a variety of factors); Lynn Langton & Matthew Durose, Police Behavior During Traffic and Street Stops, 2011, at 9 (2016), https://www.bjs.gov/content/pub/pdf/pbts11.pdf [https://perma.cc/9KBU-Y3TP] (noting that black drivers are about three times more likely to be searched during a traffic stop than white drivers and that black individuals are twice as likely to be arrested than white individuals). Although fewer studies have examined gender disparities in arrests and policing practices, the evidence suggests that women receive more lenient treatment from police than men. See Nicola Persico & Petra Todd, Generalising the Hit Rates Test for Racial Bias in Law Enforcement, with an Application to Vehicle Searches in Wichita, 116 ECON. J. F351, F364 (2006) (finding that “males are searched four times as often as females” during a traffic stop); Sonja B. Starr, Estimating Gender Disparities in Federal Criminal Cases, 17 Am. L. & Econ. Rev. 127, 147–48 (2015) (“The empirical evidence on gender and policing is limited.”); Lisa Stolzenberg & Stewart J. D’Alessio, Sex Differences in the Likelihood of Arrest, 32 J. Crim. Just. 443, 448–50 (2004) (finding that reported crimes involving female offenders are less likely to lead to arrests than those involving male offenders).
crime of conviction agreed upon in a plea bargain—as a given when exercising discretion in determining the appropriate sentence.30

As a result, judges’ sentencing discretion is constrained in a number of ways. Criminal statutes often prescribe a minimum and maximum sentence for a particular crime, which are set by the legislature when enacting the law that criminalizes a given activity. Moreover, various states and the federal government have adopted sentencing guidelines that generally provide a set of recommended sentencing ranges which are determined by an offense score (a function of the conviction crime) and the defendants’ criminal history.31 The applicable sentencing guidelines range and statutory minimum and maximum sentences are ultimately determined by the crime the defendant is convicted of.32 Except in cases adjudicated in a bench trial, the judge has no direct control over the ultimate crime of conviction, which itself is, in the vast majority of cases, a result of the plea-bargaining agreement between the defendant’s counsel and the prosecuting attorney.33 Not surprisingly, prosecutors are considered by many scholars to be the most influential players in the criminal justice system.34

Prosecutorial discretion in the plea-bargaining process can play a role in determining the conviction crime through various channels: serious charges that were initially filed against a defendant may be reduced to less serious ones (which then become the conviction offense),35 concurrent charges involving less serious crimes may be dropped, charges involving felony crimes may be reduced to misdemeanors, or all charges carrying a possible incarceration term may be dropped or reduced to charges that carry no possible jail or prison time.36

Empirical work analyzing the link between prosecutorial discretion and gender and racial disparities has been limited, at least compared to work analyzing judicial behavior and sentencing disparities.37 One of the reasons why so much empirical

30. See infra notes 31, 113–19 and accompanying text.
32. Id.
33. See id. at 5 (“Over 95 percent of federal defendants convicted . . . are adjudicated [on the basis of a guilty plea].”)
35. See Shermer & Johnson, supra note 34, at 411, 418 (finding that about twelve percent of all federal prosecutions involve a charge reduction and that such reductions shorten ultimate sentences by about twenty percent).
36. See id. at 395; Ronald F. Wright & Rodney L. Engen, Charge Movement and Theories of Prosecutors, 91 Marq. L. Rev. 9, 9–10 (2007). Moreover, prosecutors also enjoy ample discretion in deciding which initial charges to file, a choice that defines the starting point of any plea-bargaining negotiations. Shermer & Johnson, supra note 34, at 395.
37. See BESIK KUTATELADZE, VANESSA LYNN & EDWARD LIANG, DO RACE AND ETHNICITY MATTER IN PROSECUTION?: A REVIEW OF EMPIRICAL STUDIES 1 (2012) [hereinafter KUTATELADZE ET AL., RACE AND ETHNICITY] (“Relative to the attention that police and the courts have received from researchers analyzing disproportionate minority contact with the
work has focused on judges’ sentencing decisions is the fact that public entities at
the state and federal levels collect and maintain comprehensive data on sentencing,
which generally excludes presentencing information and cases not resulting in a
conviction. As a result of these data limitations, the existing literature examining
gender and race disparities in plea bargaining suffers two related shortcomings:
studies have mostly focused on a specific subset of crimes, relying on a relatively
low number of observations, and have often reached inconsistent results.

38

B. Gender Disparities in Criminal Case Outcomes

This Section discusses the existing empirical and theoretical work examining
gender disparities in the criminal justice process. It begins with an overview of the
empirical literature that has identified significant gender disparities in sentencing and
plea-bargaining outcomes, followed by a review of the theoretical work that has
attempted to explain these disparities.

1. Documenting Gender Disparities

Studies examining gender disparities in sentencing in federal cases have found
that female defendants are less likely than male defendants to be incarcerated
and

criminal justice system, there has been little study of prosecution.”); Rehavi & Starr, supra
note 34, at 1326 (noting that “prior empirical studies of racial and other demographic
disparities in sentencing have considered judicial sentencing decisions only in isolation from
the prosecutorial choices that preceded them”); Shermer & Johnson, supra note 34, at 395
(noting the scant literature in the area).

38. See Shermer & Johnson, supra note 34, at 396 (summarizing existing literature on the
topic) (“The limited empirical attention devoted to prosecutorial discretion is largely the result
of data limitations. Whereas data on judicial sentencing decisions are now readily available,
records on prosecutorial charging behavior remain elusive.”). More generally, prosecutorial
decision-making has been an area that traditionally has been less open to the public than
sentencing. See Besiki Kutateladze, Whitney Tymas & Mary Crowley, VERA
INSTITUTE OF JUSTICE, RACE AND PROSECUTION IN MANHATTAN 1, (2014) [Kutateladze et
al., race and prosecution in Manhattan] (“While prosecutorial discretion is often guided
by internal policies, external regulation or oversight of this discretion is quite limited.”);
Wayne McKenzie, Don Stemen, Derek Courson & Elizabeth Farid, VERA INSTITUTE OF
JUSTICE, PROSECUTION AND RACIAL JUSTICE: USING DATA TO ADVANCE FAIRNESS IN CRIMINAL
PROSECUTION 1 (2009) (“Unlike officials in law enforcement and the judiciary, who have
come under varying degrees of oversight in recent years . . . prosecutors act with little outside
scrutiny or governance.”).

39. See Kutateladze et al., RACE AND ETHNICITY, supra note 37, at 12–14
(summarizing existing studies examining racial disparities in dismissals and charge
reductions); Shermer & Johnson, supra note 34, at 400 (describing the methodological
limitations of existing studies examining gender and racial disparities in dismissals and charge
reductions).

40. See, e.g., David B. Mustard, Racial, Ethnic, and Gender Disparities in Sentencing:
defendants are more likely to be assigned no prison term than male defendants); Max
Schanzenbach, Racial and Sex Disparities in Prison Sentences: The Effect of District-Level
that female defendants receive on average shorter sentences than male defendants.\textsuperscript{41} Similar studies focusing on state criminal cases have also documented differences in incarceration rates\textsuperscript{32} and sentencing outcomes\textsuperscript{43} between male and female defendants.

Fewer studies have focused on gender disparities in the plea-bargaining process. Although mixed, the existing evidence, viewed as a whole, suggests that female defendants receive more favorable treatment relative to male defendants. A group of early studies identified no gender disparities in plea bargaining. For example, a 1977 study analyzed charge reductions in a sample of 1435 cases in an undisclosed city in

\textit{Judicial Demographics}, 34 \textit{J. LEGAL STUD.} 57, 84 (2005) (finding that women are 4.5 percentage points less likely than men to be imprisoned).

\textsuperscript{41} See, e.g., Mustard, \textit{supra} note 40, at 306 (finding that female defendants receive sentences that are 5.4 months lower than those received by male defendants); Schanzenbach, \textit{supra} note 40, at 72 (finding that female defendants on average receive sentences that are 5.4 months lower than those received by males in federal criminal cases).

\textsuperscript{42} E.g., Cassia Spohn & Dawn Beichner, \textit{Is Preferential Treatment of Female Offenders a Thing of the Past? A Multisite Study of Gender, Race, and Imprisonment}, 11 \textit{CRIM. JUST. POL.’Y REV.} 149, 164 (2000) (finding that “men were about 1½ times more likely than women to be incarcerated in Miami and more than 2½ times more likely than women to be incarcerated in Chicago and Kansas City”); Cassia C. Spohn & Jeffrey W. Spears, \textit{Gender and Case Processing Decisions: A Comparison of Case Outcomes for Male and Female Defendants Charged with Violent Felonies}, \textit{WOMEN & CRIM. JUST.}, 1997, at 29, 38 (analyzing a sample involving violent felonies and finding that male defendants are incarcerated in seventy-five percent of cases while female defendants are incarcerated 47.8\% of the time); Darrell Steffensmeier & Stephen Demuth, \textit{Does Gender Modify the Effects of Race–Ethnicity on Criminal Sanctioning? Sentences for Male and Female White, Black, and Hispanic Defendants}, 22 \textit{J. QUANTITATIVE CRIMINOLOGY} 241, 252 (2006) [hereinafter Steffensmeier & Demuth, \textit{Does Gender Modify the Effects of Race}] (finding that “[t]he odds of incarceration for male defendants are about 71\% higher than the odds of incarceration for female defendants” in a sample of cases from the largest U.S. counties); Darrell Steffensmeier, John Kramer & Cathy Streifel, \textit{Gender and Imprisonment Decisions,} 31 \textit{CRIMINOLOGY} 411, 428 (1993) [hereinafter Steffensmeier et al., \textit{Gender and Imprisonment Decisions}] (finding that “male offenders have, on average, about 12\% greater likelihood of being incarcerated than female offenders” in a dataset of Pennsylvania felonies); Darrell Steffensmeier, Jeffery Ulmer & John Kramer, \textit{The Interaction of Race, Gender, and Age in Criminal Sentencing: The Punishment Cost of Being Young, Black, and Male}, 36 \textit{CRIMINOLOGY} 763, 776 (1998) [hereinafter Steffensmeier et al., \textit{Race, Gender, and Age in Criminal Sentencing}] (finding that “females’ odds of incarceration are almost half those of males (which yield an almost 15\% lesser probability of incarceration than males”)).

\textsuperscript{43} See, e.g., Spohn & Spears, \textit{supra} note 42, at 38 (analyzing a sample involving violent felonies and finding that male defendants are sentenced on average to 1492 days in prison while female defendants are sentenced on average to 1064 days in prison); Steffensmeier & Demuth, \textit{Does Gender Modify the Effects of Race, supra} note 42, at 252 (finding that “[m]ale sentences are about 20\% . . . longer than female sentences”); Steffensmeier et al., \textit{Race, Gender, and Age in Criminal Sentencing, supra} note 42, at 776 (finding that “females receive sentence lengths that are about six and one-half months less than males”).
New York and found no gender disparities. A similar study in 1984 by Bishop and Frazier examined 250 cases from Florida and found no significant differences in charge reductions between male and female defendants. In a 1992 study, Albonetti analyzed 400 burglary and robbery cases in Jacksonville, Florida, finding no evidence of gender differences in the decision to reduce initial charges. A study using 1998 data from the largest U.S. counties found no correlation between gender and case dismissals.

Other studies, however, have documented gender disparities in plea-bargaining outcomes. Spohn examined a sample of 33,000 cases from Los Angeles County adjudicated between 1977 and 1980, finding that female defendants are more likely than male defendants to have charges against them initially rejected or later dismissed. Using a sample of 9966 felony thefts and 18,176 felony assaults in California adjudicated in 1988, Farnworth and Teske find that female defendants with no prior record were more likely to receive charge reductions relative to male defendants. In a 1997 study examining 6980 cases involving violent felonies in Michigan, Spohn and Spears find that for male defendants the severity of the most serious initial charge is reduced 44.3% of the time, while for females this reduction rate is 56.4%.

The studies described so far focused on criminal cases at the state level. Recent studies examining federal criminal cases have uncovered evidence that suggest that

44. Ilene Nagel Bernstein, Edward Kick, Jan T. Leung & Barbara Schulz, Charge Reduction: An Intermediary Stage in the Process of Labelling Criminal Defendants, 56 Soc. Forces 362, 372 (1977). These include cases in which the most severe initial charge “was a second or third degree burglary or related offenses, a first, second, or third degree assault, a second or third degree grand larceny, petit larceny, or a first, second or third degree robbery.” Id.

45. See id. at 374–75.

46. Donna M. Bishop & Charles E. Frazier, The Effects of Gender on Charge Reduction, 25 Soc. Q. 385, 388 (1984). These cases come from an undisclosed judicial district and exclude the lowest class of misdemeanors. See id.

47. Id. at 391. These results were consistent when dividing the sample by type of crime (e.g., violent offenses, property crimes, offenses against public welfare and order). Id. at 393.


51. Id. at 183–85.


53. Spohn & Spears, supra note 42, at 34. Cases in the sample included at least one of the following violent felonies as a charge: murder, attempted murder, manslaughter, criminal sexual conduct, robbery, and various forms of felony assault. Sexual assault cases were excluded from their sample. Of their 6980 cases, 648 involve female defendants. Id.

54. Id. at 38. This pattern is consistent across different types of crimes. See id. at 43.
gender disparities in plea bargaining also exist at the federal level. In their 2011 study, Shermer and Johnson find that male offenders are 0.68 times as likely as female offenders to receive a charge reduction in federal criminal cases.55 After decomposing ultimate sentence disparities between male and female defendants in federal criminal cases, Starr finds evidence suggesting that significant disparities favoring women are introduced at every stage of the process, including charging and charge bargaining.56

2. Explaining Gender Disparities

Various explanations have been set forth to account for the existence of gender disparities in criminal case outcomes. The most intuitive theory is that differences in defendant and crime characteristics explain these gender disparities.57 For example, male defendants have on average more extensive criminal records and are convicted of more serious crimes than female defendants.58 Demographic defendant characteristics, such as age59 and race,60 which have been found to correlate with criminal case outcomes, could also be correlated with gender. However, differences in these case and defendant characteristics are observable to researchers and are controlled for in most studies.

More problematic are crime and defendant characteristics that are observable to judges or prosecutors but unobservable to the researcher (and therefore not controlled for in the studies cited earlier). For example, male defendants may commit a given crime in a more heinous way than female defendants, thus deserving less lenient treatment.61 Similar, unobservable factors that could also be driving these gender

55. Shermer & Johnson, supra note 34, at 413. These gender disparities are largely driven by violent and drug offenses (and to a lesser extent property, fraud, and public order crimes). See id. at 415.


57. For instance, the severity of the conviction offense and the defendant’s criminal history are associated with higher rates of incarceration and longer prison sentences. Mustard, supra note 40, at 306; Darrell Steffensmeier & Stephen Demuth, Ethnicity and Judges’ Sentencing Decisions: Hispanic-Black-White Comparisons, 39 CRIMINOLGY 145, 161 (2001) [hereinafter Steffensmeier & Demuth, Ethnicity and Judges’].

