The Effect of Prosecutorial Control of Exculpatory Evidence on Plea Bargaining

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Abstract

The power of the prosecutor within the legal system has increased substantially over the last century leading many scholars to believe that there is likely a causal relationship between the recent proliferation of plea bargaining and prosecutorial power. Most efforts taken by states to halt the surge of plea bargaining have not addressed prosecutorial discretion in the court, and no literature has conducted an empirical study analyzing the impact of prosecutorial handling of exculpatory evidence. I hypothesize there will be lower rates of plea bargains in states that have adopted the American Bar Association’s Model Rule 3.8 (g) and (h) addressing ethical handling of exculpatory evidence. To test this, I ran a bivariate and a multivariate analysis at the county-level of 17 states, 10 with the model rule and 7 without. The existence of Model Rule 3.8 (g) and (h) has a statistically significant effect on the rate of plea bargains and there is a substantially lower predicted rate of plea bargaining within model rule states. If the rate of plea bargaining is to be further reduced, reigning in the discretion of the prosecutor is an important step in this direction.

Key Words: prosecutor, plea bargaining, prosecutorial power, exculpatory evidence, prosecutorial ethics

Introduction

In 2017, Nashville-resident Shanta Sweatt was unfairly arrested for claiming possession of marijuana that belonged to her boyfriend to save her sons from a possible conviction. Sweatt’s public defense attorney believed that taking the case to trial was too risky when the stakes were up to twelve years in prison. Instead she went to the prosecutor’s office to bargain for lesser charges to a crime that was never committed by Sweatt. The prosecutor reduced the punishment substantially, but Sweatt was still subject to $1,396.15 in fines and court fees (Yoffe 2017) despite her innocence. What Sweatt’s predicament shows, and what all-too-many examples of plea bargaining show, is that the protection of the
rights of the accused is not without flaws. One person is deciding the guilt or innocence of the accused in a plea bargain: the prosecutor. It was not the judge with whom Sweatt’s attorney bargained over her freedom, it was the prosecuting attorney.

The ubiquity of plea bargaining is recent. Up through the 1920s plea bargaining was opposed by the majority of the legal community. It was judicial practice to actively discourage plea bargaining; had the Supreme Court ever ruled on the constitutionality of plea bargaining in this time period they may have held it unconstitutional and halted the practice altogether (Alschuler 1979). Instead, the practice only expanded. In the Brady v. Maryland (1963) decision the Supreme Court itself claimed that plea bargaining was “inherent in the criminal law and its administration”.

As court dockets exploded, proponents claimed that plea bargaining was necessary to keep the criminal justice system functioning (Bar-Gill and Gazal Ayal 2006, Goodman and Porter 2002). Opponents argued there would be no difference in the amount of cases prosecuted absent plea bargaining (Devers 2011). Both views, however, elide the question of justice by failing to address the probability that plea bargaining incentivizes individuals to admit guilt to something they never did, just as Sweatt experienced.

As plea bargaining increased over the last few decades, so too has the influence and powers of the prosecutor (Sklansky 2018). The power in the contemporary courtroom is in the hands of the prosecutor. The modern criminal justice system, where pleading guilty is the standard, has been defined by unchecked prosecutorial power. In other words, greater power and discretion in the hands of the prosecutor directly causes greater numbers of plea bargains as dispositions in criminal cases. If fewer innocent Americans are to be convicted of crimes they did not commit, I argue it is necessary to reign in the power of the prosecutor.

One action states have taken to reduce prosecutorial power is implementing rules guiding ethical prosecutorial conduct and ethical handling of evidence. Specifically, some states have adopted the American Bar Association’s Model Rule 3.8 amendments (g) and (h), a rule compelling the disclosure of any evidence, even after conviction. The ability to withhold evidence from the defense is a huge advantage prosecutors hold in bargaining over the accused. In order to level the legal playing field, prosecutors must be stripped

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2 A report from the National Research Council cites a workshop held in 2001 to assist the National Institute of Justice in which senior scholars, chief prosecutors, judges, and senior officials involved were able to share their experience and research. The report relays that Constitutional and policy reforms in the 20th century imposed limits on the discretionary powers of practically all professions within the criminal justice system except prosecutors. Sentencing guidelines reined in judicial discretion, police were constrained by the Miranda v. Arizona verdict, etc. but prosecutors were largely unaffected.

3 RULE 3.8(g) AND (h): (g) When a prosecutor knows of new, credible and material evidence creating a reasonable likelihood that a convicted defendant did not commit an offense of which the defendant was convicted, the prosecutor shall: (1) promptly disclose that evidence to an appropriate court or authority, and (2) if the conviction was obtained in the prosecutor's jurisdiction, (i) promptly disclose that evidence to the defendant unless a court authorizes delay, and (ii) undertake further investigation, or make reasonable efforts to cause an investigation, to determine whether the defendant was convicted of an offense that the defendant did not commit. (h) When a prosecutor knows of clear and convincing evidence establishing that a defendant in the prosecutor's jurisdiction was convicted of an offense that the defendant did not commit, the prosecutor shall seek to remedy the conviction (ABA 2017).
of their exclusive power to control exculpatory evidence. In this paper I argue that the absence of the rule guiding ethical prosecutorial handling of exculpatory evidence leads to an increased rate of plea bargaining as total dispositions. Therefore states that have applied the model rule to their code of professional ethics will see a lower ratio of plea bargains than those who have not.

