TOWARD AN ECONOMIC THEORY
OF CRIMINAL PROCEDURE

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Abstract

In this paper we provide a justification for the pro-defendant bias in Anglo-American criminal procedure that we argue paints a more complete picture of the extent and breadth of these pro-defendant procedures than the most commonly forwarded justifications to date. The most commonly forwarded rationale for the pro-defendant bias is that the costs of false convictions – specifically, the sanctioning and deterrence costs associated with the erroneous imposition of criminal sanctions – are greater than the costs of false acquittals. We argue that on closer inspection this rationale does not provide a complete justification for the extent of our pro-defendant criminal procedures. We offer an alternative justification for these protections: to constrain the costs associated with abuses of prosecutorial or governmental authority. Our claim is that these procedural protections make it more costly for self-interested actors, whether individuals or government enforcement agents, to use the criminal process to obtain their own ends. Such protections help to reduce the rent-seeking and deterrence costs associated with abuses of prosecutorial or governmental authority in the criminal sphere. The theory developed here explains several key institutional features of Anglo-American criminal procedure and provides a positive theory of the case law as well. The theory is also corroborated by empirical evidence on corruption from several countries.

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I. INTRODUCTION

For many people who study Anglo-American criminal law the procedural protections offered to defendants are a bit of a puzzle. At the simplest level, these protections permit some factually guilty defendants to escape conviction, which should increase the incentives of wrongdoers to engage in criminal acts.¹ This seems odd given that criminal wrongs are the most serious wrongs in

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¹ See, e.g., Raymond A. Atkins & Paul H. Rubin, Effects Of Criminal Procedure On Crime Rates: Mapping Out The Consequences Of the Exclusionary Rule, (Oct. 23, 1998) (unpublished manuscript available on file with authors) (finding Miranda may have increased total crime rates by eleven percent and violent crimes rates by thirty-three percent); Paul G. Cassell, The Guilty & The "Innocent": A New Examination Of Alleged Cases Of Wrongful Conviction From False Confessions, 22 HARV. J.L. & PUB. POL'y 523 n.30 (1999)[hereinafter Guilty & Innocent]; Paul G. Cassell, Miranda’s Social Costs: An Empirical Reassessment, 90 N.W. U.L. REV. 387, 451 (1996)[hereinafter Miranda’s Social Costs] (finding after Miranda criminal suspects are less willing to confess to their crimes). But see, John J. Donohue, III, Did Miranda Diminish Police Effectiveness, 50 STAN. L. REV. 1147 (1998) (dissecting the statistical analyses in Cassell’s work and criticizing the use of statistics in measuring the impact of Court decisions); Dan M. Kahn, Social Influence, Social Meaning, and Deterrence, 83 VA. L. REV. 349, 389 (1997) (noting that “the ‘exclusionary rule’, the Miranda doctrine, and like constraints reduce the price of crime by lowering the probability that offenders will be convicted. The cost of such rights, then, consists of the resulting increase in crime, or the resources that must be invested—primarily in increased severity of punishment—to offset the rights discount on price of crime”).
society and hence the ones we should most wish to reduce.² What might explain the seeming willingness of Anglo-American law to permit wrongdoers to escape conviction and thereby potentially increase the crime rate?

Many commentators have offered a variety of reasons to support “pro-
defendant” procedural protections.³ In particular, many have argued that in the criminal process we should be more concerned about the social costs generated by a false conviction than the social costs generated by a false acquittal.⁴ According to this view, false convictions are especially worrisome because they involve the state’s denial of liberty to an innocent individual, the infliction of irreparable harm to an individual’s reputation, and weaken the moral force or authority with which the criminal law speaks.⁵ In In Re Winship, the Supreme Court adopted this position as the primary rationale for viewing the high