58. See Mustard, supra note 40, at 296; Spohn & Spears, supra note 42, at 31 (“The differences in the sentences imposed on men and women may be due to justifiable legal factors which judges consider when sentencing offenders, such as the seriousness of the crime and the offender’s prior criminal record.”).

59. Existing work suggests that younger defendants receive harsher punishment than older defendants. E.g., Mustard, supra note 40, at 309 (finding that younger defendants receive on average higher sentences); Steffensmeier & Demuth, Ethnicity and Judges’, supra note 57, at 161 (finding that older defendants are less likely to be incarcerated and receive longer sentences than younger defendants).

60. See Spohn & Spears, supra note 42, at 31. (“Another factor that might be confounding the results of these studies is the race of the defendant.”); infra Section I.C.1.

61. See Shermer & Johnson, supra note 34, at 421 (“Female crime tends to be less severe in its consequences (e.g., less serious victim injury) and female offenders are more likely to have unique histories of victimization as well as special family circumstances that may serve to mitigate their culpability.”); Starr, supra note 28, at 148 (“For instance, men might well
disparities include the role played by female defendants in the planning and execution of a crime and their willingness to cooperate with authorities—if women tend to be mere accomplices and play a minor roles in crimes and/or are more willing to cooperate with authorities, then we should expect them to be afforded greater leniency by judges and prosecutors alike.

A separate set of theories seeking to explain gender disparities in criminal case outcomes hinges around nonlegal factors, such as protective paternalism, as the reasons driving the more lenient treatment received by female defendants in the hands of judges and prosecutors. Similar explanations highlight concerns associated with the social costs that result from imprisoning female defendants who, as mothers, have existing responsibilities towards their family and children.

A more theoretically rigorous approach focuses on the role played by uncertainty and incomplete information on judicial and prosecutorial decision-making. This line of models starts with the assumption that judges and prosecutors must make their decisions without full knowledge of the defendant’s likelihood of recidivating and the danger that the defendant represents to the community, factors that arguably help determine the optimal outcome in a criminal case. Facing time and information

commit violent crimes with greater physical force, a difference not fully captured by the arrest code (beyond the labeling of some assaults as ‘aggravated’).

62. See Schanzenbach, supra note 40, at 63 (“If women are . . . accomplices in a manner that the guidelines do not fully account for, it is possible that the unexplained disparity is not motivated by bias.”); Starr, supra note 28, at 149 (“Women might be viewed as minor players—perhaps mere accessories of their male romantic partners. Prosecutors and judges may consider such women less dangerous, less morally culpable, or useful sources of testimony; if so, leniency may be legally appropriate.”); Steffensmeier et al., Gender and Imprisonment Decisions, supra note 42, at 432–33, 438 (noting that playing a minor role in a crime or acting as an accomplice serves as a justifications for sentencing guideline departures that may favor female defendants).

63. Starr, supra note 28, at 151 (“Another often-advanced theory is that females receive leniency because they are more cooperative with the government.”).

64. Schanzenbach, supra note 40, at 63 (“Some scholars have interpreted the existence of a sex disparity that favors women as evidence that a paternalistic or chivalrous bias exists among judges . . . .”); Spohn & Beichner, supra note 42, at 151; Spohn & Spears, supra note 42, at 31 (“Most researchers conclude that this preferential treatment reflects paternalism or, alternatively, chivalry. According to this view, criminal justice officials treat women more leniently than men because they feel that women are physically weaker than men and thus must be protected from the harshness of the criminal justice system. . . .”).

65. Spohn & Spears, supra note 42, at 31 (“The differences also might reflect more practical concerns about the childcare responsibilities of female defendants . . . . because [judges] assume that many female defendants have young children and thus feel that sending these defendants to prison would both disrupt family life and place the burden of caring for the children on society.”); Starr, supra note 28, at 150 (“Another possible explanation is that prosecutors or judges worry about the effect of maternal incarceration on children.”); Steffensmeier et al., Gender and Imprisonment Decisions, supra note 42, at 411–12 (“Considered together, the studies substantiate the widely held belief that female defendants receive more lenient treatment (apparently) because of judicial paternalism, the social costs to children and families of sending women to prison . . . .”).

66. Celesta A. Albonetti, An Integration of Theories to Explain Judicial Discretion, 38
constraints, judges\textsuperscript{67} and prosecutors\textsuperscript{68} may use salient and observable defendant characteristics, such as race, gender, or age, as heuristics or proxies for those unobservable attributes relating to the risk posed by the defendant. To the extent that male offenders are perceived as more dangerous and crime prone, as well as less amenable to rehabilitation, than female offenders, one may expect judges and prosecutors to be less lenient with male defendants.\textsuperscript{69}

\textsuperscript{67} See Albonetti, Judicial Discretion, supra note 66, at 250 (“Using defendant characteristics, circumstances of the crime, and case processing outcomes, judges assess the defendant’s disposition toward future criminal activity . . . Discrimination and disparity in sentencing decisions . . . may be the product of judicial attempts to achieve a ‘bounded rationality’ in sentencing by relying on stereotypical images of which defendant is most likely to recidivate.”); Celesta A. Albonetti, The Joint Conditioning Effect of Defendant’s Gender and Ethnicity on Length of Imprisonment Under the Federal Sentencing Guidelines for Drug Trafficking/Manufacturing Offenders, 6 J. Gender, Race & Just. 39, 42 (2002) (“From the uncertainty avoidance/causal attribution perspective, the defendant’s gender and ethnicity are salient to attributions of an enduring predisposition to criminal activity and dangerousness. As such, these defendant characteristics influence judicial sentencing decisions.”); Steffensmeier et al., Race, Gender, and Age in Criminal Sentencing, supra note 42, at 768 (“Hence, one might expect that judges, both as citizens and as elected officials, may share in the general stereotyping predominant in the community; and that racial (as well as age and gender) attributions will intertwine with the focal concerns outlined above to influence judges in deciding whether to incarcerate an offender and the length of the incarceration.”).

\textsuperscript{68} See Jerry Kang, Mark Bennett, Devon Carbado, Pam Casey, Nilanjana Dasgupta, David Faigman, Rachel Godsil, Anthony G. Greenwald, Justin Levinson & Jennifer Mnookin, Implicit Bias in the Courtroom, 59 UCLA L. REV. 1124, 1141–42 (2012) (arguing that that prosecutors are likely to be subject to implicit biases in the discharge of their duties given the fact that they have “wide discretion” and have to make “quick decisions with little accountability”); Shermer & Johnson, supra note 34, at 402–03 (arguing that prosecutors “are faced with uncertainty that may lead them to develop decision-making schema that incorporate past practices and reflect the subtle influences of social and cultural stereotypes in society” and thus “are likely to develop ‘perceptual shorthands’ . . . that tie attributions of dangerousness to the ascriptive characteristics of offenders and their victims”); Robert J. Smith & Justin D. Levinson, The Impact of Implicit Racial Bias on the Exercise of Prosecutorial Discretion, 35 Seattle U. L. Rev. 795, 796–98 (2012) (noting that prosecutors use determinations about the danger posed by an individual to society when exercising their discretion).

\textsuperscript{69} See Shermer & Johnson, supra note 34, at 421 (arguing that the gender disparities in plea-bargaining that they identify “are consistent with the theoretical interpretation that prosecutors engage in a social attribution process that links males to increased dangerousness and heightened risks of recidivism”); Spohn & Spears, supra note 42, at 31 (“[C]riminal justice officials treat women more leniently than men because they feel that women are . . . less culpable, less dangerous, or less likely to recidivate than men and thus deserve less
Some scholars have noted that under this theoretical approach, gender disparities should be greater in cases involving less serious offenses and first-time offenders, as women who have a prior criminal record or commit more serious offenses (in particular, violent crimes) have provided observable evidence of their latent criminality and departed from “female stereotypes.” However, the empirical evidence does not seem to fully support this hypothesis. While some studies analyzing sentencing disparities find that gender disparities appear to be greater in cases involving low-level offenses such as misdemeanors, others find that disparities are greater in cases involving more serious offenses. And studies focusing specifically on plea-bargaining outcomes have found that females receive more lenient treatment than males in cases involving serious offenses.

70. See Spohn & Spears, supra note 42, at 32–33 (discussing the “evil woman thesis, which hypothesizes that female offenders whose crimes conflict with stereotypes concerning ‘appropriate’ female behavior will be sanctioned more harshly than men who commit these types of crimes” and hypothesizing “that there will be no significant differences in the treatment of male and female defendants charged with violent felonies once relevant legal factors are taken into consideration”); Spohn & Beichner, supra note 42, at 151 (“Other studies, in accord with the so-called evil woman thesis, conclude that women, particularly those who commit the more ‘masculine’ violent crimes, are treated either no differently or more harshly than are men who commit these crimes.”); Steffensmeier et al., Gender and Imprisonment Decisions, supra note 42, at 429 (“Regarding offense seriousness, some commentators hypothesize that women are more likely to receive favorable outcomes when the courts are responding to defendants charged with less serious offenses, on grounds that women committing serious crimes depart too far from traditional gender role expectations, and preferential treatment ceases.”).

71. One possible explanation for these inconsistent results is that less serious offenses tend to receive more standardized treatment than more serious offenses, making it more difficult to identify disparities in the former. Steffensmeier et al., Gender and Imprisonment Decisions, supra note 42, at 429 (“[M]inor offenses involve a routinization of the criminal justice process that is ultimately reflected in relatively standardized sentence lengths, while serious offenses permit more discretion (involve a larger range of possible sentence lengths) and receive more careful attention to all (including extralegal) aspects of the case.”).

72. See id. at 430 (“[P]roportionate increases in offense seriousness tend to increase the sentence length for male more so than female defendants.”).

73. Shermer & Johnson, supra note 34, at 415 (finding that gender disparities in charge reductions “appears to be largely driven by violent and drug offenses”); Spohn & Spears, supra note 42, at 43 (finding that females received favorable treatment for prosecutors in a set of violent crimes and that this is also the case for cases involving robberies, a particularly “masculine” crime according to the authors).
This Section begins with an overview of the empirical literature that has identified significant racial disparities in sentencing and plea-bargaining outcomes, followed by a review of the theoretical work that has attempted to explain these disparities. The last part of this Section discusses the literature that has examined the intersection of gender and race in explaining criminal case outcomes.

1. Documenting Racial Disparities

Studies examining criminal case outcomes in federal courts have identified substantial racial disparities in judges’ sentencing decisions—black defendants are incarcerated more frequently and receive longer sentences than white defendants. Although fewer studies have analyzed sentencing disparities at the state level, the evidence suggests that racial disparities in sentencing outcomes also exist at the state level.

However, whether the race of the defendant plays a role in the use of prosecutorial discretion and how prosecutorial discretion may contribute to racial disparities in sentencing is far from being a settled question. While some studies find that the race of the defendant has no effect on the exercise of prosecutorial discretion in reducing or dismissing charges or that prosecutorial discretion is often exercised in

E.g., Mustard, supra note 40, at 301, 306 (finding that black and Hispanic defendants receive substantially longer sentences than white defendants and are also more likely to be incarcerated); Schanzenbach, supra note 40, at 72–73 (finding that black defendants in federal criminal cases receive sentences that are 2.9 months higher than white defendants, a difference that represents six percent of the average sentence of 48.2 months); Darrel Steffensmeier & Stephen Demuth, Ethnicity and Sentencing Outcomes in U.S. Federal Courts: Who Is Punished More Harshly?, 65 AM. SOC. REV. 705, 716 (2000) [hereinafter Steffensmeier & Demuth, Ethnicity and Sentencing] (documenting similar sentencing disparities).

E.g., David S. Abrams, Marianne Bertrand & Sendhil Mullainathan, Do Judges Vary in Their Treatment of Race?, 41 J. LEGAL STUD. 347, 356 (2012) (finding that black defendants in Chicago, Illinois, receive longer sentences and are thirty percent more likely to be incarcerated than white defendants); Steffensmeier & Demuth, Ethnicity and Judges’, supra note 57, at 160 (finding that white defendants in Pennsylvania are less likely to be incarcerated than black and Hispanic defendants, and also receive shorter sentences).

E.g., Emily Owens, Erin M. Kerrison & Bernardo Santos Da Silveira, Examining Racial Disparities in Criminal Case Outcomes Among Indigent Defendants in San Francisco, http://sfpublicdefender.org/wp-content/uploads/sites/2/2017/06/quattronefullreport.pdf [https://perma.cc/LZF7-KJZC] (finding no significant racial disparities in the downgrade of charges after controlling for criminal history and booking charges); Albionetti, Charge Reduction, supra note 48, at 325–30 (analyzing 400 burglary and robbery cases in Jacksonville, Florida, and finding no evidence of racial disparities in prosecutors' decision to reduce initial charges); Franklin, supra note 49, at 697 (finding no effect of race in case dismissals); Rodney Kingsnorth, John Lopez, Jennifer Wentworth & Debra Cummings, Adult Sexual Assault: The Role of Racial/Ethnic Composition.
a manner favorable to black defendants, many conclude that there are racial disparities in the plea-bargaining process disfavoring black defendants. In a recent study analyzing the dataset employed in this Article, the author documented racial disparities in charge reduction rates.

2. Explaining Racial Disparities

The various theories that seek to explain racial disparities in criminal case outcomes mirror those described earlier in our discussion of gender disparities. Differences in crime and defendant characteristics across cases involving black and white defendants could explain disparities in outcomes. For example, if black defendants have lengthier criminal records and are convicted of more serious offenses than white defendants, then one would expect the former to receive, on average, longer sentences. Other defendant characteristics, such as age and gender, that impact sentencing and plea-bargaining determinations could also be

in Prosecution and Sentencing, 26 J. Crim. Just. 359, 362–65 (1998) (finding no racial disparities in the in the prosecution and sentencing of cases in a sample of 365 sexual assaults in Sacramento County, California); Shermer & Johnson, supra note 34, at 415 (finding race of defendant does not affect likelihood of receiving a charge reduction in charges).

78. See, e.g., Malcolm D. Holmes, Howard C. Daudistel & Ronald A. Farrell, Determinants of Charge Reductions and Final Dispositions in Cases of Burglary and Robbery, 24 J. Res. Crime & Delinquency 233, 242–45 (1987) (finding that black defendants accused of burglary and robbery offenses in Delaware County, Pennsylvania, are more likely to receive a charge reduction); Cassia Spohn & Jeffrey Spears, The Effect of Offender and Victim Characteristics on Sexual Assault Case Processing Decisions, 13 Just. Q. 649, 661 (1996) (finding that "likelihood of charge dismissal was significantly greater for cases involving black offenders and white victims" in a sample of Michigan sexual assault cases); John Wooldredge & Amy Thistlethwaite, Bilevel Disparities in Court Dispositions for Intimate Assault, 42 Criminology 417, 437–39 (2004) (finding that black offenders are less likely to be charged and fully prosecuted relative to white offenders in a study of 2948 male arrests for misdemeanor intimate assaults in Cincinnati, Ohio).