I start by providing a background of the scholarly work developed around the increase of prosecutorial power within the legal system, the impact of that power on plea bargaining, and the subsequent attempt to abate prosecutorial power. I theorize that unchecked prosecutorial control over exculpatory evidence has been influential in propagating plea bargaining rates and has been relatively ignored in the push for criminal justice reform. To test my hypothesis, I conduct a bivariate and multivariate analysis at the county-level, comparing two categories of states: those that have adopted Model Rules 3.8 (g) and (h) with those that have not. To observe the statistical impact the model rule has on plea bargaining, crime rate, population density, GDP per capita, criminal justice reform bills, prosecutor elections, recidivism rates, and percentage of white population per county will be controlled. A statistically significant effect from Model Rule 3.8 (g) and (h) on plea bargaining indicates that unrestrained prosecutorial handling of exculpatory evidence plays a considerable role in plea bargaining rates.

Background

The Prosecutor occupies a powerful and unique role within the criminal justice system. They are simultaneously an administrative figure for the court as well as an advocate (Sklansky 2018, Alschuler 1968). Despite playing a role as a combatant in an adversarial process, prosecutors are also required to impartially provide all necessary pieces of the case in order to discover the objective truth. In Berger v. United States (1935)\(^4\), the Supreme Court held that the prosecutor’s “obligation to govern impartially is as compelling as [his] obligation to govern at all; and whose interest, therefore, in a criminal prosecution is not that [he] shall win a case, but that justice shall be done.” Berger holds an idealized version of prosecutorial priorities, one that does not acknowledge their incentive to win nor their desire to win. Prosecutors are political figures as well as legal advocates. They have their own aspirations just like other political figures, not all of which entail the objective pursuit of truth.

For instance, District Attorneys are often elected by the people, so they must be perceived as efficient and prestigious in order to win their position.\(^5\) Crucial to prosecutorial prestige is a favorable ratio of convictions to acquittals (Albonetti 1987). Even unelected, lower-level attorneys working for elected prosecutors seek to maximize their conviction rate as well in order to obtain favorable performance measures (Sklansky 2018). This self-interest in performance measures is evident as prosecutors decide which cases to bring to trial and which cases to negotiate for a plea.

\(^4\)Berger v. United States, 295 U.S. 78 (1935)

\(^5\)In all counties, with the exception of counties in Alaska, New Jersey and Connecticut, local prosecutors are elected (Coppolo 2003).
Scholarship on prosecutorial discretion shows that the stronger the case in favor of the prosecution, the more likely it is to go to trial (Albonetti 1987, Reinganum 1988, Bibas 2004). And any part of a case that strengthens the likelihood of conviction increases the likelihood that it will be prosecuted (Albonetti 1987). When asked about what had the greatest effect on a decision to bargain or a decision to negotiate, 85% of interviewed prosecutors reported that they consider the strength of the case to be the greatest factor in this decision (Alschuler 1968).

The prosecutor is unmatched in discretion when it comes to filing charges and sentences against the accused (Albonetti 1987). There is little oversight and accountability. Prosecutors are not all held to precise guidelines and can use this leniency to encourage guilty pleas. In cases where evidence may be insubstantial, the prosecutor can threaten the defendant with maximum penalties, dissuading them from going to trial where conviction is not certain. Defendants who take their case to trial often face harsher penalties for the same offense than those who opt for a guilty plea and those who plead guilty are more likely to receive lighter sentences than those who would have gone to trial (Ulmer and Bradley 2006).

The disclosure of evidence is also at the discretion of the prosecutor; another tool they can use to prevent a case from going to trial and evoke a guilty plea instead. Exculpatory evidence in a case is a huge deterrent for prosecutors from taking a case to trial (Albonetti 1987). To their advantage, their unique role in court allows them to determine what evidence should be disclosed. In 1963, the decision in *Brady* required that the prosecution disclose any material exculpatory evidence deemed useful to the defendant or any that could potentially change the disposition. Further caseloads later expanded on the meaning of “material evidence” but the interpretation was still largely up to the prosecutor. Despite the *Brady* decision, prosecutors still manage to use evidence to their advantage at the cost of the defense.

Former U.S. Ninth Circuit Court of Appeals Judge Alex Kozinski argued that there is an “epidemic of *Brady* violations abroad in the land” in *US v. Olsen* 2013. According to Gershman, “the non-disclosure of exculpatory evidence by prosecutors is one of the most pervasive forms of prosecutorial misconduct, and may account for more miscarriages of justice that any other type of prosecutorial infraction” (Gershman 2014). While some scholars disagree and see *Brady* violations as a rare occurrence in the overall amount of reported prosecutorial misconduct (Sklansky 2018), they acknowledge that *Brady* violations are probably not often reported and therefore difficult to trace. There is evidence that they occur at a frequent rate.

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7 Two reporters working for *The Chicago Tribune* found that there were 381 defendants from 1963 to 1999 whose homicide convictions were exonerated because prosecutors did not disclose exculpatory evidence or they presented false evidence. While in the grand scheme of convictions, 381 cases over thirty years does not sound particularly notable, 67 of these defendants were sentenced to death because of the prosecutorial goal to convict by all means necessary (Armstrong and Possley 1999). That is 67 innocent lives that could have been lost because of unjust prosecutorial discretion. Another report on prosecutorial misconduct in California found that out of 782 cases, 66 of them involved withholding exculpatory evidence (Ridolfi, Possley et al. 2010). The two most prevalent cases of misconduct are improper argument and improper examination, and while both of these are unacceptable in a fair trial,
A recent ACLU poll revealed that the majority of Americans believe there must be reform in the criminal justice system and a reduction in the prison population (Ofer 2017). Most Americans favor a departure from the “tough-on-crime” policies of the past and in 2017, 19 states passed 57 pieces of bipartisan reform legislation (Cohen 2017). There have been at least 29 states that have rolled back mandatory minimums as well as instituted policies that give sentencing and charging discretion to the judge. There are also now 17 states that have changed their legislature to incorporate determinate sentencing (Lawrence 2015). All these state-sponsored actions decrease prosecutorial discretion and increase prosecutorial accountability.