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² See S.E. Marshall & R.A. Duff, Criminalization and Sharing Wrongs, 11 CAN. J.L. & JURIS 7, 7 (1998) (noting that the term “criminal” indicates a serious condemnation of an activity or action); Susan Estrick, Rape, 95 YALE L.J. 1087, 1183 (1986) (noting that “conduct is labeled ‘criminal’ in order to announce to society that these actions are not to be done and to secure that fewer of them are done”); Henry M. Hart, Jr., The Aims of The Criminal Law, 23 LAW & CONTEMP. PROBS. 401, 404-05 (stating that “[w]hat distinguishes a criminal from a civil sanction . . . is the judgement of community condemnation which accompanies and justifies its imposition”). See also John. C. Coffee, Jr., Does “Unlawful” Mean “Criminal”?: Reflections on the Disappearing Tort/Crime Distinction in American Law, 71 B.U.L. REV 193, 194 (1993) (noting that “the factor that most distinguishes the criminal law is its operation as a system of moral education and socialization . . . [a]s a result, the criminal law often and necessarily displays a deliberate disdain for the utility of the criminalized conduct to the defendant”); Sanford H. Kadish, Excusing Crime, in BLAME AND PUNISHMENT: ESSAYS IN THE CRIMINAL LAW 87 (1987) (concluding that “criminal conviction charges a moral fault . . .”); HERBERT PACKER, THE LIMITS OF THE CRIMINAL SANCTION (1968).


⁵ See In Re Winship, 397 U.S. 358, 363-364 (1970) (Brennan, J.) (“The accused during a criminal prosecution has at stake interests of immense importance, both because of the possibility that he may lose his liberty upon conviction and because of the certainty that he would be stigmatized by the conviction. Accordingly, a society that values the good name and freedom of every individual should not condemn a man for commission of a crime when there is a reasonable doubt about his guilt. . . . Moreover, use of the reasonable-doubt standard is indispensable to command the respect and confidence of the community in applications of the criminal law. . . . It is critical that the moral force of the criminal law not be diluted.”), 372 – 74 (Harlan, J., concurring) (noting that the reasonable doubt standard is used in criminal trials because society views false convictions as being far worse than false acquittals largely due to liberty and reputation costs). See also Donald A. Dripps, People v. Simpson: Perspectives On The Implications For The Criminal Justice System: Relevant But Prejudicial Exculpatory Evidence: Rationality Versus Jury Trial And The Right To Put On A Defense, 69 S. CAL. L. REV. 1389, 1418 (1996) (noting that “[t]he reasonable doubt standard] strikes the balance very much in favor of increasing] false acquittal[s]” as opposed to false convictions); Bruce H. Kobayashi & John R. Lott, Jr., Low-Probability-High-Penalty Enforcement Strategies and the Efficient Operation of the Plea-Bargaining System, 12 INT’L REV. L. & Econ. 69 (1992) (analyzing the costs of false convictions). Bryan A. Liang, Shortcuts To "Truth": The Legal Mythology Of Dying Declarations, 35 A.M. CRIM. L. REV. 229 (1998) (“A foundational jurisprudential principle of our justice system is the protection of the innocent over the conviction of the guilty. The benefit of innocent citizens being rightfully acquitted is of much greater social value than the loss associated with guilty citizens being wrongfully acquitted.”)
standard of proof used in criminal trials as constitutionally mandated. However, we argue that for this traditional error-cost rationale to justify our current criminal procedural protections, we would need to attach surprisingly large orders of magnitude to the false conviction harms identified in the traditional story. The magnitude of the cost of false convictions necessary to justify the traditional account appears to be unsupported by the empirical evidence. Given this, we have a choice of continuing to believe the traditional rationale while recognizing that work remains to be done in providing empirical support for its premises, or suggesting another rationale that provides a more persuasive justification for the extent and magnitude of the pro-defendant bias in Anglo-American criminal procedure.

In this paper we offer another justification for procedural protections: to constrain the costs associated with abuses of prosecutorial or governmental authority. We argue that when these costs are combined with the costs identified by the traditional account then we have a more persuasive case for criminal procedure being strongly biased in favor of the defendant. Further, the case law is more persuasively explained when we bring into consideration our theory. Thus, this paper offers (depending on one's point of view) an alternative rationale for the strong pro-defendant bias in criminal procedure or a significant modification of the traditional error cost argument in favor of that bias.