79. See, e.g., Besiki Luka Kutateladze, Nancy R. Andiloro & Brian D. Johnson, Opening Pandora’s Box: How Does Defendant Race Influence Plea Bargaining?, 33 Just. Q. 398, 414 (2016) (finding in a sample of misdemeanor marijuana cases in New York County that black defendants are less likely than white defendants to be offered a charge reduction); see also Kutateladze et al., Race and Prosecution in Manhattan, supra note 38, at 6 (analyzing a sample of misdemeanor and felony drug cases in New York City and finding that “[a]lthough some evidence emerged that black defendants were less likely to receive an offer of a lower charge than were similarly situated white defendants, this difference was not statistically significant due to a relatively small sample size.”); Spohn et al., supra note 50, at 183–86 (finding that Hispanic and black males are more likely to be fully prosecuted in a sample of cases from Los Angeles county).


81. Steffensmeier & Demuth, Ethnicity and Sentencing, supra note 74, at 716 (finding that black defendants are convicted of more severe offenses and have lengthier prior records than white defendants).

82. See supra note 59.

83. See supra Section I.B.1.
correlated with defendants’ race. However, even after controlling for these defendant and crime characteristics, a significant black-white gap in sentencing and plea-bargaining outcomes remains.\footnote{84}{See supra notes 74–75 and accompanying text. Unobservable crime characteristics may also be driving these sentencing disparities. The heinousness and other aspects of a crime, which may be observed by a judge but not a researcher, may affect sentencing decisions. See Schanzenbach, supra note 40, at 63. However, for this to explain racial disparities in sentencing, one would need the heinousness of a crime to correlate with the race of the criminal (i.e., black criminals would need to be more likely to commit a given crime in a more heinous manner than white criminals).}

Another explanation for the observed racial disparities in criminal case outcomes is that judges and prosecutors may be using a defendant’s race as a proxy for the defendant’s inherent criminality.\footnote{85}{See supra notes 66–69 and accompanying text.} In that setting, implicit biases can lead judges and prosecutors to make decisions that systematically discriminate against defendants of a given race if they ascribe certain characteristics to members of that group.\footnote{86}{See, e.g., Jeffrey J. Rachlinski, Sheri Lynn Johnson, Andrew J. Wistrich & Chris Guthriet, Does Unconscious Racial Bias Affect Trial Judges?, 84 NOTRE DAME L. REV. 1195, 1197 (2009) (arguing that judges “hold implicit racial biases” and that such biases “can influence their judgment”). For an overview of the possible sources of implicit racial biases, see Kang et al., supra note 68, at 1128–35; Anthony G. Greenwald & Linda Hamilton Krieger, Implicit Bias: Scientific Foundations, 94 CALIF. L. REV. 945, 957–62 (2006), see also Christine Jolls & Cass R. Sunstein, The Law of Implicit Bias, 94 CALIF. L. REV. 969, 969–70 (2006) (providing examples of both explicit and implicit bias).} In other words, race, like gender, matters because it is an observable attribute that can be used by judges and prosecutors (consciously or subconsciously) as a proxy or signal of an individual’s inherent criminality, the latter being an unobservable attribute.\footnote{87}{See supra notes 66–69 and accompanying text.}

Thus, if judges perceive black defendants as being more dangerous and more likely to recidivate than white defendants, then black defendants will be incarcerated more often and receive on average longer sentences than similar white defendants.\footnote{88}{Albonetti, Judicial Discretion, supra note 66, at 258 (“Increases in sentence severity produced by the race variable support the causal attribution and uncertainty avoidance hypothesis linking black defendants with attributions of a high risk of future criminal behavior and judicial use of discretion as a means to deal with administrative concerns for reducing such risk.”); Baradaran, supra note 28, at 176–77 (“Criminal justice actors often predict which defendants are going to commit an additional crime in determining whether to arrest defendants, to release them on bail, or to release them on parole, or in determining their sentence. This prediction is often based not only on individual evaluation, but also on a group’s criminality and past behavior . . . Arguments against prediction include that it . . . allows judges to inappropriately consider race in determining who will commit an additional crime. In other words, judges use race as a proxy for risk.”).} Similarly, if prosecutors perceive black defendants as being more dangerous and more likely to recidivate than white defendants, we would expect prosecutors to be on average more lenient on white defendants relative to black defendants, for example by agreeing to reduce the top charges faced by white defendants’ more often.\footnote{89}{See supra note 68 and accompanying text.}
The existence of racial disparities in average charge reduction rates is not the only prediction that follows from this model. If prosecutors have other salient and easily accessible information about a defendant’s dangerousness, race should then play a smaller role as prosecutors have other proxies to employ in their decision-making. That is, one would expect the gap in charge reduction rates between white and black defendants to be smaller when the defendants share a characteristic that is associated with recidivism, such as a prior criminal record.

3. Gender Disparities and the Mediating Role of Race

The discussion so far has focused on two defendant characteristics, race and gender, that play an important role in shaping criminal case outcomes in federal and state criminal cases. A number of studies have examined the intersection of these dimensions by addressing a series of interrelated questions. If female and white defendants achieve more favorable outcomes, should we expect white female defendants to have outcomes that are superior to those of other groups (including white males and black females)? Conversely, should we expect male black defendants to face far worse case outcomes than any other group? Are female offenders, regardless of race, treated more leniently than male offenders? Or do white female defendants receive more lenient treatment than black female defendants? The answers to these questions hinge on the role of race in mediating the dynamics underlying the more lenient treatment received by female relative to male defendants.

90. See supra note 70 and accompanying text.

91. In other words, black defendants should receive less “personalized” or “individualized” treatment—i.e., the differences in charge reductions between black defendants with and without criminal records will be smaller than the difference in charge reductions between white defendants with and without criminal records. See Steen et al., supra note 66, at 461 (“[D]ecision makers do not appear to make sharp distinctions between the most ‘dangerous’ black offenders and most other black offenders . . . Thus, a principal effect of minority status may be to produce less individualized, more homogenous decision making.”). Empirical evidence lends support to this prediction. See id. at 460–61 (finding that “the likelihood of incarceration is virtually certain for both black and white offenders who fit the stereotype of a dangerous drug offender, but in the less-serious categories . . . judges are less likely to incarcerate white offenders than their black counterparts”); Berdejó, supra note 80, at 1191 (finding that racial disparities are greater in cases involving low-level offenses and defendants with no prior convictions).

92. See Spohn & Beichner, supra note 42, at 167.

93. See Spohn & Spears, supra note 42, at 34 (noting that a “number of studies have suggested that discriminatory treatment of criminal defendants may be restricted primarily to black males, while preferential treatment may be reserved for white females”).

94. See Spohn & Beichner, supra note 42, at 167.

95. See Steffensmeier et al., Gender and Imprisonment Decisions, supra note 42, at 429 (“[S]ome writers propose that leniency is directed more toward white than black female defendants, on grounds that the chivalry and other protections of traditional gender stereotyping are not accorded to low-income black women, who are overrepresented in court dockets.”).
These studies have found that although gender disparities in sentencing are present when comparing white and black defendants and racial disparities are present when comparing male and female defendants, gender disparities are greater in the set of black defendants and racial disparities are greater in the subset of female defendants. Together, these two sets of findings suggests that white female defendants receive the most favorable treatment and that black male defendants receive the most harsh treatment at the sentencing stage—with black female and white males somewhere in between.

The evidence presented in studies examining disparities in plea bargaining is mixed. While some studies uncover evidence suggesting that white female defendants are treated more leniently by prosecutors than black female defendants, other studies find no significant differences in the treatment received by defendants in these two groups. The evidence also suggests that black male defendants fare worse than other groups in the plea-bargaining stage of the criminal justice system, though this is not a universal finding.

II. DESCRIPTION OF THE DATA

The first Section of this Part presents an overview of the legal framework governing the criminal justice process in Wisconsin, focusing mainly on the discretion afforded to district attorneys and judges. The second Section describes the dataset and the construction of the variables used in the empirical analyses presented

96. See, e.g., Spohn & Beichner, supra note 42, at 167 (finding that in Chicago and Kansas City, black and female defendants are significantly less likely than male defendants to be sentenced to prison, while in Miami gender disparities are concentrated on the set of black defendants); Starr, supra note 28, at 152 (finding that racial disparities are larger among black than nonblack defendants); Steffensmeier & Demuth, Does Gender Modify the Effects of Race, supra note 42, at 255 (finding that gender disparities in incarceration and sentence length outcomes is smaller for white defendants and larger for black defendants).

97. Steffensmeier et al., Gender and Imprisonment Decisions, supra note 42, at 430 (“[A]mong male defendants, race has a negligible effect on sentence length; among female defendants, however, black female defendants receive prison sentences that, on average, are about three months longer than white female defendants.”); Steffensmeier et al., Race, Gender, and Age in Criminal Sentencing, supra note 42, at 782 (finding that black females offenders are more likely to be incarcerated and receive longer sentences than white female defendants).

But see Steffensmeier & Demuth, Does Gender Modify the Effects of Race, supra note 42, at 255 (finding that there are no racial disparities in incarceration rates and sentencing for female defendants, but that disparities do exist for male defendants).

98. See Farnworth & Teske, supra note 52, at 23 (noting a “greater tendency to change charges of assault to nonassault among white female defendants than among minority females”).

99. See Spohn & Spears, supra note 42, at 47–48 (finding that white females are more likely to have their charges dismissed than white males and black males, but finding no significant difference between black and white females).

100. See Franklin, supra note 49, at 700 n.10 (“Findings indicated that compared to Whites, Black males, Black females, Hispanic males, and Hispanic females were no more or less likely to have their cases dismissed in the present sample.”); Spohn et al., supra note 50, at 183–85.
later in the Article. Before proceeding further, it is worth explaining why Wisconsin was selected as the jurisdiction in which to study gender disparities in the plea-bargaining process. The most important reason is the nature of the available data. Wisconsin courts maintain records that include a comprehensive set of information for each criminal action, allowing us to follow a case from the initial filing of charges, through the dismissal or reduction of charges, and up to adjudication and sentencing. Similar databases maintained by other states or the federal government are far more limited in their scope, often including only cases which resulted in a conviction and containing only sentencing information.

A. Criminal Justice Process in Wisconsin

State circuit courts have jurisdiction to hear and determine all criminal actions and proceedings in Wisconsin. With a few exceptions, each county in the state has its own circuit court, with the number of branches (or judges) varying from circuit to circuit. Circuit court judges are elected at the circuit court level for a term of six years. Similarly, with a few exceptions, each county in the state also encompasses a prosecutorial unit and elects a district attorney who serves for a term of four years.

Charging and plea bargaining decisions are made by the local district attorney office. Prosecutorial discretion in this respect is quite broad so long as the charges are supported by probable cause. Although judges do review plea bargains, in practice few agreements are rejected. As in other jurisdictions, the minority of cases which are not resolved via a plea agreement are adjudicated at a bench or jury trial. Once a defendant has been convicted of a particular crime, Wisconsin law provides the presiding judge ample discretion in choosing the appropriate sentence.

Wisconsin does not have a set of sentencing guidelines providing a mandatory or advisory sentencing range based on the crime committed by the defendant and the defendant’s criminal history. Moreover, few crimes carry a mandatory minimum sentence.
Most crimes are classified into classes of felonies or misdemeanors, with each class carrying its own maximum penalty. Currently, there are nine classes of felony crimes and three classes of misdemeanors. Certain statutory provisions allow for sentencing enhancements which increase the possible maximum sentence a judge may impose, but these are advisory in nature and not ultimately binding. Except for crimes involving a class A felony, the sentencing judge also has the discretion to impose probation instead of a sentence carrying an incarceration term. Sentences imposed by judges in Wisconsin are often definitive, as defendants are required to serve the full term of their sentences without the possibility of parole or early release due to good behavior.

B. Description of the Data

The first part of this Section provides an overview of the dataset used to conduct the analyses presented later in the Article. The second part describes how the different variables were constructed.

114. O’HEAR, supra note 108, at 7–8 (noting that few crimes carry a mandatory minimum and that the most important of these are Class A felonies which carry a mandatory life sentence).

115. See id.; infra notes 116–17 and accompanying text.

116. The classes of felony crimes are as follows (with maximum sentences in years in parentheses): A (Life), B (60), C (40), D (25), E (15), F (12.5), G (10), H (6), and I (3.5). Wis. Stat. Ann. § 939.50 (West 2005). Prior to 2002, there were six classes of felonies: A (Life), B (60), BC (30), C (15), D (10), E (5). Wis. Stat. Ann. § 939.50 (West 1996). Three new classes of felony crimes were added as part of a broader reform to the criminal system in 2002. See 2001 Wis. Sess. Laws 109 §§ 545–59 (amending Wis. Stat. § 939.50). Prior to this reform a number of drug offenses, among others, had maximum sentences that were set by statute and not keyed to a class. See, e.g., Wis. Stat. Ann. § 961.41 (West 2007).

117. The three classes of misdemeanor crimes are the following (with maximum sentences in parenthesis): A (nine months), B (ninety days), and C (thirty days). Wis. Stat. Ann. § 939.51 (West 2005). More generally, misdemeanors are defined as crimes that are not punishable by imprisonment in a state prison. Id. § 939.60.

118. O’HEAR, supra note 108, at 8. If a defendant is convicted of more than one count that carries a potential sentence, the judge may impose sentences for each count to be served concurrently or consecutively. Id. at 7.


1. Overview of the Database

The data comes from the public records of the Wisconsin circuit courts, which are available electronically at the Wisconsin Circuit Court Access (WCCA) website. This site provides the case information entered into the Consolidated Court Automation Programs (CCAP) case management system by court staff in the Wisconsin circuit courts where the files are located. The focus of this study will be those cases labeled as criminal misdemeanors or criminal felonies, which involve offenses committed after December 31, 1999, and adjudicated before December 31, 2006.

The analyses presented later in the Article restrict the sample to cases filed and adjudicated in Dane County. Focusing on a single county is advantageous to the extent that it helps maintain various factors relating to law enforcement and the criminal justice system (such as district attorney office and judges) constant. Dane County, which includes the capital city of Madison, is the second most populous county in the state after Milwaukee County and has a demographic makeup that reflects that of the state as a whole. Moreover, the coding of various variables in the system’s database are more consistent in Dane County compared to Milwaukee County.

Cases which were transferred to another county or jurisdiction before adjudication or that deal with the extradition of a defendant to another state are excluded from the final dataset. Also excluded are cases that involve defendants which are legal persons.