In recent years, only 4 criminal justice reform acts have been introduced at the federal level. Hardly any of these reforms specifically addressed prosecutorial power with the exception of the federal Mens Rea Reform Act. The Washington Examiner noted that this act was not applied uniformly across courts or prosecutors and only established a default requirement at the federal level. In 2012, a federal bill introduced by Alaska senator Murkowski forcing prosecutors to be more forthcoming with evidence in favor of the defense died in committee (Charles 2018). Prosecutors have not been a priority at the federal level.

Support for criminal justice is high across the country, but a nationwide attempt to reduce Brady violations has been largely ignored. As of 2017, only 17 states have adopted Model Rule 3.8 (g) and (h) from the American Bar Association. The majority of those without the rule did not outright reject it, they simply took no action in regards to it. States that have not adopted the model rule have most likely done so because they see federal-level policy as less comprehensive, or because the push for reforming prosecutors is a relatively recent one and has not gained widespread recognition within the states. The model rule itself is relatively new as the first few states to adopt it did so in 2014.

Theory and Hypothesis

The prosecutor decides whether or not to charge for a crime which gives them access to evidence and information the defense does not have. The prosecutor therefore has a distinct advantage in determining whether a case is strong enough to be tried. The key is that they both must happen at trial. Plea bargaining as a result of withholding evidence waives the right to trial.

See the American Bar Association’s CPR Policy Implementation Committee report from 2017.

At the federal level, large reform acts such as the Reverse Mass Incarceration Act can be passed if there is a spirit of cooperation in Congress. At the state-level, national debate can be bypassed and smaller-level reforms such as shortening sentences, reforming drug laws, and ending cash bail can be passed quickly and effectively.

The ACLU has been leading voter education campaigns specifically targeting prosecutorial power since 2010; they note that the vast majority of citizens skip over local prosecutor elections on ballots or side with the incumbent. In some targeted districts they have noticed an average increase of 10 percentage points in votes for D.A.s. While more progressive candidates are gaining higher percentages of votes, the power of incumbency is still very strong and it will take many more election cycles to increase greater awareness in the public of the need for prosecutorial change (Pendergrass 2018).

See the American Bar Association’s CPR Policy Implementation Committee, 2017.
strength of a case is often ambiguous to the defense, incentivizing them to bargain with the prosecutor rather than risk going to trial with asymmetrical information. In the stages before trial, the prosecutor can then present harsh penalties to reaffirm the notion that the defense is disadvantaged and should plead guilty.

If prosecutors wanted the idealized Berger vision of objective justice they would see that weak cases be solved in court. A trial guarantees that impartial jurors come to a decision of guilt or innocence after due process of law. Discrepancies would be subject to debate in order to eliminate ambiguity, not exploit it. The verdict would represent the desire for truth, not the desire for conviction. Instead, a prosecutor attempts to bargain with the defendant to prevent a weak case from going to trial and try only strong cases they know they will win.12

The discretion a prosecutor exercises in charging, sentencing, and evidence distribution can give prosecutors power over the defense if they fear they could lose the case. There has not been as much momentum towards fixing the issue of prosecutorial misconduct and evidence withholding. Not only are prosecutors a low legislative priority, but the threat of punishment is very low when prosecutors are caught violating ethics.13 This is probably due to the fact that policies involving prosecutorial ethics are first written by the American Bar Association (ABA) to then later be adopted by states and prosecutors can only be held accountable by the ABA if their states adopt these rules.14 The process is not one that has historically gathered a lot of press and popularity, but every state besides California has thus far adopted the basic Model Rule 3.815 for special responsibilities of a prosecutor as written by the ABA House of Delegates (Keenan et al. 2011).

Very few states have ratified amendments (g) and (h) to Model Rule 3.8. Most states are likely focused on their own comprehensive reforms for criminal justice that do not involve prosecutorial discretion due to the lack of public awareness. There is also inconsistent application of the Brady rule because some courts apply compulsory evidence reporting only to cases that go to trial,16 not to cases that end in a plea bargain.17 While the model rule is imperfect and does not lay out strict guidelines for plea negotiating, the application in its entirety may reign in prosecutorial withholding of evidence because it requires that a prosecutor promptly disclose any exculpatory evidence whenever it is discovered regardless of negotiations or a trial.

*Hypothesis:* States without the uniform discretionary policy for prosecutors disclosing exculpatory evidence, Model Rule 3.8 (g) and (h), face higher rates of plea bargaining as total county disposition than states that adopt the model rule.