We start with the claim that criminal procedural protections make it more costly for self-interested actors, whether individuals or government enforcement agents, to use the criminal process to obtain their desired ends. Absent some constraint, prosecutors and government agents might be tempted to use the criminal process to benefit themselves or their constituents. History provides us with a number of examples of this. Procedural protections impose constraints and make the criminal process more costly to use, thereby providing enforcement agents and those who would lobby them with a disincentive to use the criminal process for selfish ends. This saves resources that otherwise would be eaten up in the lobbying process. In addition, constraining this sort of behavior is likely to enhance deterrence. The reason is that when it is easy to

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6 See In Re Winship, supra note 5, at 364.
7 See infra Part IV.
8 As the criminal process becomes more expensive to use then prosecutors and those who lobby them would prefer to substitute less costly methods of obtaining their desired ends (e.g., lobbying legislatures for particular kinds of laws that disproportionately burden another group). Whether this substitution is desirable and how we might contain rent-seeking in these other spheres is outside the scope of this paper. We do, nonetheless, briefly discuss this issue at infra text accompanying notes 160 - 163. For a recent discussion of the role of politics and the criminal law, see William J. Stuntz, The Deep Politics of Criminal Law, Draft 2001 (on file with authors).
enforce the law in selective ways, enforcement agents will come under pressure to sacrifice deterrence objectives for distributive goals. The effects on deterrence together with the direct costs associated with lobbying and the costs identified by the traditional account provide a more complete rationale for the existence and extent of our criminal procedural protections and a better positive theory of the criminal procedure case law. In particular, the theory we develop provides a better explanation for the existence and specific form of key rules and institutional features: the reasonable-doubt and double-jeopardy rules, restrictions on excessive and retroactive punishments, features of the right to a jury, such as the unanimity requirement and peremptory challenges, and others. The theory is also corroborated by empirical evidence on corruption from several countries and seems consistent with the historical development in this area.

Part II provides a brief description of some core criminal procedural protections that inhabit our jurisprudence. These include the reasonable doubt standard of proof, double jeopardy protections, and others. All of these protections have a cumulative effect of biasing the criminal process in favor of the defendant. This raises the fundamental question of whether such a bias can be justified.

Part III inquires into the traditional rationales provided for these core criminal procedural protections. Because the core protections in our view are those that impart a pro-defendant bias to the law, we focus on the reasonable doubt standard as the quintessential procedural protection. We argue that if one examines the available data on the costs and benefits of punishment, the traditional error-cost rationale does not appear, by itself, to justify the reasonable doubt rule.

Part IV argues that an alternative rationale for these procedural protections is that they make it more difficult for enforcement agents to use the criminal process to facilitate wealth extraction. In this part we explain the

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10 Our reason for choosing these protections is that they seem to have the most historical support and most directly influence the probability of being punished or the actual punishment meted out. Other procedural protections (e.g., the Fourth Amendment's Unreasonable Search & Seizure) do not carry the same kind of historical pedigree and also do not impact the probability of being punished as directly as those listed in the text. See Benton v. Maryland, 395 U.S. 784, 794 (1969) (noting that “the double jeopardy prohibition of the 5th Amendment represents a fundamental ideal in our constitutional heritage”); In Re Winship, supra note 5, at 361 (1970) (noting that “the reasonable doubt standard is accepted as the measure of persuasion by which the prosecution must convince the trier of all the essential elements of guilt”).

11 See W. William Hodes, Reform: Lord Brougham, The Dream Team, And Jury Nullification Of The Third Kind, 67 U. COLO. L. REV. 1075, 1078 nn.7 & 46 (1996) (noting that a criminal trial favors the defense because of the many procedural protections); William J. Stuntz, The Uneasy Relationship Between Criminal Procedure And Criminal Justice, 107 YALE L.J. 1 (1997) (noting that these constitutional protections favor the defendant, but that there is still much discretionary power left with a prosecutor).
incentives for and various types of wealth extraction in the law enforcement process.

Part V discusses the costs of rent-seeking (i.e., wealth extraction efforts) in the criminal law enforcement process. Lobbying efforts are often wasteful from society’s perspective and generate additional costs, such as a dilution in the deterrent effect of criminal prohibitions.\(^\text{12}\)

Part VI examines methods of constraining self-interested prosecutors. These include procedural protections, restrictions on penalties, and other ways to limit prosecutorial abuse of the criminal process.\(^\text{13}\) In this part we present core theories of the functions of various pro-defendant protections. We argue that the core function of the reasonable-doubt rule is to constrain the set of contractible bribes between a prosecutor and another party. We also argue that the reasonable-doubt and double jeopardy rules function as complements in suppressing corruption in enforcement. Penalty restrictions, such as the prohibition of cruel and unusual punishment, provide deeper institutional barriers to corruption by taking the profit out of punishment. Lastly, the unanimity rule regarding jury convictions and the original function of peremptory challenges are both explained as features designed to dampen rent-seeking in enforcement.