124. This restriction is imposed so that only cases adjudicated under the Truth in Sentencing Law are included. See supra note 120 and accompanying text.
125. The Wisconsin circuit courts provided all available information in the CCAP system for all cases resolved on or before December 31, 2006.
126. As of 2010, Dane County had a population of 488,073, and Milwaukee County had a population of 947,735. The next most populous county is Waukesha County with 389,891 inhabitants. U.S. Census Bureau, Population and Race Data, Wisconsin County Subdivisions (Minor Civil Divisions), Census 2000 and 2010 Comparisons, Wisconsin.gov https://doa.wi.gov/pages/SearchResults.aspx?q=%22population%20and%20race%22 [https://perma.cc/56RS-PWGZ].
127. According to the 2010 Census, 86.2% of the Wisconsin population was white. Id. That number is considerably lower in Milwaukee, where only 60.6% of the population was white according to census data. Id. In Dane County, on the other hand had, 84.7% of the population was white. Id.
(such as businesses) or defendants who were found to not be mentally competent. To better capture the effect of plea bargaining, the final sample also excludes cases in which none of the initial charges carried a potential jail or prison sentence, cases which were adjudicated in a trial, cases in which all charges were dismissed before the defendant’s initial appearance, and cases in which the highest charge was dismissed by the court by the defendant’s motion or on its own. As customary in the literature examining gender disparities, cases involving offenses that are disproportionately committed by male offenders, namely, those in which less than five percent of offenders were females, are also excluded.128

The final dataset contains 46,150 cases. Of these, 15,861 cases included at least a felony crime as part of the initial charges, while the remaining 30,289 cases involved misdemeanor charges. A total of 9896 cases (or 21.44% of the entire sample) involve female defendants.129

2. Construction of the Variables

The data made available by the CCAP is quite detailed. One file of the dataset provides demographical information on the defendant, including the defendant’s name, gender, race, and date of birth. This information was used to create variables for the defendant’s gender,130 age,131 and race.132 One key variable not directly contained in the dataset is the criminal history of the defendant. However, the fact that the data contains the full name and date of birth of the defendant allows us to generate a variable to measure a defendant’s criminal history. Using the defendant information dataset together with the judgment disposition dataset133 one can


129. The relative proportion of male and female defendants is similar to that in the two most recent studies examining gender disparities in plea bargaining. See Shermer & Johnson, supra note 34, at 412 (14% of cases involve female defendants); Starr, supra note 28, at 132–33 (19.2% of cases involve female defendants).

130. The variable Female is an indicator variable equal to one if a defendant’s gender is coded in CCAP as female and zero if the defendant’s gender is coded as male.

131. The variable Age is constructed by subtracting the defendant’s year of birth from the year in which the case was originally filed. For cases missing a defendant’s age, the average age in the sample is imputed.

132. Defendants were divided into three groups based on the race description provided in the CCAP data: (1) white, (2) black, and (3) other. This last group includes defendants of other races as well as defendants for whom race information was not available.

133. That dataset contains sentencing information for those cases in which a defendant was convicted of at least one of the charges filed against him or her. Records relating to offenses committed before the year 2000 were also employed to measure the prior criminal record of
calculate the number of times a defendant had been convicted prior to the adjudication of a given case.\textsuperscript{134}

The database also contains detailed information for each individual charge in a case, including the initial crime a defendant was charged with, as well as the crime with which that defendant was ultimately charged. For each final charge the dataset contains information on its final adjudication—whether it was dismissed, whether the defendant pleaded guilty or no contest, or whether the defendant was found guilty or innocent at trial. Another dataset contains the sentencing information for those charges for which defendants were convicted, namely, whether the defendant was given a jail or prison sentence (and the number of months), whether the defendant was put on probation, or whether the defendant was assessed a monetary penalty.

For each case, I collect information on the initial set of charges: the highest crime class (i.e., the highest possible sentence for all charges)\textsuperscript{135} and the type of crime corresponding to the principal initial charge,\textsuperscript{136} as well as a general count of the number of felony and misdemeanor offenses the defendant was initially charged with. The same information is recorded for the final set of charges for which the defendant was convicted—namely, the highest crime class, the type of crime associated with the main conviction offense, the number of charges by crime class group, as well as a general count of the number of felony and misdemeanor convictions. Finally, I record the highest sentence received by the defendant for all charges. Different outcome and control variables are then constructed based on these variables, all of which are described in more detail in the discussion of the results presented in the next part.

\section*{III. RESULTS}

The first Section of this Part explores gender disparities in plea-bargaining outcomes. The results reveal that female defendants are more likely than male defendants to see their initial top charges reduced and dropped during this process. Notably, gender disparities are greater in cases involving lower-level offenses and defendants with no prior convictions. Building on these findings, the second section

\textsuperscript{134} Defendants were matched according to first name, last name, and month and year of birth to create a unique identifier. For each case in the dataset, the following two variables were generated: (i) Prior\(_1\), an indicator variable equal to one if the defendant had one prior conviction, and (ii) Prior\(_2+\), an indicator variable equal to one if the defendant had two or more prior convictions. Defendants with no prior convictions are coded with a zero in both of these indicator variables. This method of calculating this variable is certainly not precise. One concern is that of false positives—if two individuals have the same name and date of birth, then the number of priors for these individuals will be artificially inflated. It is worth noting that the nature of the sample (i.e., just individuals charged with a crime) reduces the likelihood of such false positives occurring. Moreover, for these false positives to bias the results, one would need such false positives to be systematically correlated with the gender of the defendant.

\textsuperscript{135} \textit{See supra} notes 116–17 and accompanying text.

\textsuperscript{136} This set of crime categories is based on the corresponding chapter of the Wisconsin criminal code. For a list of these categories see Appendix Table 2.
of this Part explores the intersection of gender and race in the plea-bargaining process. These results indicate that white female defendants are treated more leniently than other groups by prosecutors and that black male defendants receive the least favorable treatment.

A. Gender Disparities in Plea Bargaining

The first part of this Section explores gender disparities in the plea-bargaining process. To measure such disparities, we can compare the rates at which different defendants plead guilty to the initial principal charge, or conversely, the rates at which different defendants end up pleading guilty to a reduced charge.\textsuperscript{137} Such charge reduction is one of the most important outcomes in plea bargaining as sentence length is often determined by the severity of the crime of which the defendant is ultimately convicted.\textsuperscript{138} The main results indicate that female defendants are significantly more likely than male defendants to receive a charge reduction, even after controlling for a number of defendant and case characteristics.\textsuperscript{139}

The second and third parts of this Section examine how gender disparities in charge reduction rates vary according to the severity of the offense and the defendant’s criminal history, respectively. The results suggest that gender disparities are greater in low-information cases (i.e., cases involving low-level offenses or defendants with no prior convictions), raising the possibility that a defendant’s gender may be being used as a proxy of his or her inherent criminality.\textsuperscript{140} The fourth part of this Section briefly examines disparities in the stage that follows the plea-bargaining process (i.e., sentencing) to verify whether gender disparities in charge reduction are being corrected in later stages.

1. Gender Disparities in Charge Reductions

a. Baseline Results

Generally, female defendants see their top charge dropped or amended to a lesser charge in 47.48\% of the cases, while the charge reduction rate for male defendants is considerably lower, 39.91\%.\textsuperscript{141} That is, female defendants are approximately 20\% more likely to have their top charge dropped or reduced than male defendants.\textsuperscript{142} Though informative, merely comparing raw averages can be deceiving, as several

\textsuperscript{137} This follows Shermer and Johnson who define their charge reduction outcome as a reduction in the statutory maximum between the filing offense and the offense of conviction. Shermer & Johnson, \textit{supra} note 34, at 408. Following Shermer and Johnson, for cases involving multiple charges and concurrent sentences the statutory maximum for the most serious charge (i.e., that with the highest statutory maximum) is used. \textit{Id.}
\textsuperscript{138} \textit{See} Wright & Engen, \textit{supra} note 36, at 9.
\textsuperscript{139} \textit{See infra} notes 156--57 and accompanying text.
\textsuperscript{140} \textit{See supra} notes 70--73; \textit{infra} notes 167--68, 185--86 and accompanying text.
\textsuperscript{141} \textit{See infra} Figure 1.
\textsuperscript{142} This relative difference is calculated by dividing the difference in charge reduction rates between female and male defendants (7.6 percentage points) by the charge reduction rates of male defendants (39.9 percentage points), which yields nineteen percent.
factors affect prosecutorial decision-making. For example, the type and severity of the crime, the number of concurrent charges, and the defendant’s criminal history all play a role in plea-bargaining determinations.\textsuperscript{143} Moreover, other demographic characteristics of defendants, such as age and race, are correlated with criminal case outcomes, including charge reductions.\textsuperscript{144} One concern is that male defendants are more likely than female defendants to exhibit those characteristics and commit those types of crimes associated with less favorable criminal case outcomes.\textsuperscript{145}

To assess gender disparities in the plea-bargaining process more rigorously, we can estimate a series of probit models in which the outcome variable is a binary indicator variable equal to one if the top charge in a case was reduced and zero if the top charge was not reduced.\textsuperscript{146} A probit model provides an estimate of the probability of observing a charge reduction in a particular case given a set of defendant and crime characteristics.\textsuperscript{147} For each case $i$, suppose that $V_i$ equals one for those cases

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{Figure1.pdf}
\caption{Figure 1. Charge Reduction Rates by Gender}
\end{figure}

\begin{itemize}
\item To assess gender disparities in the plea-bargaining process more rigorously, we can estimate a series of probit models in which the outcome variable is a binary indicator variable equal to one if the top charge in a case was reduced and zero if the top charge was not reduced.\textsuperscript{146} A probit model provides an estimate of the probability of observing a charge reduction in a particular case given a set of defendant and crime characteristics.\textsuperscript{147} For each case $i$, suppose that $V_i$ equals one for those cases
\item For example, if male defendants are more likely to be black than female defendants or are on average younger than female defendants, then some of the difference captured in the earlier analyses may be attributed to those “hidden” characteristics. Similarly, if male defendants are convicted of more serious crimes than female defendants, then it should not be surprising to find that male defendants are incarcerated more often and receive on average longer sentences.
\item See Baradaran & McIntyre, supra note 146, at 532 (using a similar probit model to
\end{itemize}
in which a defendant received a charge reduction and zero for all those cases in which the defendant did not receive a charge reduction. The goal is to model how different factors affect the probability of \( V_{i} \) equaling one. A probit estimates a model of a latent (unobservable) index variable, \( y_{i} \), that is greater than zero for those cases in which a defendant receives a charge reduction and negative for those cases in which the defendant does not receive a charge reduction.\(^{148}\) We can model the latent variable \( y_{i} \) as follows:

\[
y_{i} = \alpha + \beta_{1}\cdot \text{Female} + \beta_{2}\cdot X_{ji} + \beta_{3}\cdot Z_{ji} + e_{i} \tag{1}
\]

In this specification, \( \text{Female}_{i} \) is an indicator variable equal to one if the defendant’s gender was coded as female.\(^{149}\) The vector \( X_{ji} \) contains an additional set of defendant controls, including (i) the race of the defendant,\(^{150}\) (ii) the age of the defendant,\(^{151}\) and (iii) the defendant’s prior criminal history.\(^{152}\) The vector \( Z_{ji} \) contains a set of crime and case characteristics, including (i) \( \text{Concurrent}_{ji} \), which is equal to one if the defendant was charged with more than one crime; (ii) \( \text{MaxSent}_{ji} \), a set of fixed effects for the statutory maximum sentence corresponding to the principal initial charge, namely, the charge carrying the highest possible sentence;\(^{153}\) (iii) \( \text{CrimeDesc}_{ji} \), a set of fixed effects controlling for the type of crime involved in the defendant’s principal charge;\(^{154}\) and (iv) \( \text{Year}_{ji} \), a set of fixed effects for the year in which each case was initially filed. Finally, \( e_{i} \) is a mean-zero stochastic error term.\(^{155}\)

Column (1) of Table 1 presents the estimates of the marginal effects for the explanatory variables in the baseline probit model.\(^{156}\) The coefficient on the indicator

---

estimate the probability of an individual being rearrested as a function of several variables).\(^{148}\)

148. In other words, \( y_{i} \) is a continuous theoretical approximation of the probability of observing the outcome \( V_{i} \). See id.

149. See supra notes 83, 130 and accompanying text.

150. \( \text{Blacks}_{i} \) is an indicator variable equal to one if the defendant’s race was coded as African-American, while \( \text{Others}_{i} \) is an indicator variable equal to one if the defendant was coded as a race other than African-American or Caucasian. Thus, in these models, white defendants (i.e., Caucasian) are the omitted race group.

151. See supra notes 59, 131 and accompanying text. To account for a nonlinear relationship between age and the probability of receiving a charge reduction, the model includes the quadratic term for age (i.e., \( \text{Age2}_{i} \)) in addition to a linear term (i.e., \( \text{Age}_{i} \)).

152. See supra notes 57, 134 and accompanying text.

153. See supra note 135 and accompanying text. All results presented in this Article are robust to using the applicable maximum statutory sentence as a linear control instead of as a fixed effect.

154. See supra note 136 and accompanying text.

155. Unless otherwise noted, heteroskedasticity-robust standard errors are used in calculating the statistical significance of coefficients of all regressions estimated in this Article.

156. These marginal effects indicate how the probability of the outcome variable (i.e., likelihood of receiving a charge reduction) varies when the value of a given explanatory variable changes, holding all other variables constant. See Wooldridge, supra note 146, at 585–86. For example, the marginal effects of the indicator variable \( \text{Female} \) tells us how the probability of the defendant being incarcerated changes if we were to switch the gender of the
variable *Female* measures the effect of gender in the probability of a defendant receiving a charge reduction, holding constant all other defendant and crime characteristics. The results confirm the gender disparities documented earlier: female defendants are 5.8 percentage points more likely than male defendants to receive a charge reduction, a statistically significant difference that represents fourteen percent of the average charge reduction rate in the sample.