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12See Albonetti 1987.
13See Kozinski 2015.
15The first iteration of this rule was adopted by the ABA in 1983, the most recent amendments (g) and (h) were adopted in 2014 according to the American Bar Association’s CPR Policy Implementation Committee, 2017.
16The addition of amendments (g) and (h) make it clear to the prosecution that anytime exculpatory evidence is found, even post-conviction, it must be immediately handed over to the defense.
17See Petegorsky 2012.
The prosecutor still has an incentive to either convict at trial or convict via plea because convictions represent the competency of the prosecutor.\textsuperscript{18} The presence of exculpatory evidence disincentivizes trial because the prosecutor risks losing (Albonetti (1987)). To combat this, the prosecutor can withhold exculpatory evidence as they deem necessary in order to coerce a defendant to enter a plea and waive their right to trial. States that have the model rule will have more structure and clarity in defining ethical prosecutorial procedures because the statute crafted by the ABA is transparent and violations are subject to punishment by the State Bar Association. Not only this, but if a prosecutor is required to turn over any exculpatory evidence, even after a conviction, there is no incentive to suppress evidence. They would instead be encouraged to hand over all evidence as soon as possible allowing the defense to create a strong case that does not have to end in a plea bargain. In short, adopting Model Rule 3.8 in its entirety will act as a threat against prosecutorial mishandling of exculpatory evidence and will allow more cases to go to trial, or be dismissed from the docket.\textsuperscript{19}

Variables and Methodology

In order to observe the significance of Model Rule 3.8 (g) and (h) on rates of plea bargaining at the county level, I had to compile downloadable public data with data that I collected and coded. To create the most accurate analysis under current conditions, I utilized both quantitative and qualitative data from 2017 to record variables. I measured all possible variables at the county level to allow for more control, but there were limits to the amount of accessible county-level data. Therefore, some variables are measured at the state level instead.

To analyze the current effect Model Rule 3.8 (g) and (h) has, I utilized only county caseloads 2017 in this analysis. As of 2017, only 17 states published caseload data at the county-level including all recorded quantities of plea bargains, dismissals, trials (both court and jury), and other means of disposition.\textsuperscript{20} Not only did fewer than half of the states in the United States publish this information, but no state organized their caseload data the same way. While Florida and Pennsylvania allowed for each county to be viewed individually in a user-friendly manner, other states such as New York and Missouri published this information alongside civil proceedings in long, complex spreadsheets. For such states it was of the utmost importance that I recheck the data multiple times in order to

\textsuperscript{18}Working as a prosecutor is often a stepping stone to more prestigious government jobs and the conviction rate is an important aspect of the promotion (Sklansky (2018)).

\textsuperscript{19}In 1985, William Campbell was charged with aggravated murder for killing his wife and Ronald Franket. Campbell turned himself in, but he believed that he was acting in self-defense after he received a warning that Franket sought to kill him. Before their client decided to plead guilty, the defense counsel made a motion for discovery from the prosecution which included any material evidence. The prosecution failed to report that the police had confiscated a gun from Franket’s body and so a plea was negotiated. When Campbell learned of the prosecution’s suppression of this crucial evidence, he challenged his conviction in \textit{Campbell v. Marshall}, 769 F.2d 314 (6th Cir. 1985). See \textit{Campbell v. Marshall} 1985.

\textsuperscript{20}The caseload data I am referring to is only for criminal caseloads, both felonies and misdemeanors.
ensure that I recorded caseloads accurately. Some states, such as Ohio, published more
information in addition to the typical “guilty plea”, “dismissal”, “trial”, and “other” such
as transferred cases. I did not record any transfer information as no sentence was reached
in that particular county and because transfers fall under the discretion of the judge. Nor
did I record any pending cases because a sentence had not yet been reached. Dismissals
were included as part of my caseload data even though no sentence was technically given
because the prosecutor plays a direct role in this. The prosecutor either dismisses the
case themselves or a judge finds the prosecutor has insufficient evidence.

All caseload data for these 17 states was compiled in an original dataset with six
categories: state, county, guilty plea, dismissal, trial, and other.21 The data I collected
was necessary for recording my dependent variable: the rate of plea bargaining. Using
caseload data from each of the 17 states, I created a new column in R that divided the
number of guilty pleas by total dispositions. This enabled me to view plea bargaining as
a percentage in each county.

The independent variable I am examining is the application of ABA Model Rule 3.8 (g)
and (h) in states and their subsequent counties. States that have adopted amendments (g)
and (h) will have applied the clearly-defined rule regarding ethical prosecutorial handling
of evidence and it will be enforced by the state bar association or the highest court of
jurisdiction within the state.22 The counties in states that have applied this model rule
are coded as “1.” Counties without the rule are coded “0”.

The ABA reports that three states have adopted Model Rule 3.8 (g) and (h) verbatim
and fourteen have adopted a modified version (ABA (2017)). All variations still guide the
handling of exculpatory evidence by prosecutors, therefore partial adoption is counted in
this study as well. Any state that has adopted the model rule in anyway is indicating their
intention to follow the ABA and halt misconduct. The majority of states have adopted
every part of Model Rule 3.8 except for amendments (g) and (h), most likely due to the
slow ratification process. It has been more than a decade since amendments (g) and (h)
were added by the ABA to rule 3.8 and many states have only adopted them within the
last five years.