Part VII applies the core theories developed earlier to provide a detailed positive theory for some of the case law on procedural protections and constitutional law. We find that even these areas can be explained under our theory.

Part VIII provides empirical evidence based on corruption data from several countries. We present results from multivariable regressions that suggest that pro-defendant protections dampen corruption. One problem with empirical work in this area is that corruption and pro-defendant protections are, arguably, jointly-dependent under our theory, which means that traditional regression analysis yields biased results. We confront this problem directly by estimating an “instrumental variables” regression model. The instrumental-variables results, which are free from the joint-dependency bias, provide strong support for our theory. Part IX concludes with suggestions for future research.

Overall the analysis suggests that explicitly taking into account the costs associated with abuses of prosecutorial and governmental authority provides a

\(^{12}\) See Tullock, supra note 9, at 5, 96.

more persuasive case for the pro-defendant bias in criminal procedure. Our theory is more persuasive than the traditional account in the sense that it explains the features of criminal procedure explained by the traditional account as well as other features that are not so easily explained by the traditional account. Of course, our analysis does not disprove the traditional account, but rather puts forward a theory that better explains criminal procedure case law and thus suggests that a rent-seeking perspective should be an integral part of any positive theory of criminal procedure.

II. SOME CORE PRO-DEFENDANT CRIMINAL PROCEDURAL PROTECTIONS

There is a vast panoply of procedural protections attached to the criminal process in the U.S. To focus our analysis we hone in on the handful of protections that appear to impose a significant pro-defendant bias in the criminal law process. In particular, we focus on the reasonable-doubt standard of proof, double jeopardy protections, and the right to a jury trial. We reserve for later discussion, in Part VII, other protections that also impact the criminal process in favor of the defendant.

The reasonable-doubt standard requires that the moving party (i.e., the prosecution) prove that the defendant is guilty, beyond a reasonable doubt, of the criminal offense(s) with which he is charged. Although the reasonable-doubt formulation seems to have first appeared in 1798, the notion that the standard of proof in criminal trials should favor defendants seems to have ancient origins. Blackstone, in his description of the criminal process, noted that “all presumptive evidence of felony should be admitted cautiously: for the law

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15 In our view, rules that directly impose a pro-defendant bias are those that reduce either the probability of conviction or the severity of the punishment. Cf. Jeffrey Standen, Plea Bargaining in the Shadow of the Guidelines, 81 CAL. L. REV. 1471, 1519 (1993) (stating that “[B]etter rules would limit opportunities for manipulation by prosecutors in their charging, and would require criminal offenders who wish to lower or eliminate their expected punishment to alter their behavior either to conform to the law or cause less harm.”). Rules that merely restrict the type of evidence that can be presented, such as the exclusionary rule, do not fall within our definition of core pro-defendant protections. This is because their impact on the probability of conviction is not as direct as the reasonable doubt standard and also because they do not have the same kind of historical pedigree that the reasonable doubt standard has. See Lawrence H. Tribe, Constitutional Calculus: Equal Justice Or Economic Efficiency?, 98 HARV. L. REV. 592, 607 (1985) (noting that “[E]xclusionary rule cases... are today treated as occasion for the assessment of the marginal deterrent effects of excluding particular categories of evidence”). Also note that it might be easier for police and other government agencies to satisfy some parts of the Fourth Amendment (e.g., giving a Miranda warning) as compared to satisfying the reasonable doubt standard. See Charles Weisselberg, Saving Miranda, 84 CORNELL L. REV. 109 (1998) (advocating a return to the “original” vision of Miranda).

16 See In Re Winship, supra note 5, at 361.

holds, that it is better that ten guilty persons escape, than one innocent suffer.”

Coke, considerably earlier, said that “the evidence against a prisoner should be so manifest, as it could not be contradicted.” In 1970, the Supreme Court endorsed this by holding in In Re Winship that the due process clause protects the defendant against conviction except upon proof beyond a reasonable doubt.