Table 1. Baseline Estimates & Robustness Checks

<table>
<thead>
<tr>
<th></th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
<th>(5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>0.058***</td>
<td>0.055***</td>
<td>0.058***</td>
<td>0.071***</td>
<td>0.063***</td>
</tr>
<tr>
<td></td>
<td>[0.006]</td>
<td>[0.008]</td>
<td>[0.006]</td>
<td>[0.006]</td>
<td>[0.010]</td>
</tr>
<tr>
<td>Black</td>
<td>-0.068***</td>
<td>-0.067***</td>
<td>-0.069***</td>
<td>-0.042***</td>
<td>-0.069***</td>
</tr>
<tr>
<td></td>
<td>[0.005]</td>
<td>[0.006]</td>
<td>[0.005]</td>
<td>[0.005]</td>
<td>[0.006]</td>
</tr>
<tr>
<td>Other Race</td>
<td>-0.036***</td>
<td>-0.033***</td>
<td>-0.018*</td>
<td>-0.034***</td>
<td></td>
</tr>
<tr>
<td></td>
<td>[0.010]</td>
<td>[0.010]</td>
<td>[0.010]</td>
<td>[0.008]</td>
<td></td>
</tr>
<tr>
<td>Fem*Black</td>
<td>-0.008</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>[0.012]</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prior (1)</td>
<td>-0.245***</td>
<td>-0.239***</td>
<td>-0.245***</td>
<td>-0.235***</td>
<td>-0.245***</td>
</tr>
<tr>
<td></td>
<td>[0.006]</td>
<td>[0.006]</td>
<td>[0.006]</td>
<td>[0.006]</td>
<td>[0.011]</td>
</tr>
<tr>
<td>Prior (2+)</td>
<td>-0.328***</td>
<td>-0.325***</td>
<td>-0.330***</td>
<td>-0.307***</td>
<td>-0.327***</td>
</tr>
<tr>
<td></td>
<td>[0.005]</td>
<td>[0.005]</td>
<td>[0.005]</td>
<td>[0.005]</td>
<td>[0.009]</td>
</tr>
<tr>
<td>Felony</td>
<td>-0.039</td>
<td>-0.040</td>
<td>-0.063</td>
<td>-0.035</td>
<td>-0.036</td>
</tr>
<tr>
<td></td>
<td>[0.0506]</td>
<td>[0.051]</td>
<td>[0.056]</td>
<td>[0.0504]</td>
<td>[0.030]</td>
</tr>
<tr>
<td>Obs.</td>
<td>46,140</td>
<td>43,121</td>
<td>46,090</td>
<td>46,140</td>
<td>46,140</td>
</tr>
<tr>
<td>Mean</td>
<td>0.415</td>
<td>0.413</td>
<td>0.415</td>
<td>0.415</td>
<td>0.415</td>
</tr>
</tbody>
</table>

**Note:** Robust standard errors in brackets (* significant at 10%; ** significant at 5%; *** significant at 1%). This table presents the marginal effects from probit models in which the outcome variable is an indicator variable equal to one if the initial top charge in a case was dropped, amended to a lesser charge, or dismissed. For a description of the explanatory variables of interest see Appendix Table 1. Unless otherwise noted below, all regressions also include a set of crime class fixed effects, a set of crime type fixed effects, a set of year fixed effects, and controls for the defendant’s age. Column (3) replaces the set of crime class fixed effects and the set of crime type fixed effects with a set of crime class and crime type interactions. See supra notes 159–60 and accompanying text. Column (4) includes a set of defense

defendant from male to female, holding all other case and defendant characteristics constant. 157. See infra Table 1, column (1).
attorney fixed effects. See supra notes 164–66 and accompanying text. Column (5) includes a set of prosecuting attorney fixed effects and estimates robust standard errors clustered at the prosecuting attorney level. See supra notes 161–63 and accompanying text.

b. Omitted Variables and Robustness Checks

One concern with the baseline result presented above is that there might be relevant factors that affect the probability of a defendant receiving a charge reduction which are not being controlled for and that are also correlated with the defendant’s gender. If such a relevant factor is omitted, the econometric model may compensate for this omission by giving more weight (i.e., ascribe a higher explanatory value) to a variable that is included in the analysis and that is correlated with the missing variable. This Section explores three such possible omitted factors: the nature of the offense, the identity of the prosecuting attorney, and the identity of the defense attorney. These robustness checks reassure us that these omitted variables are not driving the baseline result.

i. Granular Controls for Crime Type and Severity

One concern is that the crime type controls are too broad, raising the possibility that the gender of the defendant may be correlated with the severity of the offense within each crime type category. Although the empirical model also controls for crime class and severity (i.e., by including fixed effects for the statutory maximum sentence), the inclusion of both variables might not fully address this problem. As a robustness check, one can instead create alternative controls based on the interaction of the type of crime (e.g., Robbery) and its class (e.g., 720, 480, and 180 months). This measure, for example, would yield three different groups for Robbery crimes, each associated with a different class (or statutory maximum). Including these alternative crime controls instead of the two complementary sets of crime type and crime severity controls described earlier does not affect the baseline results presented above.

ii. Differences in Prosecuting Attorneys

If prosecutors differ in their willingness to agree to a charge reduction and cases are not effectively allocated randomly across prosecutors, one may be concerned that the gender disparities documented earlier are the result of the assignment of cases involving male defendants to prosecutors that are less likely to agree to charge reductions. If this is true, then the coefficient on the female indicator variable would

158. For a discussion of this issue see WOOLDRIDGE, supra note 146, at 96–97.
159. For example, male defendants may be more likely to be charged with first-degree robberies, while female defendants are more likely to be charged with lesser degrees of that crime.
160. See supra Table 1, column (3). The coefficient on the Female indicator variable is identical to that of the baseline specification.
be capturing some of these systematic differences across prosecutors, thus artificially inflating the magnitude of the observed gender disparities.\textsuperscript{161}

To address these concerns, we can use the identity of the prosecuting attorney, which the CCAP database provides for all but 205 of the 46,150 cases in the sample. Thirty-three prosecutors appear in at least 100 cases. Using this information, we can construct 35 indicator variables: (i) one indicator variable for each of the 33 prosecutors that appear in at least 100 cases; (ii) one indicator variable for cases involving prosecutors that appeared less than 100 times in the dataset; and (iii) one indicator variable for cases in which the identity of the prosecutor was not available. To verify whether systematic differences in the identity of the prosecutor are driving gender disparities in plea-bargaining outcomes, we can include these additional indicator variables in equation (1)\textsuperscript{162} The baseline result is robust to the inclusion of these additional controls.\textsuperscript{163}

\textbf{iii. Differences in Attorney Quality}

Another possible explanation for the gender disparities in plea-bargaining outcomes documented earlier is that there are systematic differences in the quality of the legal representation of male and female defendants. If more qualified and experienced attorneys negotiate superior terms for their clients during the plea-bargaining process and female defendants have on average better legal representation than male defendants, then one would expect female defendants to have a higher rate of charge reductions than male defendants.\textsuperscript{164} In that case, the coefficient on the female indicator variable would be capturing differences in attorney quality.

\textsuperscript{161}. Moreover, cases assigned to the same prosecutor are not necessarily independent of one another, which can result in artificially deflated standard errors that make results appear statistically significant when they might not be.

\textsuperscript{162}. To correct for the fact that cases managed by the same prosecutor are not independent from one another, as part of this robustness check, standard errors are clustered at the prosecutor level. See Joni Hersch & W. Kip Viscusi, Punitive Damages: How Judges and Juries Perform, 33 J. LEGAL STUD. 1, 32 (2004) (explaining how clustering of standard error addresses this issue).

\textsuperscript{163}. See supra Table 1, column (5). The coefficient on the Female variable indicates that female defendants are 6.3 percentage points more likely than male defendants to receive a charge reduction, a difference that represents just over fifteen percent of the average charge reduction rate in the sample.

\textsuperscript{164}. The quality of legal representation for male defendants could be different from that of female defendants if the former have to rely on public defenders or legal defense funds and the latter are able to afford private defense attorneys. See Schanzenbach, supra note 40, at 63 (“Both income and assets are determinants of quality of legal counsel and hence will play a role in sentencing, offense level determination, and probability of a downward departure.”). However, the existing evidence does not necessarily support this assumption. Although more experienced counsel seem to obtain better sentencing outcomes for their clients, studies that have examined how public defenders perform relative to private counsel have reached inconsistent conclusions. See David S. Abrams & Albert H. Yoon, The Luck of the Draw: Using Random Case Assignment to Investigate Attorney Ability, 74 U. CHI. L. REV. 1145, 1150 (2007) (finding that defendants represented by more experienced public defenders are less likely to plea to the most serious charge and be incarcerated); Nadine Frederique, Patricia
The dataset allows us to partially rule out the possibility that such systematic differences in legal representation are driving the observed disparities. The name of the defense attorney is available for 41,524 of the 46,150 cases. Ninety defense attorneys appear in at least 100 cases in the database and, in the aggregate, comprise a total 34,873 observations. Using this information, one can construct a series of (i) 90 indicator variables for each of these 90 defense attorneys, (ii) one indicator variable for the 6651 cases involving attorneys that appear less than 100 times, and (iii) one indicator variable for the 4626 cases for which no defense attorney information was available. To verify whether the identity of the defense attorney is driving the racial disparities in plea-bargaining outcomes documented earlier, we can reestimate equation (1) but include the set of 92 defense attorney indicator variables described above. The baseline result is robust to the inclusion of these additional controls.

2. Charge Reductions and Crime Severity

The empirical and theoretical literature examining gender disparities in criminal case outcomes suggests that offense severity mediates gender disparities. Accordingly to one strand of this literature, female defendants are afforded more lenient treatment for low-level offenses, but are afforded similar treatment to that of male defendants in cases involving more serious offenses in which gender-based attributions about a defendant’s inherent criminality are less compelling.


For cases involving more than one attorney, I selected the attorney who was active (i.e., had not withdrawn) as of the date in which the case was resolved. When more than one attorney was active as of this date, I selected the attorney based on alphabetical ordering. In 2264 cases only the name of the attorney’s organization was available—Legal Defense Program in 1840 cases and State Public Defender in 424 cases. I treated these organizations as the attorney of record.

See supra Table 1, column (4). The coefficient on the Female variable indicates that female defendants are 7.1 percentage points more likely than male defendants to receive a charge reduction, a difference that represents just over seventeen percent of the average charge reduction rate in the sample.

See supra notes 66–69 and accompanying text.

See supra notes 70–73 and accompanying text.
Section examines whether crime severity mediates gender disparities by examining gender disparities in different subsets of cases grouped by the severity of the corresponding offense.

**Table 2. Charge Reduction Rates & Crime Severity**

<table>
<thead>
<tr>
<th></th>
<th>Misdemeanor Cases</th>
<th>Felony Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>All</td>
<td>High</td>
</tr>
<tr>
<td>Female</td>
<td>47.81%</td>
<td>52.11%</td>
</tr>
<tr>
<td>Male</td>
<td>37.37%</td>
<td>36.52%</td>
</tr>
</tbody>
</table>

*Note:* All columns present the percentage of cases in which the initial top charge was dropped, amended to a lower charge, or dismissed. Column (1) includes all misdemeanor cases and column (4) includes all felony cases. Columns (2) and (3) divide misdemeanor cases based on whether the principal charge carried a potential sentence of (i) six months or less or (ii) more than six months, respectively. Columns (5) and (6) divide felony cases based on whether the principal charge carried a potential sentence of (i) ten years or less or (ii) more than ten years, respectively. Table 2 presents average charge reduction rates for male and female defendants in cases involving misdemeanors and felony offenses. In cases involving misdemeanor offenses, female defendants receive a charge reduction 47.81% of the time, a rate that is 10.44 percentage points greater than that of males. In other words, female defendants in misdemeanor cases are 27.94% more likely than male defendants to receive a charge reduction. If we focus on cases involving felony offenses, gender disparities in charge reductions are considerably smaller. In this set of cases, the difference in charge reduction rates between male and female defendants, 2.15 percentage points, represents just 4.82% of the charge reduction rate for male defendants. Thus, it appears that the gender disparities in charge reduction rates identified above are mainly driven by cases in which a misdemeanor crime was the top charge. Figure 2 provides a graphical illustration of this difference in gender disparities in charge reduction rates across misdemeanor and felony cases.

---

169. *See supra* Table 2, column (1).

170. Such charge reductions at the misdemeanor level can be especially valuable to a defendant to the extent that these may eliminate the possibility of a misdemeanor conviction (thus precluding the possibility of incarceration) either by the dismissal of all charges or their reduction to a lesser offense that does not carry a prison sentence (such as a forfeiture).

171. Charge reductions at the felony level can be valuable to defendants not just because of the corresponding reduction in the maximum possible sentence they may receive later in the process, but also because of the possibility of having felony charges reduced to misdemeanor charges. Wright & Engen, *supra* note 36, at 9 (noting that the reduction of felony charges to misdemeanors is especially consequential because it reduces punishment and offender’s criminal history).

172. *See supra* Table 2, column (4).
Felony crimes as a class includes a very diverse group of offenses. Some felonies are associated with penalties of just over a year in prison, while others carry potential sentences of up to sixty years or even life imprisonment. To explore these variations in gender disparities more closely, we can divide felony cases into two groups according to the severity of the crime involved—whether the maximum statutory sentence corresponding to the principal charge is (i) greater than ten years or (ii) ten years or lower.

In cases involving lower-level felonies, female defendants receive charge reductions 50.80% of the time while male defendants receive charge reductions 46.85% of the time. This difference in charge reduction rates, 3.95 percentage points, represents 8.43% of the average charge reduction rate of male defendants. The results are strikingly different if we look at cases involving the most serious felonies. In this set of cases, the charge reduction for male defendants (37.32%) is higher than the charge reduction rate for female defendants (34.99%).

Dividing misdemeanor cases according to the severity of the offense reveals a similar pattern. In cases involving misdemeanors punishable by up to six months imprisonment, female defendants receive charge reductions 52.11% of the time while male defendants receive charge reductions 36.52% of the time. Gender disparities are slightly lower if we look at cases involving misdemeanors punishable by more than a six-month imprisonment: the charge reduction for female defendants is 46.12%, while that of male defendants is 37.70%.

173. See supra note 116.
174. See supra Table 2, column (5).
175. See supra Table 2, column (6).
176. See supra Table 2, column (2). The difference in charge reduction rates, 15.59 percentage points, represents 42.69% of the average charge reduction rate of male defendants.
177. See supra Table 2, column (3). The difference in charge reduction rates, 8.42 percentage points, represents 22.33% of the average charge reduction rate of male defendants.
These results are consistent with the “bad woman” hypothesis, which predicts that female defendants committing less serious offenses receive more favorable treatment relative to male defendants but that female defendants committing more serious offenses receive similar treatment to male defendants. However, as noted earlier, merely comparing reduction rates can be deceiving as various factors, such as crime and defendant characteristics, that affect prosecutorial decision-making may be correlated with defendants’ gender. To control for such factors, we can estimate the probit model described earlier separately for cases involving different offense seriousness levels. The results of these different probit models, which are presented in Table 3, confirm that the magnitude of gender disparities is correlated with the severity of the offense.

Table 3. Charge Reduction Rates & Crime Severity

<table>
<thead>
<tr>
<th></th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
<th>(5)</th>
<th>(6)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Misdemeanor Cases</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All</td>
<td>0.076***</td>
<td>0.092***</td>
<td>0.069***</td>
<td>0.014</td>
<td>0.024*</td>
<td>-0.009</td>
</tr>
<tr>
<td>Low</td>
<td>0.007</td>
<td>0.014</td>
<td>0.009</td>
<td>0.011</td>
<td>0.013</td>
<td>0.021</td>
</tr>
<tr>
<td>High</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black</td>
<td>-0.081***</td>
<td>-0.075***</td>
<td>-0.085***</td>
<td>-0.043***</td>
<td>-0.054***</td>
<td>-0.019</td>
</tr>
<tr>
<td>Other Race</td>
<td>-0.042***</td>
<td>-0.012</td>
<td>-0.053***</td>
<td>-0.006</td>
<td>-0.039*</td>
<td>0.077**</td>
</tr>
<tr>
<td>Prior (1)</td>
<td>-0.266***</td>
<td>-0.249***</td>
<td>-0.272***</td>
<td>-0.173***</td>
<td>-0.183***</td>
<td>-0.156***</td>
</tr>
<tr>
<td>Prior (2+)</td>
<td>-0.351***</td>
<td>-0.375***</td>
<td>-0.342***</td>
<td>-0.254***</td>
<td>-0.276***</td>
<td>-0.199***</td>
</tr>
<tr>
<td>ConcChrg</td>
<td>-0.015**</td>
<td>-0.053***</td>
<td>-0.008</td>
<td>-0.110***</td>
<td>-0.142***</td>
<td>-0.051***</td>
</tr>
<tr>
<td></td>
<td>0.006</td>
<td>0.012</td>
<td>0.007</td>
<td>0.012</td>
<td>0.014</td>
<td>0.021</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Felony Cases</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Obs.</td>
<td>30,279</td>
<td>8,605</td>
<td>21,672</td>
<td>15,861</td>
<td>12,100</td>
<td>3,758</td>
</tr>
<tr>
<td>Mean</td>
<td>0.397</td>
<td>0.400</td>
<td>0.396</td>
<td>0.451</td>
<td>0.476</td>
<td>0.369</td>
</tr>
</tbody>
</table>

**Note:** Robust standard errors in brackets (* significant at 10%; ** significant at 5%; *** significant at 1%). This table presents the marginal effects from probit models in which the outcome variable is an indicator variable equal to one if the initial top charge in a case was dropped, amended to a lesser charge, or dismissed. Column (1) includes all misdemeanor cases and column (4) includes all felony cases.