Mandatory minimum sentences in America present a strong rival hypothesis as they
give prosecutors an advantage when bargaining for a plea (Sklansky (2018)). A judge
cannot use discretion post-trial to reduce any penalties that are prescribed by federal
law. In contrast, in the pre-trial stage the prosecutor can offer any number of “discounts”
to a defendant in exchange for a guilty plea. They can also threaten the entirety of the
maximum penalty if a defendant suggests going to trial. In recent years states have passed
new legislation attempting to curb sentencing disparities. Mandatory minimums are a

21 A complete list of the court websites for all states from which I recorded data can be found in the
appendix.

22 ABA model rules are not binding to attorneys until they are adopted by the state in which attorneys
practice. See the Georgia State Law Library Research Guides (Georgia State Law Library (2018)). This
should act as a mechanism that disincentivizes prosecutorial exclusion of exculpatory evidence which in
turn should decrease plea bargaining rates. In theory, taking away the prosecutor’s incentive to hide
exculpatory evidence gives innocent defendants more power in deciding whether or not to go to trial
where they have a chance to defend their innocence instead of plead guilty.
powerful, coercive tool in the prosecutorial arsenal. Recognizing their stringency, there have been 29 states that have rolled back the severity of their mandatory minimums since the early 2000s which indirectly takes power away from the prosecutor. 18 of these states go even farther and give sentencing discretion back to judges (Subramanian and Delaney 2013), a recommendation often suggested to solve arbitrary sentencing. Reformation of sentencing, either by returning power to judicial discretion, rolling back mandatory minimums, or both, is an important variable for which I must control.

To record this data, I cross-referenced a 2014 Congressional Report on criminal justice reform in states (Scott (2014)) with an updated 2017 report from the criminal justice reform non-profit FAMM (FAMM (2017)). I created an index to record this data in which states that have both reduced mandatory minimums and restored judicial discretion are assigned a "2", states that have adopted one of these policies but not the other are assigned a "1", and states that have adopted neither are assigned a "0".23

There are physical and practical constraints that need to be controlled for when conducting this study. In some counties, there is no feasible way that every case on the docket could go through a time-consuming trial. Prosecutors face days that are more burdened that others; there is no predicting how many cases are going to appear in any given week. Without a way to file through cases quickly, many fear that the system would collapse (Alschuler 1968). When a county has a larger population density, it will inevitably face more cases than a county with a much smaller population, and therefore a higher rate of pleas in order to push cases through the docket quickly. I downloaded county-level population data and county-level area in square miles from the Census Bureau’s Fact Finder online database.24 After I downloaded and appended this data to my dataset, I created a new column that divided the population by the total land area giving me population density of people per square mile.

The wealth of a population must be controlled when looking into plea bargaining rates. Theoretically, poorer counties will have higher rates of plea bargains. Counties that are not as wealthy will most likely have public defenders that are understaffed and under budgeted which would incentivize them to bargain cases away. A poorer county would be more likely to have an overworked prosecutor as well, not simply because of a lack of resources, but because poorer communities statistically face higher rates of incarceration.25 They are also less likely to afford a defense attorney that is not a public defender, also adding to the copious caseloads defense attorneys in that county already have. I downloaded data for the gross domestic product per capita (GDP per capita) in every recorded county from the Census Bureau’s database and appended that to my dataset.

In the majority of states, prosecutors are elected officials. Most prosecutors count

23 According to the congressional report, all 50 states have taken action to reform criminal justice, but only the aforementioned reforms that effect the discretion of the prosecutor directly will be considered for this study.

24 See U.S. Census Bureau (2017).

25 See Rabuy and Kopf (2015) report on pre-incarceration income rates. Poor people are more likely to accept a plea bargain as the economic risk they face by remaining in the criminal justice system is often not worth waiting for a trial.
on the illusion of their prestige to be their ticket into higher offices (Albonetti 1987). Therefore, states in which prosecutors are elected and not appointed need to be differentiated. A recent study found that prosecutors attempt to gain more convictions in the year preceding an election (Bandyopadhyay and McCannon 2014) indicating they do have personal incentives to convict because it can be used as a campaign tool. Plea bargaining is a way to ensure a conviction, meaning that elected prosecutors have more to gain by increasing their numbers of convictions through pleas. A report published by the U.S. Department of Justice recorded whether county prosecutors were appointed or elected in all 50 states (Coppolo 2003). Utilizing this report, I coded each county dichotomously in my dataset, “1” for a county where prosecutors are elected and “0” for counties where they are appointed.

In areas with higher rates of crime I expect to see larger caseloads and therefore more guilty pleas due to time/resource constraints. If a population believes they are at risk due to a high crime rate they are more likely to support “tough on crime” policies that work to the advantage of the prosecutor. To control for crime rates, I appended the 2017 reported crime data for all available counties from the FBI’s Uniform Crime Reporting website and divided that by the total population in each county. I then multiplied this number by 100,000 in order to observe a uniform unit of measurement of reported crime per 100,000 people.

Two other variables that must be controlled for are recidivism rates and race. Unfortunately, race plays a significant role both in the decision to prosecute as well as a jury’s decision to convict. Non-white defendants are often threatened with harsher penalties for the same crimes as their white counterparts and face higher rates of exoneration after spending years in prison for false convictions (Smith and Hattery (March 2011)). In areas where the population is predominantly white, I expect to see lower rates of pleas. I downloaded the Census Bureau’s dataset recording the percentage of white population in each county and appended it to my dataset.

Recidivism is a significant factor as well in plea bargaining. The standard of proof is lower for repeat offenders, giving the prosecutor more leverage in bargaining, especially because the defense knows that a repeat offender will be viewed unfavorably by a jury (Covey (April 2011)). There is no database that has compiled recidivism rates per county, so instead I will be using the average recidivism rate per state and record that for each county, respectively. While this will not result in as accurate a control as county-level recidivism, it is still important to account for recidivism rates.

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26 In cases where counties did not report their crime to the FBI, such as Alaska and Pennsylvania, I used the state’s uniform crime reporting website to fill in gaps of information. Those sources can be found in the appendix.

27 Florida and Pennsylvania both their county-level crime rates at the rate of crime per 100,000 inhabitants. In order to keep this variable consistent, I converted all rates to crime per 100,000 people.