The reasonable-doubt standard stands in contrast to the “preponderance of the evidence” standard, used most frequently in non-criminal cases and for sentencing issues in criminal proceedings. It requires that the moving party prove that the defendant is liable on the preponderance of the evidence or, put simply, is more likely liable than not. The preponderance rule is considered the easier standard for the moving party to meet relative to the reasonable doubt rule. Sometimes the preponderance rule is assumed to require that the decision-maker be 51% certain that the defendant is liable before finding against him, whereas the reasonable doubt standard is assumed to require that the decision-maker be somewhere in the range of 90% to 95% certain before convicting the defendant. This imparts a significant pro-defendant bias in the criminal law.

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18 4 William Blackstone, Commentaries, at 358.
19 Id., at 349 – 50.
20 See In Re Winship, supra note 5, at 364.
21 See Ethyl, infra note 25, at 28 n. 58 (noting that different levels of certainty are required to meet the distinct burdens).
22 See Concrete Pipe and Products Of California, Inc. v. Construction Laborer’s Pension Trust for Southern California, 508 U.S. 602, 622 (1993) (noting that preponderance of the evidence is the “most common standard in the civil law”); Apprendi v. New Jersey, 530 U.S. 466 (2000) (noting that the preponderance of the evidence standard can be used for sentencing as long as the sentence is not more severe than the statutory maximum for the offense established by the jury’s verdict); U.S. v. Lombard, 72 F.3d 170, 176 (1st Cir. 1995) (noting that the preponderance of the evidence can be used in sentencing issues [enhancements in this case]).
23 See U.S. v. Mandanici, 205 F.3d 519, 532 (2d Cir. 2000) (Kearse, J. concurring) (noting that “a preponderance means more likely than not”).
24 See Martin v. U.S., 277 F.2d 785, 786 (5th Cir. 1960) (noting that the preponderance of the evidence standard is a lesser burden than proof beyond a reasonable doubt).
25 See Ethyl Corp. v. EPA, 541 F.2d 1, 28 n. 58 (D.C. Cir. 1976) (stating that “It may be that the ‘beyond a reasonable doubt’ standard of criminal law demands 95% certainty [internal cites omitted]. But ..., a preponderance of the evidence demands only 51% certainty.”); Brown v. Bowen, 847 F.2d 342, 345-46 (7th Cir. 1988) (suggesting that certainty of 90% or more is sufficient to meet the reasonable doubt standard).
26 See Anthony M. Morano, A Reexamination of the Development of the Reasonable Doubt Rule, 55 B.U.L. Rev. 507, 511-19 (1975) (arguing that prior to the articulation of the reasonable doubt standard, a higher standard existed that required proof beyond any doubt). Although these three standards are sufficient for purposes of our analysis it is worth noting that in the past there have been other standards. In fact, there was at one time a standard even higher than the reasonable doubt standard. See Anderson v. Liberty Lobby, Inc., 477 U.S. 242, 271 (1986); Cornell v. Nix, 119 F.3d (8th Cir. 1997). Although these three standards are sufficient for purposes of our analysis it is worth noting that in the past there have been other standards. In fact, there was at one time a standard even higher than the reasonable doubt standard. See Anthony M. Morano, A Reexamination of the Development of the Reasonable Doubt Rule, 55 B.U.L. Rev. 507, 511-19 (1975) (arguing that prior to the articulation of the reasonable doubt standard, a higher standard existed that required proof beyond any doubt). Although we have discussed three standards of proof, it is possible that other standards could exist as well. There is, in theory, a continuum of standards of proof, but in practice only three. See V.S. Khanna, Corporate Criminal Liability, 109 Harvard L. Rev. 1477, 1516 n. 210; See also
Another procedural protection is Double Jeopardy. The prohibition against Double Jeopardy stems from the 5th Amendment to the U.S. Constitution, which states “nor shall any person be subject for the same offense to be twice put in jeopardy of life or limb”. In many respects this protection is similar to the doctrines of Res Judicata and Collateral Estoppel that are found in non-criminal cases. However, there are some differences. In particular, one difference that has garnered much attention is the rule that normally prohibits prosecutorial appeals of initial trial acquittals, but permits defense appeals of initial trial convictions. This asymmetry in appeal rights appears like it has a pro-defendant bias whereas in the non-criminal side the analogous doctrines (e.g., Collateral Estoppel) do not present such asymmetry in appeal rights.