178. See supra notes 66–73 and accompanying text.
179. See supra notes 146–55 and accompanying text.
Columns (2) and (3) divide misdemeanor cases based on whether the principal charge carried a potential sentence of (i) six months or less or (ii) more than six months, respectively. Columns (5) and (6) divide felony cases based on whether the principal charge carried a potential sentence of (i) ten years or less or (ii) more than ten years, respectively. For a description of the explanatory variables of interest see Appendix Table 1. All regressions also include a set of crime class fixed effects, a set of crime type fixed effects, a set of year fixed effects, and controls for the defendant’s age.

In misdemeanor cases, female defendants are 7.6 percentage points more likely than male defendants to receive a charge reduction, a statistically significant difference that represents 19.14% of the average charge reduction rate in misdemeanor cases. On the other hand, if we focus on felony cases, the coefficient on the Female indicator variable is small and not statistically significant. Within misdemeanor and felony cases, there is a similar negative correlation between gender disparities and the severity of the offense. Female defendants in low-level misdemeanor cases are 9.2 percentage points more likely than male defendants to receive a charge reduction, while in high-level misdemeanor cases the difference in charge reduction rates between male and female defendants is 6.9 percentage points. In low-level felony cases, female defendants are 2.4 percentage points more likely than male defendants to receive a charge reduction, a difference that represents 5.04% of the charge reduction rate in this subset of cases and is of marginal statistical significance. For high-level felony cases, the coefficient on the Female indicator variable is actually negative and statistically indistinguishable from zero.

3. Charge Reductions and Defendant’s Criminal History

The gender attribution theory discussed earlier suggests that the gender of the defendant should be a less reliable proxy for a defendant’s inherent criminality when a defendant has been previously convicted. Consequently, one may expect gender disparities to be lower in cases involving defendants with at least one prior conviction and higher for cases involving defendants with no prior convictions. The data confirms this hypothesis.

180. See supra Table 3, column (1).
181. See supra Table 3, column (4). In felony cases, female defendants are just 1.4 percentage points more likely than male defendants to receive a charge reduction, a difference representing 3.10% of the average charge reduction rate in felony cases.
182. See supra Table 3, columns (2), (3).
183. See supra Table 3, column (5).
184. See supra Table 3, column (6).
185. See supra notes 66–73 and accompanying text.
186. See supra note 134 and accompanying text.
Table 4. Charge Reduction Rates & Criminal History

<table>
<thead>
<tr>
<th></th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
<th>(5)</th>
<th>(6)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>All</td>
<td>Misdemeanors</td>
<td>Felonies</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>No Prior</td>
<td>Prior</td>
<td>No Prior</td>
<td>Prior</td>
<td>No Prior</td>
<td>Prior</td>
</tr>
<tr>
<td>Female</td>
<td>64.42%</td>
<td>28.50%</td>
<td>65.42%</td>
<td>25.06%</td>
<td>61.77%</td>
<td>34.36%</td>
</tr>
<tr>
<td>Male</td>
<td>57.95%</td>
<td>29.79%</td>
<td>57.01%</td>
<td>24.57%</td>
<td>60.28%</td>
<td>38.10%</td>
</tr>
</tbody>
</table>

Note: All columns present the percentage of cases in which the initial top charge was dropped, amended to a lower charge, or dismissed. Columns (1) and (2) include all cases, while columns (3)–(4) and columns (5)–(6) include all misdemeanor and felony cases, respectively. Columns (1), (3), and (5) restrict the sample to cases in which the defendant had no prior convictions, while columns (2), (4), and (6) restrict the sample to cases in which the defendant had at least a prior conviction.

Female defendants with no prior convictions receive charge reductions in 64.42% of the cases, 6.47 percentage points higher than the rate of charge reductions for male defendants with no prior convictions, 57.95%. In other words, female defendants with no prior convictions are 11.16% more likely than male defendants to receive a charge reduction. On the other hand, female defendants with at least one prior conviction are 1.29 percentage points less likely than male defendants with at least one prior conviction to receive a charge reduction. Figure 3 presents a graphical illustration of this relationship between defendants’ criminal history and gender disparities in charge reduction.

187. See supra Table 4, column (1).
188. See supra Table 4, column (2). In other words, female defendants are 4.3% less likely than male defendants to receive a charge reduction. This difference, however, is not statistically significant.
This pattern of gender disparities favoring females with no prior convictions is consistent across both felony and misdemeanor crimes, though in notably different ways. Female defendants charged with misdemeanors who have no prior criminal history are 8.41 percentage points more likely than similarly situated male defendants to see their top charges dropped or reduced. Differences in charge reduction rates between male and female defendants in misdemeanor cases are substantially smaller if we only consider defendants who have at least one prior conviction. In these cases, females are just 0.49 percentage points more likely than male defendants to receive a charge reduction.

Female defendants with no prior convictions see their top felony charges reduced 61.77% of the time, while male defendants do so 60.28% of the time, a difference of 1.49 percentage points. However, gender disparities reverse when we look at defendants with at least one prior conviction that have been charged with at least one felony. In this subset of cases male defendants are more likely to receive charge reductions than female defendants. The charge reduction rate for male defendants in these cases (38.10%) is 3.74 percentage points greater than that of female defendants (34.36%).

189. See supra Table 4, column (3). In these cases, female defendants see their top charges reduced 65.42% of the time, while male defendants do so 57.01% of the time. This difference of 8.41 percentage points represents 14.75% of the charge reduction rate for male defendants.

190. See supra Table 4, column (4). In these cases, female defendants see their top charges reduced 25.06% of the time, while male defendants do so 24.57% of the time. This difference of 0.49 percentage points represents 1.99% of the charge reduction rate for male defendants.

191. See supra Table 4, column (5). This difference of 1.49 percentage points represents 2.47% of the charge reduction rate for male defendants.

192. See supra Table 4, column (6). This difference of 3.74 percentage points represents
In other words, gender disparities in misdemeanor cases reverse by 7.92 percentage points as we move from defendants with no prior convictions (where female charge reduction rates are 8.41 percentage points higher) to defendants with at least one prior conviction (where female charge reduction rates are just 0.49 percentage points higher). Similarly, gender disparities in felony cases reverse by 5.23 percentage points as we move from defendants with no prior convictions (where female charge reduction rates are 1.49 percentage points higher) to defendants with at least one prior conviction (where female charge reduction rates are 3.74 percentage points lower). Figure 4 presents a graphical illustration of these patterns in gender disparities.

![Figure 4. Interaction of Crime Severity & Criminal History](image)

To control for various factors that affect prosecutors’ plea-bargaining decisions, we can reestimate the baseline probit model on separate subsets of the cases based on defendants’ criminal histories. The results are consistent with those described just above—there are significant disparities in the rate of charge reductions favoring female defendants over male defendants who have no prior criminal records, but the disparities between these two groups decrease significantly (and even reverse) when the analyses focus solely on defendants with at least a prior conviction. This is true

10.88% of the charge reduction rate for female defendants.

193. See supra notes 146–55 and accompanying text.

194. Female defendants with no prior convictions are 9.2 percentage points more likely than male defendants to receive a charge reduction, a difference that represents 15.38% of the average reduction rate. See infra Table 5, column (1). On the other hand, when we look at cases in which the defendant had prior convictions, the coefficient on Female is smaller
for cases in which the top charge was a misdemeanor\textsuperscript{195} and in cases in which the top charge was a felony.\textsuperscript{196}

\textsuperscript{195} Female defendants with no prior convictions who are initially charged with misdemeanors are 10.8 percentage points more likely than male defendants to receive a charge reduction. See infra Table 5, column (3). The coefficient on Female represents 18.15\% of the average reduction rate in this sample of cases. See infra Table 5, column (3). On the other hand, when we look at misdemeanor cases in which the defendant had prior convictions, the coefficient on Female is substantially smaller (0.023) and represents 9.31\% of the mean outcome. See infra Table 5, column (4).

\textsuperscript{196} In felony cases, female defendants with no prior convictions are 3.7 percentage points more likely than male defendants to obtain a charge reduction, a difference that represents 6.10\% of the average rate in this sample of cases. See infra Table 5, column (5). However, there is no statistically significant difference between the rates of charge reduction for male and female defendants with prior criminal history. See infra Table 5, column (6). The coefficient on Female is small (-0.007) and represents 1.87\% of the mean outcome in this subset of cases. See infra Table 5, column (6).
Table 5. Charge Reduction Rates & Criminal History

<table>
<thead>
<tr>
<th></th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
<th>(5)</th>
<th>(6)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>All Cases</td>
<td>Misdemeanor Cases</td>
<td>Felony Cases</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>No Prior</td>
<td>Prior</td>
<td>No Prior</td>
<td>Prior</td>
<td>No Prior</td>
<td>Prior</td>
</tr>
<tr>
<td>Female</td>
<td>0.092***</td>
<td>0.012</td>
<td>0.108***</td>
<td>0.023**</td>
<td>0.037**</td>
<td>-0.007</td>
</tr>
<tr>
<td></td>
<td>[0.008]</td>
<td>[0.008]</td>
<td>[0.010]</td>
<td>[0.009]</td>
<td>[0.017]</td>
<td>[0.014]</td>
</tr>
<tr>
<td>Black</td>
<td>-0.142***</td>
<td>-0.020***</td>
<td>-0.161***</td>
<td>-0.023***</td>
<td>-0.104***</td>
<td>-0.016</td>
</tr>
<tr>
<td></td>
<td>[0.009]</td>
<td>[0.006]</td>
<td>[0.010]</td>
<td>[0.007]</td>
<td>[0.016]</td>
<td>[0.010]</td>
</tr>
<tr>
<td>Other Race</td>
<td>-0.026*</td>
<td>-0.062***</td>
<td>-0.028*</td>
<td>-0.074***</td>
<td>0.012</td>
<td>-0.030</td>
</tr>
<tr>
<td></td>
<td>[0.014]</td>
<td>[0.013]</td>
<td>[0.016]</td>
<td>[0.014]</td>
<td>[0.028]</td>
<td>[0.026]</td>
</tr>
<tr>
<td>Prior (2+)</td>
<td>-0.073***</td>
<td>-0.065***</td>
<td>-0.082***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>[0.007]</td>
<td>[0.008]</td>
<td>[0.013]</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ConcChrg</td>
<td>0.008</td>
<td>-0.057</td>
<td>-0.057***</td>
<td>0.022***</td>
<td>-0.143***</td>
<td>-0.089***</td>
</tr>
<tr>
<td></td>
<td>[0.010]</td>
<td>[0.051]</td>
<td>[0.011]</td>
<td>[0.008]</td>
<td>[0.017]</td>
<td>[0.012]</td>
</tr>
<tr>
<td>Obs.</td>
<td>18,258</td>
<td>27,882</td>
<td>13,083</td>
<td>17,196</td>
<td>5,175</td>
<td>10,686</td>
</tr>
<tr>
<td>Mean</td>
<td>0.598</td>
<td>0.296</td>
<td>0.595</td>
<td>0.247</td>
<td>0.607</td>
<td>0.375</td>
</tr>
</tbody>
</table>

Note: Robust standard errors in brackets (* significant at 10%; ** significant at 5%; *** significant at 1%). This table presents the marginal effects from probit models in which the outcome variable is an indicator variable equal to one if the initial top charge in a case was dropped, amended to a lesser charge, or dismissed. Columns (1)–(2) include all cases, while columns (3)–(4) and (5)–(6) include all misdemeanor and felony cases, respectively. Columns (1), (3), and (5) restrict the sample to cases in which the defendant had no prior convictions. Columns (2), (4), and (6) restrict the sample to cases in which the defendant had at least one prior conviction. For a description of the explanatory variables of interest see Appendix Table 1. All regressions also include a set of crime class fixed effects, a set of crime type fixed effects, a set of year fixed effects, and controls for the defendant’s age.

4. Gender Disparities in Sentencing

The results presented thus far document the existence of gender disparities in the plea-bargaining process. This Section examines the role played by these differences in charge reduction rates in generating gender disparities in ultimate criminal case outcomes. If judges “undo” the disparities introduced at the plea-bargaining stage by sentencing female defendants more harshly than male defendants, then the biases introduced during plea bargaining would be of lesser practical importance.197 This

197. Existing evidence indicates this is likely not the case. See supra notes 40–43 and accompanying text.
Section presents evidence that suggests that gender disparities in charge reduction rates are not corrected during the sentencing stage.

Table 6 presents summary statistics of sentencing outcomes for those cases in which the defendant was convicted of a crime carrying a possible jail or prison sentence. As documented in the existing literature, female defendants are less likely to receive a prison sentence than male defendants. The incarceration rate for male defendants is 44.83%, substantially higher than that of female defendants, 30.94%. In other words, male defendants are about 44.89% more likely than female defendants to be incarcerated. Moreover, female defendants receive sentences that are on average 1.69 months shorter than those received by male defendants (3.21 months vs. 1.52 months).

Table 6. Sentencing Outcomes by Gender

<table>
<thead>
<tr>
<th>Panel: All Cases</th>
<th>(1) Incarceration</th>
<th>(2) Sentence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>Obs.</td>
<td></td>
</tr>
<tr>
<td>6,548</td>
<td>30.94%</td>
<td>1.52</td>
</tr>
<tr>
<td>Male</td>
<td>27,392</td>
<td>44.83%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Panel: Cases with Felony Convictions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Obs.</td>
</tr>
<tr>
<td>Female</td>
</tr>
<tr>
<td>1,829</td>
</tr>
<tr>
<td>Male</td>
</tr>
<tr>
<td>7,875</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Panel: Cases with Misdemeanor Convictions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Obs.</td>
</tr>
<tr>
<td>Female</td>
</tr>
<tr>
<td>4,719</td>
</tr>
<tr>
<td>Male</td>
</tr>
<tr>
<td>19,517</td>
</tr>
</tbody>
</table>

Note: Panel A includes all cases in which the defendant was convicted of a crime which carries a possible sentence in jail or prison. Panel B includes cases in which the defendant was convicted of at least one felony. Panel C includes cases in which the defendant was convicted of at least one misdemeanor, but of no felonies. Column (1) in each panel reports the average incarceration rate for each gender group, while column (2) reports the average highest sentence received by a defendant (in months).