28 This is a tool the prosecution can use to coerce a plea bargain as mentioned earlier.

29 Even if a defendant is innocent of a crime for which they are currently under investigation, there is an underlying assumption that they are probably guilty of another crime if they have been convicted in the past (Albonetti 1987).

30 Recidivism is defined as those released from prison returning within three years. A list of sources for recidivism rates can be found in the appendix.
Findings

Shanta Sweatt was only one of the estimated 95% of cases that ended in plea bargaining.\textsuperscript{31} Her case is not a phenomenon. A psychological study on the likelihood of false admission of guilt found that over 50% of respondents would falsely admit guilt if it meant they received some benefit (Dervan and Edkins (2013)). This study was conducted using college students in a low-stakes environment. It is reasonable to imagine that those in a similar, high-stakes position like Sweatt are even more likely to falsely admit to guilty in exchange for benefits from the prosecutor\textsuperscript{32}. If half of the 95% of defendants accepting plea bargains are innocent, the rate at which innocent people are being convicted is unacceptable. This rate must be reduced if true justice is to be sought and per my results, one way to work towards this goal is to implement rules that reduce prosecutorial discretion.

Using Pearson’s product-moment correlation in \texttt{R}, I found that the correlation between my dependent and independent variables is -0.38. This means statistically that as Model Rule 3.8 (g) and (h) is applied in states, the rate of plea bargaining decreases. Testing a simple bivariate regression between states with and without the model rule and their subsequent plea rates shows that there is a statistically significant relationship between the independent and dependent variable. This means there is a very low probability that the relationship between Model Rule 3.8 and plea bargaining is merely by chance. The p-value for the application of the model rule is less than 0.01 meaning that I can reject the null hypothesis which says application of the model rule has no effect on the percent of plea bargains as dispositions in caseloads. Instead, there is a very high probability that the existence of the model rule in certain states directly lowers the average rate of plea bargains or it indicates the systematic reduction of prosecutorial discretion in the pre-trial stage.

There is a significant difference in the rates of plea bargaining in states that have adopted the model rule and states that have not. To visualize the average rate of plea bargaining as total dispositions, I created Figure 1, a comparison between plea rates in model rule and non-model rule states. As evident in this figure, the difference in plea rates is around 13%, with 62.9% as the average for model rule states and 76.3% for non-model rule states. Table 2 also showcases the dramatic difference between predicted rates of pleas in model rule states and non-model rule states. The predicted plea rates for states adopting Model Rule 3.8 (g) and (h) ranges from around 61% to 64% of dispositions, whereas in states without the rule they range from about 75% to 77% of caseload dispositions.\textsuperscript{33}

According to the adjusted R-squared value from Table 1, there are only a small amount of cases that fall along the regression line; roughly 15%. This is visually evident in Figure

\textsuperscript{31}Refer to Devers (2011).

\textsuperscript{32}It is interesting to note that in the study conducted by Dervan, more than 50% of innocent participants were willing to accept harsh pleas as well as lenient ones.

\textsuperscript{33}A more accurate measure of the averages would include county-level data from all 50 states, unfortunately that would only be possible if all 50 states published their county-level caseload data. This is only a measurement of states with higher levels of transparency. For the future of criminal justice research, making caseload data transparent and accessible in every state is critical.
Table 1: Bivariate Regression and Correlation Data

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<th>Dependent variable: Plea Bargaining Rate as Percentage of Dispositions</th>
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*p<0.1; **p<0.05; ***p<0.01

Figure 1:
Average Rates of Plea Bargaining in County-level Dispositions, 2017
2, as the majority of points\textsuperscript{34} do not fall nicely along the line of regression. Theoretically, this is not surprising. Prosecutorial discretion is difficult to observe and the control of evidence only accounts for one of their discretionary powers. It is very clear that in states where the rule is not applied, the percentage of plea bargains are congregated at a higher rate. In these states, the plea rate is in the 75\% to 100\% range, compared to states with the model rule in which the pleas are dispersed mainly around the 50\% to 75\% range. The aforementioned application of the model rule is statistically significant\textsuperscript{35} and Figure 2 visually represents this effect: the states which have applied this model rule experience, on average, lower rates of plea bargaining. If Model Rule 3.8 (g) and (h) had no effect, I would expect to see plea rates for both groups to be in the 75\% to 100\% range.

Not only do the current figures support my hypothesis that limiting prosecutorial discretion over evidence will result in lower rates of plea bargaining, but the range of rates determined by Table 2 supports the notion that the majority of case dispositions will fall within this lower range. After running a bivariate test, I ran that model through predict to examine the high and low predicted plea rates within each group of states. Those with Model Rule 3.8 (g) and (h) are predicted to see a high rate of 64.2\% of cases end in plea bargains and a low of 61.6\%. States without the model rule are predicted to see a high of 77.4\% of cases end in plea bargains and a low of 74.7\%. There is a 13\% difference between the predicted rates of pleas in model rule states and states without the

\textsuperscript{34}The points represent the percentage of plea bargains as dispositions in each of the 1088 counties included in this study.

\textsuperscript{35}See Table 1
model rule. These predictions show that there is a substantial difference in the overall ratio of plea bargaining as case dispositions. When Model Rule 3.8 is applied in its entirety, average plea bargaining is predicted to not exceed 64% of total dispositions. Without the model rule, that expectation jumps to 77%. To see these lower rates of pleas, it is crucial to restrain the discretion of the prosecutor.