Other protections that are relevant in the criminal context are the right to a jury trial, the ex post facto punishment rule, and the excessive punishments prohibition. Yet other protections exist that appear to have a pro-defendant bias (some of which we address later in Part VII), but the crucial point for now is that many criminal procedures appear biased in favor of the defense. This raises the basic question - what justifies this sort of bias in criminal procedure?

Part III examines the traditional justification for this bias in criminal procedure and raises important questions about its persuasive force. This provides some background for the primary discussion in the remainder of this paper - the development of our theory of criminal procedure. We hasten to add...
that the reader need not reject the traditional justification to find our theory compelling and important. Our analysis of the traditional justification is largely background to the discussion of our theory.

III. TRADITIONAL JUSTIFICATION FOR THE CORE CRIMINAL PROCEDURAL PROTECTIONS: THE REASONABLE-DOUBT STANDARD

The reasonable-doubt standard presents the quintessential case of a pro-defendant protection. The most common justification given for it is that in the criminal process we are more concerned with false convictions than false acquittals and hence should prefer a pro-defendant bias.\textsuperscript{34} Elaborating on this justification, the Supreme Court in In Re Winship identified three types of harm associated with false convictions: loss of liberty, stigma, and dilution of the moral force of the criminal law.\textsuperscript{35} Although the Court did not conduct a similar analysis of false acquittal costs in In Re Winship, those costs presumably consist only of the third type of harm, dilution of the law’s moral force. For if the law loses moral authority when the innocent are convicted, it must lose some of the same, though perhaps to a different degree, when the guilty are allowed to go unpunished.

In this Part we will try to develop a framework for analyzing the relative costs of false convictions and false acquittals, and to determine, in an admittedly preliminary manner, whether the available data support the traditional argument in favor of the reasonable-doubt standard. In order to do this, we will need to translate the Court’s In Re Winship analysis of error costs into terms that can be identified as either measurable or largely immeasurable.

Specifically, we will use three categories for classifying the costs of false convictions and false acquittals: sanctioning costs, deterrence costs, and disutility costs.\textsuperscript{36} Sanctioning costs are simply the social costs of punishing an offender, which include, amongst other things, loss of liberty and stigma effects recognized by the Court in In Re Winship. Deterrence costs refer to a portion of the costs associated with the public’s perception of the seriousness of the offense. Disutility costs refer to the costs associated with the psychological effects of the conviction.

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\textsuperscript{34} See 4 WILLIAM BLACKSTONE, COMMENTARIES *358; see also In Re Winship, supra note 5, at 372 (Harlan, J., concurring).

\textsuperscript{35} In Re Winship, supra note 5, at 363-364.

\textsuperscript{36} In theory one could consider the impact on the “expressive” effects of the law too. The expressive effect of the law is the effect it has on behavior without threatening a sanction. See Richard H. McAdams, A Focal Point Theory of Expressive Law, 86 VA. L. REV. 1649 (2000), Robert Cooter, Expressive Law and Economics, 27 J. LEGAL STUD. 585 (1998). However, the law’s expressive effect is probably more closely connected to the perceived legitimacy of the law – that is whether it is corrupt or easy to corrupt – rather than a particular trade off between types of errors. See Jason Mazzone, When Courts Speak: Social Capital and Law’s Expressive Capital, 49 SYRACUSE L. REV. 1039 (1999). The corruption concern is more closely tied to our rent-seeking/public choice theory than the traditional error cost account and as such is not discussed in this section. We discuss the expressive effect as impacted by our theory in Part V.B.2. For now we only note the existence of the expressive effect and note that we doubt it is much impacted by error rates independent of rent-seeking/public choice concerns.
what the Court in In Re Winship must have intended when describing the dilution in law's moral force caused by false convictions. If the law punishes the innocent, then it weakens its deterrent effect by giving people less incentive to comply and, similarly, if it fails to punish the guilty, then it weakens its deterrent effect for obvious reasons.\textsuperscript{37} Disutility costs refer to the disutility or unhappiness individuals suffer when they know that the law fails to punish the guilty or that it sometimes punishes the innocent.\textsuperscript{38} Sanctioning costs arise only with false convictions, whereas deterrence and disutility costs arise with both types of errors. Translating In Re Winship into these terms, the Court has said in effect that the additional sanctioning, deterrence, and disutility costs from moving from the reasonable-doubt to the preponderance standard, in criminal trials, would outweigh any potential benefits. It should be clear from the foregoing that sanctioning and deterrence costs are to some extent measurable, while disutility costs are largely immeasurable.\textsuperscript{39}