198. See supra notes 40–43 and accompanying text.

199. See infra Table 6A, column (1). These figures include those cases in which a sentence of zero months was imposed.

200. This is equal to the difference in incarceration rates (13.89 percentage points) divided by the incarceration rate of female defendants (30.94%).

201. See infra Table 6A, column (2). This difference is substantial in relative terms—the sentences received by male defendants are 111.18% longer than those received by female defendants.
In panels B and C of Table 6, cases are divided into two groups—those in which there was at least one felony conviction (panel B) and those in which defendants were only convicted of misdemeanor crimes (panel C). Male defendants convicted of at least one felony are 19.56 percentage points more likely than female defendants to be incarcerated (45.09% vs. 25.53%) and receive sentences that are on average 4.61 months longer than those received by male defendants (8.53 months vs. 3.92 months). Looking at sentencing in misdemeanor cases reveals similar disparities. In these cases, male defendants are 11.69 percentage points more likely than female defendants to be incarcerated (44.73% vs. 33.04%) and receive sentences that are almost twice as large as those received by female defendants (1.06 months vs. 0.59 months).

These gender disparities in incarceration rates and sentence length suggests that judges are not “correcting” the gender disparities being introduced during the plea-bargaining process by sentencing female defendants more harshly than male defendants. Of course, disparities in raw averages do not take into account differences in defendant and crime characteristics across cases involving male and female defendants that may impact judges’ sentencing decisions. A series of models that control for these factors and are presented in the Appendix confirm that gender disparities in sentencing are present even after controlling for numerous factors.

B. The Intersection of Gender and Race

The results presented above indicate that female defendants receive more lenient treatment than male defendants during the plea-bargaining process. These gender disparities are greater in cases involving low-level offenses and defendants with no prior convictions, patterns that suggest that a defendant’s gender is used as a proxy for the defendant’s inherent criminality. Race also appears to play a critical role in determining plea-bargaining outcomes. When considering the entire sample, the charge reduction rate for black defendants is 6.8 percentage point lower than that of white defendants. Notably, the magnitude of this racial disparity is similar to the gender disparity identified earlier (5.8 percentage points). A recent article examining racial disparities in plea bargaining using this dataset finds that racial disparities are present even after controlling for numerous factors.

202. See supra Table 6B, column (1). This difference represents 76.62% of the incarceration rate of female defendants.

203. See supra Table 6B, column (2). That is, male defendants convicted of a felony offense receive sentences that are 117.60% longer than those received by female defendants.

204. See supra Table 6C, column (1). This difference represents 35.38% of the incarceration rate of male defendants convicted of a misdemeanor offense.

205. See supra Table 6C, column (2).

206. See infra Appendix Table 3. The coefficient on the Female indicator variable for all models is negative and statistically significant, confirming that female defendants receive more lenient treatment during sentencing than male defendants.

207. See supra Table 1, column (1). This racial disparity is measured by the coefficient on the indicator variable Black.

208. See supra note 157 and accompanying text.
disparities are also greater in cases involving low-level offenses and defendants with no prior convictions.\textsuperscript{209}

The analyses in this Section examine the intersection of gender and race in the plea-bargaining process.\textsuperscript{210} Due to the relatively low number of nonblack and nonwhite female defendants in the database, these analyses are restricted to cases involving black and white defendants. Thus, defendants are divided into four groups: (1) white female, (2) white male, (3) black female, and (4) black male. The baseline model estimated earlier predicts that white females should be the group with the highest charge reduction rate in the sample, while black males should be the group with the lowest charge reduction rate. Moreover, black female and white male defendants should have similar charge reduction rates.

These predictions, however, assume that race does not mediate the effects of gender. It could be that racial disparities are driven, for example, by the less favorable treatment received by black male defendants and that black female defendants are afforded the same treatment as white female defendants. If that is the case, black and white female defendants should have the highest charge reduction rates and black male defendants should have the lowest charge reduction rates (with the charge reduction rate for white male defendants falling somewhere in between). Or it could be that gender disparities are being driven by the more favorable treatment received by white female defendants. In that case, we would expect white female defendants to have the highest charge reduction rates followed by white male defendants. Black female and black male defendants would then have the lowest charge reduction rates.

1. Disparities in Charge Reductions

This Section explores differences in charge reduction rates among white female, white male, black female, and black male defendants. The first part of this Section analyzes disparities using all cases in the dataset. The second and third parts of this Section divide cases based on the severity of the offense involved and the criminal history of the defendant.

a. Baseline Results

Let us first examine differences in charge reduction rates across our four groups. The existence of racial disparities favoring white over black defendants and gender disparities favoring female over male defendants suggests that we should observe high charge reduction rates in cases involving white female defendants and low charge reduction rates in cases involving black male defendants. That is exactly what the data reveals. White female defendants receive charge reductions over fifty percent of the time, while black male defendants receive charge reductions less than thirty-five percent of the time.\textsuperscript{211} Notably, charge reductions rates for white male defendants and black female defendants are similar—43.79\% and 41.26\%,

\textsuperscript{209} See Berdejó, supra note 80, at 1188.
\textsuperscript{210} See supra Section I.C.3.
\textsuperscript{211} See infra Table 7, column (1).
respectively—which suggests that the effects of gender and race on plea-bargaining outcomes are of similar magnitude.212

Table 7. Gender, Race, & Pre-Sentencing Outcomes

<table>
<thead>
<tr>
<th></th>
<th>(1) All Offenses</th>
<th>(2) All Prior</th>
<th>(3) No Prior</th>
<th>(4) Felonies</th>
<th>(5) Misd.'s</th>
</tr>
</thead>
<tbody>
<tr>
<td>White Female</td>
<td>50.09%</td>
<td>29.26%</td>
<td>66.57%</td>
<td>46.56%</td>
<td>51.80%</td>
</tr>
<tr>
<td>White Male</td>
<td>43.79%</td>
<td>30.11%</td>
<td>63.01%</td>
<td>46.10%</td>
<td>42.70%</td>
</tr>
<tr>
<td>Black Female</td>
<td>41.26%</td>
<td>27.36%</td>
<td>58.13%</td>
<td>45.41%</td>
<td>39.35%</td>
</tr>
<tr>
<td>Black Male</td>
<td>34.23%</td>
<td>30.01%</td>
<td>46.97%</td>
<td>43.11%</td>
<td>8.48%</td>
</tr>
</tbody>
</table>

Note: All columns present the percentage of cases in which the initial top charge was dropped, amended to a lower charge, or dismissed. Column (1) includes all cases. Column (2) restricts the sample to cases in which the defendant had at least one prior conviction, while column (3) restricts the sample to cases in which the defendant had no prior convictions. Columns (5) and (6) include all cases in which the top initial charge was a felony or misdemeanor, respectively.

Two related observations are worth highlighting. First, race does not appear to mediate the effect of gender in plea bargaining. The probability of a white female defendant receiving a charge reduction is 6.40 percentage points higher than that of a white male defendant (50.09% vs. 43.79%).213 Gender disparities are similar if we focus on black defendants—black females receive a charge reduction in 41.26% of cases, 7.03 percentage points more often than black male defendants.214 Second, gender does not appear to mediate the effect of race in plea bargaining. The charge reduction rate for white female defendants is 8.83 percentage points higher than that of black female defendants.215 The difference in charge reduction rates between white and black male defendants is just slightly larger at 9.56 percentage points.216 Thus, the effects of a defendant’s gender and race on his or her likelihood of receiving a charge reduction are complementary (i.e., act as additive effects).

To examine the role of race and gender in plea-bargaining outcomes in a more rigorous manner, we can estimate the following probit model:217

\[ y_i = \alpha + \beta_1 \text{Female}_i + \beta_2 \text{Black}_i + \beta_3 \text{Female}_i \cdot \text{Black}_i + \beta_4 X_1 + \beta_5 Z_1 + \varepsilon_i \]  \hspace{1cm} (2)

The explanatory variables of interest in this model are: (1) Female, an indicator variable equal to one if the defendant was a woman; (2) Black, an indicator variable

---

212. See infra Table 7, column (1).
213. See supra Table 7, column (1).
214. See supra Table 7, column (1).
215. See supra Table 7, column (1).
216. See supra Table 7, column (1).
217. For a discussion of the probit model see supra note 146 and accompanying text.
equal to one if the defendant was a black individual; and (3) Black*Female, a race-gender interaction term. All other variables are the same as described earlier. The interaction term Black*Female will tell us whether race mediates the effect of gender and vice versa. If black female defendants receive the same treatment as white female defendants, the coefficient on this interaction term should be positive and of a magnitude that offsets the coefficient on the Black indicator variable. On the other hand, if black female defendants receive the same treatment as black male defendants, then the coefficient on the Black*Female interaction term should be negative and of a magnitude that offsets the coefficient on the Female indicator variable. Finally, if the coefficient on the interaction terms is equal to zero, then we could conclude that gender and racial disparities are independent and additive.

The result for this model is presented in column (2) of Table 1. The coefficient on the Female*Black interaction term is small and not statistically significant. And the coefficients on the Female and Black indicator variables are similar to the estimates from the baseline model presented earlier (5.5 and 6.7 percentage points, respectively). This confirms that race does not mediate the effect of gender on a defendant’s likelihood of receiving lenient treatment and that white females receive the most lenient treatment of all groups while black males receive the harshest treatment during the plea-bargaining process.

b. Crime Severity

As discussed earlier, the gender and race of a defendant may affect plea-bargaining outcomes if prosecutors employ these observable defendant characteristics as proxies for the defendant’s inherent criminality, itself an unobservable characteristic. In that case, we should then observe greater gender and racial disparities in cases involving low-level offenses and lesser disparities in cases involving more serious offenses, where the crime itself provides information about the defendant’s inherent criminality.

The data is consistent with this prediction. In cases involving felony crimes, charge reduction rates are similar across the four groups of defendants. The charge reduction rate for white female defendants (the group with the highest rate) is just 3.45 percentage points higher than the charge reduction rate for black male defendants (the group with the lowest charge reduction rate) (46.56% vs. 43.11%). The charge reduction rate for black female defendants (45.41%) and white male defendants (46.10%) fall between the other two groups. Disparities are considerably greater if we look at cases involving misdemeanor offenses. In these cases, the charge reduction rate for white female defendants (the group with the

218. See infra Appendix Table 2; supra notes 149–55 and accompanying text.
219. See supra Table 1, column (2).
220. Cf. supra Table 1, columns (1) and (2).
221. See supra notes 66–69, 85–88 and accompanying text.
222. See supra notes 70–73, 89–91 and accompanying text.
223. See supra Table 7, column (4).
224. See supra Table 7, column (4).
highest rate) is 23.32 percentage points higher than the charge reduction rate for black male defendants (the group with the lowest charge reduction rates).\textsuperscript{225}

Figure 5 illustrates how differences in charge reduction rates across the four groups are greater in cases involving misdemeanor crimes than in cases involving felony crimes, a pattern that lends support to the theory that race and gender are used by prosecutors as proxies for defendants’ risk and inherent criminality when making plea-bargaining decisions.

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{figure5.png}
\caption{Race, Gender & Charge Reduction Rates by Crime Severity}
\end{figure}

\textbf{c. Criminal History}

As in our earlier analyses of gender disparities, we can examine how defendants’ criminal histories mediate the effects of gender and race in determining plea-bargaining outcomes. In cases involving defendants with at least one prior conviction, disparities across the four groups are relatively small.\textsuperscript{226} However, in cases involving defendants with no prior convictions there are greater disparities across the four groups.\textsuperscript{227}

In cases involving defendants with no prior convictions, white females have the highest charge reduction rate across the four groups (66.57%).\textsuperscript{228} White males are a close second with a charge reduction rate of 63.01%.\textsuperscript{229} The difference, 3.56

\textsuperscript{225} See supra Table 7, column (5).
\textsuperscript{226} See supra Table 7, column (2). The difference between the groups with the highest and lowest charge reduction rates is 2.75 percentage points.
\textsuperscript{227} See supra Table 7, column (3).
\textsuperscript{228} See supra Table 7, column (3).
\textsuperscript{229} See supra Table 7, column (3).
percentage points, represents 5.65% of the average charge reduction for white males. However, gender disparities are substantially greater if we focus on black defendants. The charge reduction rate for black male defendants, 46.97%, is 11.16 percentage points lower than that of black females, a difference that represents 23.76% of the charge reduction for black males.\(^{230}\) Gender disparities in the subset of defendants with no prior convictions thus appear to be driven by black male and female defendants.\(^{231}\)

Figure 6 presents a graphical depiction of these differences in charge reduction rates across the four groups of defendants. The pattern depicted therein—namely, lesser disparities in cases involving defendants with a prior criminal record and greater disparities in cases involving defendants with no prior criminal record—lends further support to the theory that race and gender are used by prosecutors as proxies for defendants’ risk and inherent criminality when making plea-bargaining decisions.

2. Disparities in Sentencing Outcomes

The results presented thus far document the existence of gender and racial disparities in the plea-bargaining process that significantly disfavor male black defendants. The analyses in this Section verify whether judges “correct” disparities introduced in the plea-bargaining stage that adversely affected black males by

\(^{230}\) See supra Table 7, column (3).

\(^{231}\) Similarly, racial disparities in charge reduction rates in cases involving defendants with no prior convictions appear to be driven by the treatment received by black males. The charge reduction rate for black females (58.13%) is 8.44 percentage points lower than that of white females, a difference that represents 14.52% of the average charge reduction for black females. On the other hand, the charge reduction rate for black males is 16.04 percentage points lower than that of white males, a difference that represents 34.15% of the average charge reduction for black males. See supra Table 7, column (3).
sentencing these defendants less “harshly” than others. Table 8 presents summary statistics of sentencing outcomes for those cases in which the defendant was convicted of a crime that carries a possible jail or prison sentence.

Table 8. Sentencing Outcomes by Race & Gender

<table>
<thead>
<tr>
<th>Race &amp; Gender</th>
<th>(1) Obs.</th>
<th>Incarceration</th>
<th>(2) Sentence</th>
</tr>
</thead>
<tbody>
<tr>
<td>White Female</td>
<td>3,656</td>
<td>27.54%</td>
<td>1.36</td>
</tr>
<tr>
<td>White Male</td>
<td>13,898</td>
<td>36.78%</td>
<td>2.43</td>
</tr>
<tr>
<td>Black Female</td>
<td>2,688</td>
<td>36.20%</td>
<td>1.71</td>
</tr>
<tr>
<td>Black Male</td>
<td>11,619</td>
<td>55.71%</td>
<td>4.27</td>
</tr>
</tbody>
</table>

Note: This table includes all cases in which the defendant was convicted of a crime which carries a possible sentence in jail or prison. Column (1) reports the average incarceration rate for each group, while column (2) reports the average highest sentence received by a defendant (in months).