Table 2: Predicted Percentage of Cases Ending in a Guilty Plea

<table>
<thead>
<tr>
<th></th>
<th>Predicted Plea Rate</th>
<th>95% Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Model Rule</td>
<td>76.097</td>
<td>(74.769, 77.425)</td>
</tr>
<tr>
<td>Model Rule</td>
<td>62.919</td>
<td>(61.605, 64.232)</td>
</tr>
</tbody>
</table>

The multivariate regression shows that the application of the model rule remains statistically significant and also has a substantial effect on plea bargaining rates. Table 3 shows that the results are marginally stronger in the multivariate regression with the application of Model Rule 3.8 (g) and (h) decreasing plea bargaining rates by an average of 14.1% instead of 13.1%. A possible explanation is that I omitted counties with N/A values from the multivariate regression in order for R to successfully run it. Fortunately, omitting these counties does not drastically change the results of the bivariate model. I can therefore assume that the values and significance of the control variables are valid even with omitted values.

There are a few interesting variable results evident in the multivariate regression that contest my theories. The first is the relationship between the GDP per capita and plea bargaining. I had originally theorized that counties with a lower GDP per capita would see higher rates of plea bargaining, but according to the model, the relationship is small but positive. This means that as GDP per capita increases, so do plea rates. What I did not account for is the fact that poorer counties typically would have higher rates of crime, and when crime rates are higher it is easier to convict at trial.

I also theorized that crime rate and plea rate would have a positive relationship but the statistical relationship is actually negative. Similar to my misjudgement of GDP per capita, it makes sense that areas with higher crime rates would see less plea bargains because it would be easy for prosecutors to convict them at trial. As I mentioned before, the strength of a case is what a prosecutor uses to determine whether trial is risky or not. When areas have high crime rates, the jury is more likely to convict someone based on the fear they have that crime is rampant. A prosecutor knows this and can use it to their advantage. Therefore, because these counties allow the prosecutor to put on a show and easily convict people at trial there is no need to suppress evidence and coerce pleas.

As the white population increases, so does the plea rate. Originally, I believed this relationship would be negative as predominantly white communities would most likely face less prosecution. In reality, because race strengthens a case in favor of prosecution, a prosecutor would have an easy time convicting at trial and plea higher rates of plea bargaining may not be necessary.

36This is race other than white. See Albonetti (1987).
I found it surprising that recidivism did not have a statistically significant relationship with plea rates but that is probably due to the fact that my data was state-wide recidivism instead of county-level. In future research, if it were possible to record recidivism rates at smaller geographic levels, this variable would be more accurate of a control. Recidivism remains one of the strongest indicators of prosecution; repeat offenders offer an easy case for the prosecutor.

Model Rule 3.8 (g) and (h), sentencing reform, and elected prosecutors all have a statistically significant relationship with plea bargaining. More importantly, they all have a negative relationship, meaning they decrease plea bargains, and they are all variables that could be easily implemented in every county. While other variables, such as GDP per capita and crime rate cannot easily be changed, for these three variables to exist all it takes is simple policy. What I mean by this, is that if every county were to implement the model rule, elect their prosecutors, and adopt sentencing reforms that both reduce mandatory minimums and provide for judicial discretion, plea bargaining rates would decrease even more.

To see the effect of changing both sentencing reform and prosecutorial elections I created a new model. I held every other variable at the mean, but made it so that every county had a sentencing reform rank of “2” and an elected prosecutor. I ran predict on this model to see what the new plea rate confidence intervals were in order to compare them with the predicted rates of the original model.
Table 3: Multivariate Regression

<table>
<thead>
<tr>
<th>Dependent variable: Plea Bargaining Rate as Percentage of Dispositions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Model Rule Application</strong></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td><strong>Sentencing Reform</strong></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td><strong>Elected Prosecutor</strong></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td><strong>GDP per Capita</strong></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td><strong>Crime Rate</strong></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td><strong>White Population Percentage</strong></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td><strong>Recidivism Rate</strong></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td><strong>Population Density</strong></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td><strong>Constant</strong></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

| **Observations** | 870  |
| **R^2**          | 0.235 |
| **Adjusted R^2** | 0.228 |
| **Residual Std. Error** | 14.962 (df = 861) |
| **F Statistic**  | $33.054^{***}$ (df = 8; 861) |

*p<0.1; **p<0.05; ***p<0.01
According to Figure 3, if all counties were to adopt “2” sentencing reforms, prosecutorial elections, and Model Rule 3.8 (g) and (h), the predicted plea rates would decrease even more. Applying the model rule while holding all controls at their mean gave a predicted plea rate of 62.9% and a confidence interval of 61% to 64%. With this updated model, predicted plea rate is 56% with a confidence interval of 52% to 59%. This is a substantial decrease in the rate of plea bargains.

Creating more comprehensive sentencing reforms, electing a prosecutor, and adopting Model Rule 3.8 (g) and (h) are all within human control. If all of these measures were to be taken, average plea bargaining rates could theoretically be decreased to the lowest they have been in decades. If we are to make sure that less innocent people like Shanta Sweatt are to be falsely convicted via plea bargaining, it would be beneficial to start adopting these policies, and similar policies, nationwide.

Conclusion

Reigning in prosecutorial discretion over exculpatory evidence is either an effective method to lower rates of guilty pleas, or it is at least a good indicator that other criminal justice reforms are occurring and it works in tandem with lowering those rates. The presence of Model Rule 3.8 (g) and (h) results in a considerable difference in average plea bargaining rates. Predicted plea bargaining rates in states with the model rule make up less than two-thirds of case dispositions, whereas in states without the rule, plea bargaining makes up more than three-fourths of case dispositions. This is a remarkable difference.