We use available data on deterrence and sanctioning costs below to see whether they support the traditional argument that the costs of false convictions are sufficiently larger than the costs of false acquittals to justify the reasonable doubt rule. We conclude that the data do not support the traditional argument. However, we concede that this is an unresolved empirical question because there are difficult-to-measure disutility costs that we have not incorporated and that should be taken into account. To the extent these difficult-to-measure costs are significant, our analysis suggests how large they need to be in order to justify the reasonable-doubt standard under traditional error-cost arguments. In other words, one can view our analysis in this section as providing a sense of the implicit value society places on the disutility or moral harms connected to false convictions.

\textsuperscript{37} On the deterrence cost, see A. Mitchell Polinsky & Steven Shavell, Legal Error, Litigation, and the Incentive to Obey the Law, 5 J. L. ECON. & ORG'N 99 (1989) (noting that if a potential defendant will not be prosecuted whether or not he obeys the law, he “will not obey the law, because there is a cost to obeying but no benefit (assuming, of course, that there is a benefit in disobeying)”). On the issue of those who go unpunished, see Don E. Scheid, Constructing a Theory of Punishment, Desert, and the Distribution of Punishments, 10 CAN. J. L. & JURIS. 441, 455 (1997) (noting that “[p]eople are willing to obey the law themselves so long as they can reasonably assume that those who break the law will not be able to do so with impunity, that they will not get away with it.”).

\textsuperscript{38} Suppose people gain utility from knowing that the criminal justice system is fair. Then a system that has some parts perceived to be unfair will reduce the utility of those people who obtain utility from knowing the system is fair. This is clearly a harm that can be traced to any change that weakens the moral force of the criminal law.

\textsuperscript{39} The social cost of denying liberty (part of the sanctioning cost) to a convicted offender can be measured, roughly, by the value of the labor society forfeits when it puts an offender in prison. The stigma effect can be measured, at least in part, by the reduction in the market's assessment of the value of a convicted offender's labor. Deterrence costs can be measured, roughly, by the extent to which crime increases or decreases in response to a change in the rate of punishment. However, the disutility that individuals feel when they know that the criminal justice system is flawed cannot be measured.
These arguments are developed in two sections. Section A lays out the theoretical requirements for preferring the reasonable doubt standard over the preponderance standard on traditional error cost grounds involving a comparison of the costs of false convictions and false acquittals. Section B elaborates on the components of these costs and then engages in an empirical examination of these components to determine if the available data confirms the traditional error cost theory.

A. When to Prefer the Reasonable Doubt over the Preponderance Standard

When should we prefer the reasonable doubt standard over the preponderance standard? To choose between the reasonable-doubt and preponderance standards, we will take advantage of an approach suggested by Gordon Tullock. The relationship between error probabilities and standards of proof can be illustrated with the diagram in Figure 1. The vertical axis measures the probability of guilt. The horizontal axis measures the amount of evidence (of guilt). The straight line captures the functional relationship between the probability of guilt and the quantity of evidence against the defendant. The

40 See Gordon Tullock, The Logic of the Law 65–67 (1987 ed.). Perhaps the first to examine this question was John Kaplan in his classic article “Decision Theory and the Factfinding Process”. See John Kaplan, Decision Theory and The Factfinding Process, 20 STAN. L. REV. 1065 (1968). Kaplan showed that the standard of proof (i.e., the probability of guilt necessary for a rational jury to convict) depends only on the ratio of the cost of a false acquittal to the cost of a false conviction. To be precise, if we let \( P \) represent the proof standard and \( R \) the ratio of the false acquittal cost to the false conviction cost (or ratio of error costs), Kaplan showed that the standard of proof \( P \) is bounded below by \( 1/(1+R) \). See id., at 1071–72. It follows that the preponderance rule (\( P > \frac{1}{2} \)) is appropriate whenever the cost of acquitting a guilty person is equal to the cost of convicting an innocent person (\( R = 1 \)). See id., at 1072. The reasonable-doubt rule can also be justified in terms of Kaplan’s formula, since the formula implies that the proof threshold should be increased as the cost of a false conviction rises relative to that of a false acquittal. For example, if the ratio of error costs (\( R \)) is \( 1/3 \), so that each false conviction is three times as costly as a false acquittal, the probability of guilt necessary to convict becomes \( .75 \). If a false conviction is four times as costly as a false acquittal, the probability of guilt necessary to convict becomes \( .8 \) and so forth.