Rather than “reversing” the disparities introduced in the plea-bargaining process, sentencing appears to exacerbate these disparities. The lowest incarceration rate belongs to white females (27.54%) while the highest incarceration rate corresponds to black males (55.71%). That is, the incarceration rate for black males is over twice as great as that of white females. As was the case with charge reduction rates, the incarceration rates for white males and black females are similar (36.78% and 36.20%, respectively) and fall in between those of white females and black males. Figure 7 provides a graphical representation of these differences in incarceration across the four groups. Examining sentence length reveals a similar pattern—white females receive the lowest average sentences, while black males receive the highest.

232. Existing evidence indicates this is likely not the case. See supra notes 74–75 and accompanying text.  
233. See supra Table 8, column (1).  
234. See supra Table 8, column (1).  
235. See supra Table 8, column (2).
CONCLUSION

The results presented in this Article document the existence of gender disparities in the plea-bargaining stage of the criminal justice system. Female defendants are more likely than male defendants to receive a reduction in their principal initial charge. These disparities in plea bargaining appear to be driven by cases involving defendants with no prior convictions and less serious offenses. These patterns suggest that in “low information” cases, a defendant’s gender appears to be used by some prosecutors as a proxy for his or her likelihood to recidivate and latent criminality.

The Article also explores the intersection of gender and race in the plea-bargaining process, finding that gender and racial disparities complement each other in a way that yields additive effects. The charge reduction rate for white females is almost fifty percent higher than that of black males. White males and black females experience similar charge reduction rates, which fall between those of white females and black males. Consistent with the individual analyses of gender and racial disparities, intergroup disparities are greater in cases involving misdemeanor offenses and defendants with no prior criminal records.

These results inform the evaluation of various current policy debates. Efforts to mitigate gender and racial disparities in the criminal justice system should consider disparities in the plea-bargaining process. The results presented in this Article also

236. See supra Section III.A.1.a.
237. See supra Section III.A.3.
238. See supra Section III.A.2.
239. See supra notes 66–73 and accompanying text.
240. See supra Section III.B.1.a.
241. See supra note 211 and accompanying text.
242. See supra note 212 and accompanying text.
243. See supra Section III.B.1.b; III.B.1.c.
highlight how gender and racial disparities run deeper in misdemeanor cases, adding an empirical dimension to the concerns of those scholars who have called for the decriminalization of misdemeanors and for increased scrutiny of the misdemeanor adjudication process. More generally, the possible implicit nature of the biases driving the disparities uncovered in this Article lends support to those who have argued that the weight afforded to evidence showing disparate impact in equal protection claims should be reexamined.

The results and conclusions presented in this Article are subject to some caveats. As with most empirical work in this area, it is difficult to establish a causal link between defendants’ characteristics (such as gender or race) and criminal case outcomes (in this case, charge reductions). One concern is that the models estimated above may not be accounting for certain crime and defendant characteristics that play a role in determining plea-bargaining outcomes and that are also correlated with the gender or race of the defendant. Failing to control for such unobservable variables could be biasing the results. Similarly, it could be that prosecutors are relying on defendant characteristics other than gender or race—but that are correlated with gender or race—to assess the risk posed by a defendant and that these defendant characteristics are not being controlled for in the analyses above. Finally, the dataset includes cases from 2000–2006 and the results may not necessarily be representative of Dane County’s current criminal justice system. In 2010, the Wisconsin governor appointed Dane County’s first African American district attorney. And starting in 2016, Dane County has provided implicit bias training for judges, prosecutors, and public defenders. It will be interesting to see whether recent

244. See supra notes 24–26 and accompanying text.
245. See supra notes 20–23 and accompanying text.
246. See supra Section III.A.1.b.
247. See supra Section I.B.1.
249. Dane County recently adopted a number of recommendations made by workgroups charged with evaluating policies to improve the criminal justice system. Among these recommendations was the implementation of an ongoing “Implicit Bias, Racial Equity and Inclusion, Diversity and Poverty Training” for judges, prosecutors, and public defenders, among others. DANE CTY. BD. OF SUPERVISORS, INVESTIGATING SOLUTIONS TO RACIAL DISPARITIES AND MENTAL HEALTH CHALLENGES IN THE DANE COUNTY JAIL AND THROUGHOUT DANE COUNTY’S CRIMINAL JUSTICE SYSTEM: WORKGROUP RECOMMENDATIONS 9 (2015). These implicit bias trainings are already taking place. Chris Rochester & Tyler Brandt, Dane County Spends $50,000 to Send Courthouse Staff to “Implicit Bias” Training, MACIVER INST. (Aug. 25, 2016), http://www.maciverinstitute.com/2016/08/dane-county-spends-50000-to-send-courthouse-staff-to-implicit-bias-training [https://perma.cc/G7LQ-DLND].
changes in policies and personnel training have been effective in addressing the disparities documented earlier.

Setting these caveats aside, there is no reason why the exercise of prosecutorial discretion (and the plea-bargaining process) should not be subject to the same rigorous empirical scrutiny that has been applied to judicial decision-making (and the sentencing process). It would be interesting to see whether the disparities documented in this Article are present in other jurisdictions. Future work can also focus more closely on the role of the prosecutor by examining, for example, which attributes and characteristics of prosecuting attorneys (if any) explain differences in plea-bargaining outcomes or documenting the existence of significant heterogeneity across individual prosecuting attorneys.

Conducting this type of empirical work requires detailed data that provides information on pre-sentencing decisions made by prosecutors. Most empirical work has focused on judges’ sentencing decisions because public entities at the state and federal levels collect and maintain comprehensive data on sentencing. There needs to be a similar level of transparency with respect to decisions taken by actors in the pre-sentencing stages of the criminal justice system. Collecting and maintaining such data certainly presents a more complex and challenging endeavor than collecting data on sentencing decisions, both in terms of the number of observations and variables. However, the Wisconsin circuit courts’ CCAP shows that this can be achieved. And a number of district attorney offices across the nation have tried to collect and use data to internally identify and address instances of biases in the

250. See supra notes 37–38 and accompanying text.
251. Studies analyzing differences in judges’ sentencing behavior based on judges’ demographic characteristics have been inconclusive. While some studies have found differences between male and female judges and between minority and white judges, other studies have not. See Abrams et al., supra note 75, at 372–74 (finding that black judges are associated with longer sentences but lower incarceration rates); Claire S.H. Lim, Bernardo S. Silveira & James M. Snyder, Jr., Do Judges’ Characteristics Matter? Ethnicity, Gender, and Partisanship in Texas State Trial Courts, 18 AM. L. & ECON. REV. 302, 305 (2016) (finding that demographic characteristics of judges have little effect on sentence length); Schanzenbach, supra note 40, at 73 (finding that judicial demographics have little effect on average prison sentences though they may impact racial and gender disparities); Darrell Steffensmeier & Chester L. Britt, Judge’s Race and Judicial Decision Making: Do Black Judges Sentence Differently?, 82 SOC. SCI. Q. 749, 757–58 (2001) (finding that black judges are more likely to incarcerate offenders than white judges); Darrell Steffensmeier & Chris Hebert, Women and Men Policymakers: Does the Judge’s Gender Affect the Sentencing of Criminal Defendants?, 77 SOC. FORCES 1163, 1174–75 (1999) (finding that female judges are more likely to incarcerate offenders and impose slightly longer sentences than male judges).
252. Recent studies on judges’ sentencing behavior have focused on individual judges, finding substantial heterogeneity in average incarceration rates and sentencing length across judges. See Abrams et al., supra note 75, at 367–68 (finding that judges’ decisions show significant heterogeneity in all sentencing measures, including incarceration, average sentence length, and average sentence length conditional on receiving a nonzero jail sentence); Lim et al., supra note 251, at 305 (finding substantial heterogeneity in sentencing harshness across judges).
253. See supra notes 37–38 and accompanying text.
254. See supra Section II.B.
exercise of prosecutorial discretion.\textsuperscript{255} The availability of this type of information would also allow courts and other external groups to scrutinize prosecutorial decision-making, an area that traditionally has been less open to the public than sentencing.\textsuperscript{256} Decision-makers exercising discretion in a transparent criminal justice system can be held accountable and this accountability can help legitimize the system in the eyes of all citizens.\textsuperscript{257}

\textsuperscript{255} See McKenzie et al., supra note 38, at 7.

\textsuperscript{256} See supra notes 38–39 and accompanying text.

\textsuperscript{257} See Kutateladze et al., Race and Prosecution in Manhattan, supra note 38, at 9 (“Prosecutors, as powerful actors in the criminal justice system, are empowered to adopt measures that promise to significantly promote equity for all people throughout all stages of the criminal justice continuum. Doing so will require a commitment to accountability and transparency.”).
**APPENDIX**

**Appendix Table 1. Description of Main Explanatory Variables**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black</td>
<td>Indicator variable equal to 1 if the defendant was African American.</td>
</tr>
<tr>
<td>Other</td>
<td>Indicator variable equal to 1 if the defendant was not African American or Caucasian.</td>
</tr>
<tr>
<td>Female</td>
<td>Indicator variable equal to 1 if the defendant was a woman.</td>
</tr>
<tr>
<td>Age</td>
<td>Equal to the age of the defendant as of the initial filing and calculated as the year of the case filing minus the defendant’s year of birth.</td>
</tr>
<tr>
<td>Prior (1)</td>
<td>Indicator variable equal to 1 if defendant had one prior conviction.</td>
</tr>
<tr>
<td>Prior (2+)</td>
<td>Indicator variable equal to 1 if defendant had two or more prior convictions.</td>
</tr>
<tr>
<td>ConcCov</td>
<td>Indicator variable equal to 1 if defendant was convicted of at least two charges. In specifications restricted to felonies, it is equal to 1 if there are at least two felony convictions. In specifications restricted to misdemeanors, it’s equal to 1 if there are at least two misdemeanor convictions.</td>
</tr>
<tr>
<td>ConcChrg</td>
<td>Indicator variable equal to 1 if defendant was initially charged with at least two crimes. In specifications restricted to felonies, it is equal to 1 if there are at least two felony charges. In specifications restricted to misdemeanors, it’s equal to 1 if there are at least two misdemeanor charges.</td>
</tr>
<tr>
<td>Trial</td>
<td>Indicator variable equal to 1 if any of the charges in a case were adjudicated in a trial.</td>
</tr>
</tbody>
</table>
Appendix Table 2. Crime Type Categories

<table>
<thead>
<tr>
<th>Category</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fleeing Officer (Wis. Stat. Ann. § 346.04 (West 2019))</td>
<td></td>
</tr>
<tr>
<td>Hit and Run (Wis. Stat. Ann. §§ 346.67–.69 (West 2019))</td>
<td></td>
</tr>
<tr>
<td>Other Crimes Against Children (Wis. Stat. Ann. §§ 948.30–.62 (West 2005))</td>
<td></td>
</tr>
<tr>
<td>Other Felony</td>
<td></td>
</tr>
<tr>
<td>Other Misdemeanor</td>
<td></td>
</tr>
<tr>
<td>Crime</td>
<td>Reference</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>-----------------------------------------------</td>
</tr>
</tbody>
</table>
## Appendix Table 3. Explaining Sentencing Outcomes

<table>
<thead>
<tr>
<th></th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
<th>(5)</th>
<th>(6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>1.174***</td>
<td>0.126***</td>
<td>-3.302***</td>
<td>-0.179***</td>
<td>-0.380***</td>
<td>-0.109***</td>
</tr>
<tr>
<td></td>
<td>[0.099]</td>
<td>[0.0072]</td>
<td>[0.356]</td>
<td>[0.013]</td>
<td>[0.034]</td>
<td>[0.008]</td>
</tr>
<tr>
<td>Black</td>
<td>1.001***</td>
<td>0.152***</td>
<td>2.600***</td>
<td>0.101***</td>
<td>0.449***</td>
<td>0.171***</td>
</tr>
<tr>
<td></td>
<td>[0.109]</td>
<td>[0.006]</td>
<td>[0.388]</td>
<td>[0.012]</td>
<td>[0.032]</td>
<td>[0.007]</td>
</tr>
<tr>
<td>Other</td>
<td>-0.0581</td>
<td>0.0759***</td>
<td>-0.775</td>
<td>0.084***</td>
<td>0.0818</td>
<td>0.0749***</td>
</tr>
<tr>
<td></td>
<td>[0.279]</td>
<td>[0.013]</td>
<td>[1.155]</td>
<td>[0.027]</td>
<td>[0.056]</td>
<td>[0.015]</td>
</tr>
<tr>
<td>Priors (1)</td>
<td>0.429***</td>
<td>0.0872***</td>
<td>1.542***</td>
<td>0.071***</td>
<td>0.161***</td>
<td>0.0925***</td>
</tr>
<tr>
<td></td>
<td>[0.152]</td>
<td>[0.009]</td>
<td>[0.598]</td>
<td>[0.019]</td>
<td>[0.025]</td>
<td>[0.011]</td>
</tr>
<tr>
<td>Priors (2+)</td>
<td>1.919***</td>
<td>0.245***</td>
<td>4.811***</td>
<td>0.227***</td>
<td>0.983***</td>
<td>0.253***</td>
</tr>
<tr>
<td></td>
<td>[0.139]</td>
<td>[0.007]</td>
<td>[0.538]</td>
<td>[0.013]</td>
<td>[0.030]</td>
<td>[0.008]</td>
</tr>
<tr>
<td>ConcCov</td>
<td>1.452***</td>
<td>0.009</td>
<td>7.243***</td>
<td>0.169***</td>
<td>0.411</td>
<td>0.0671</td>
</tr>
<tr>
<td></td>
<td>[0.148]</td>
<td>[0.007]</td>
<td>[0.762]</td>
<td>[0.016]</td>
<td>[0.943]</td>
<td>[0.377]</td>
</tr>
<tr>
<td>Mean</td>
<td>2.881</td>
<td>0.423</td>
<td>7.662</td>
<td>0.414</td>
<td>0.967</td>
<td>0.427</td>
</tr>
<tr>
<td>Outcome</td>
<td>33,933</td>
<td>33,783</td>
<td>9,704</td>
<td>9,681</td>
<td>24,229</td>
<td>24,092</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.403</td>
<td>0.399</td>
<td>0.091</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Note:** Robust standard errors in brackets (* significant at 10%; ** significant at 5%; *** significant at 1%). The outcome variable in columns (1), (3), and (5) is the length (in months) of the highest sentence (capped at 720 months) received by the defendant. The outcome variable in columns (2), (4), and (6) is an indicator variable equal to one if the defendant received a prison or jail sentence. Columns (1), (3), and (5) present the results of ordinary least squares specifications, while columns (2), (4), and (6) present the marginal effects from a probit model. For a description of the explanatory variables of interest see Appendix Table 1. All regressions include a set of crime class fixed effects (i.e., maximum statutory sentence), a set of crime type fixed effects, and a set of year fixed effects.