Providing an explicit guideline for prosecutors releasing exculpatory evidence, and therefore eliminating discretion that could be used for selfish purposes, is a relatively efficient way to reduce plea bargaining. 62% of cases ending in plea bargaining is still a high number. In those 62% of plea bargains, many could have been innocent and potentially won at trial, yet they were unfortunately subject to the will of the self-interested prosecutor. Even in these model rule states, the prosecutors would have an average conviction rate of 62%. 62% of accused criminal offenders relinquished their Constitutional rights even with the model rule in place. The asymmetrical power a prosecutor holds in the stages before trial must continue to be reduced if the ratio of plea bargaining as total dispositions is to be reduced even more.

Future Research

While over 1000 county observations provides a decent amount of cases for a robust analysis, the findings in this study would provide more accurate results had there been county-level data available from every state in America. The 17 states allow for a good variation of environments, but they make up less than half of the country. For future research, it would behoove social scientists to urge state courts to move to a more uniform system of transparent data reporting. Caseload data is not something that should be concealed by the institution. In order to contribute more empirical studies to the literature, the data must be present.
References

ABA. 2017. “American Bar Association CPR Policy Implementation Committee Variations of the ABA Model Rules of Professional Conduct RULE 3.8(g) AND (h).” URL: http://www.americanbar.org/content/dam/aba/administrative/professional_responsibility/mrpc_3.8_g_h.pdf


Cohen, Kelly. 2017. “Criminal Justice Reform Poised to Take off in 2018.”.
URL: www.washingtonexaminer.com/criminal-justice-reform-poised-to-take-off-in-2018

Coppolo, George. 2003. “States that Elect their Chief Prosecutors.”.


Devers, Lindsey. 2011. “Plea and Charge Bargaining.”. 
URL: https://www.bja.gov/Publications/PleaBargainingResearchSummary.pdf

FAMM. 2017. “Recent State-Level Reforms to Mandatory Minimums Laws.”. 

URL: http://libguides.law.gsu.edu/c.php?g=253396&p=1689859

Gershman, Bennett L. 2014. “The prosecutor’s contribution to wrongful convictions.”. 


URL: https://www.ncsl.org/documents/cj/sentencing.pdf

URL: https://www.aclu.org/blog/smart-justice/aclu-poll-finds-americans-reject-trumps-tough-crime-approach

Pendergrass, Taylor. 2018. “Progress Is Occurring on Prosecutorial Reform, Despite Tuesday’s Setbacks in California.”. 


URL: https://www.prisonpolicy.org/reports/income.html


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Appendix

Table 4: Summary Statistics

<table>
<thead>
<tr>
<th>Variable</th>
<th>Median</th>
<th>Mean</th>
<th>St. Dev.</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recidivism</td>
<td>35.97</td>
<td>40.837</td>
<td>19.315</td>
<td>20</td>
<td>76.7</td>
</tr>
<tr>
<td>GDP per Capita</td>
<td>25278</td>
<td>27,202.300</td>
<td>11,562.700</td>
<td>13,657</td>
<td>48,482</td>
</tr>
<tr>
<td>Crime Rate</td>
<td>1235.1</td>
<td>2,280.067</td>
<td>3,044.700</td>
<td>0</td>
<td>8,331</td>
</tr>
<tr>
<td>Plea Rate</td>
<td>72.083</td>
<td>64.948</td>
<td>31.392</td>
<td>7.862</td>
<td>100.000</td>
</tr>
<tr>
<td>White Percentage</td>
<td>91.80</td>
<td>77.709</td>
<td>34.024</td>
<td>9.300</td>
<td>99.400</td>
</tr>
<tr>
<td>Population Density</td>
<td>55.526</td>
<td>593.513</td>
<td>1,272.349</td>
<td>0.046</td>
<td>3,187.590</td>
</tr>
</tbody>
</table>

The following websites provided county caseload data.

**Alaska**
https://public.courts.alaska.gov/web/admin/docs/fy17.pdf

**Arizona**

**Delaware**

**Florida**
http://trialstats.flcourts.org/TrialCourtStats/ReportTrialCourtStats
Illinois

Kansas

Michigan
https://courts.michigan.gov/education/stats/Caseload/Pages/2017-Caseload-Reports.aspx

Missouri
https://www.courts.mo.gov/file.jsp?id=122357

New Mexico

New York

North Carolina

Ohio
https://www.sconet.state.oh.us/Publications/annrep/17OCSR/2017OCSR.pdf

Pennsylvania

Tennessee

Vermont

Washington
https://www.courts.wa.gov/caseload/content/archive/superior/Annual/2017.pdf
Wisconsin

The following websites provided statewide recidivism rates.

Alaska
http://labor.state.ak.us/trends/jun17.pdf

Arizona
https://azsentencing.org/

Delaware

Florida

Illinois

Kansas

Michigan
https://www.michigan.gov/som/0,4669,7-192-26847-459956-,00.html

Missouri

New Mexico

New York
http://www.doccs.ny.gov

North Carolina
Ohio
https://drc.ohio.gov/Portals/0/Recidivism%20Report%202017.pdf

Pennsylvania

Tennessee

Vermont

Washington

Wisconsin
https://doc.wi.gov/Pages/DataResearch/RecidivismReincarceration.aspx

The following websites provided crime reporting data for individual states.

Alaska
https://dps.alaska.gov/statewide/r-i/ucr

Pennsylvania
https://ucr.psp.state.pa.us/ucr/reporting/ruaware/ruawarecountyui.asp