Though enormously valuable as a clear statement of the assumptions underlying alternative proof standards, Kaplan’s approach does not tell us whether we should prefer the reasonable-doubt to the preponderance standard. Kaplan’s approach tells us which percentage proof requirement is to be preferred over all others given a particular ratio of error costs. However, we are choosing not from a continuum of proof requirements, but from only two – either the preponderance or the reasonable-doubt threshold. To determine which of these two standards is preferable, we will need to take a different approach (for example, that taken in the text).

Note also that Kaplan’s formula for determining the probability necessary to convict tells us one important lesson from decision theory. The probability-of-guilt threshold that minimizes the overall costs of error depends only on the ratio of error costs. The absolute cost of a false conviction or false acquittal is not important in this analysis. The fact that false convictions may seem more costly for one type of criminal defendant than another is not an important datum under the decision-theoretic approach. The key question is whether the cost of a false conviction relative to the cost of a false acquittal is higher for one type of defendant than for another.

41 See Tullock, supra note 40. Tullock uses a logistic or ‘S’ shaped curve instead of a linear one that we use. We chose the linear shape because of expositional ease and because using the linear shape, over the logistic one, should make it easier to justify the reasonable doubt standard. A technical proof is available upon request from authors. If even on the easier linear standard we cannot justify the reasonable doubt standard then it is unlikely to be justified on the ‘S’ shaped logistic standard.
vertical line $PE$ reflects the preponderance-of-evidence standard. If the amount of evidence is below (to the left) of the $PE$ line, the defendant will be found innocent, and if the evidence is above the $PE$ standard then the defendant will be found guilty. Error probabilities under the $PE$ standard are shown by the areas $OBE$ and $PBA$ in Figure 1. The probability of a false acquittal is given by $OBE$, to the left of the $PE$ standard. The probability of a false conviction is given by $PBA$, to the right of the $PE$ standard. Figure 1 also shows the same relationship under the reasonable-doubt standard, where the vertical line labeled $RD$ reflects the reasonable-doubt standard.

Two intuitive points follow from Figure 1: the probability of a false acquittal and the overall likelihood of error are both larger under the reasonable-doubt standard. In moving from the preponderance to the reasonable-doubt standard, we reduce the probability of a false conviction by the area $ABCD$, and we increase the likelihood of a false acquittal by the larger area $BDEF$. It follows that if the social costs of false acquittals and false convictions are equal society should prefer the preponderance standard to the reasonable-doubt rule. However, if the costs of false convictions and false acquittals are not equal, examining the overall probability of error will be insufficient to tell us whether the reasonable-doubt rule is preferable to the preponderance rule.

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$42$ See id.

$43$ See Posner, supra note 4, at 605.
In general, society should prefer the reasonable-doubt standard to the preponderance standard if the expected social costs are lower under the reasonable-doubt standard. Thus, the reasonable-doubt standard is preferable if the change in the probability of a false conviction (ABCD in Figure 1) multiplied by the cost of a false conviction exceeds the incremental false acquittal probability (BDEF) multiplied by the cost of a false acquittal. Put simply, the reasonable-doubt rule is preferable if the reduction in false conviction costs exceeds the increase in false acquittal costs. Should one believe this holds?

B. Toward an Empirical Test

To determine whether, as an empirical matter, a move from the preponderance to the reasonable-doubt standard would reduce false conviction costs by a larger amount than it increases false acquittal costs, we must formulate in precise terms what we mean by the costs of false convictions and false acquittals. Although we have discussed these costs earlier, here we will simply spell out the costs for which we are able to obtain measures.

In the standard economic analysis of enforcement, the costs of false convictions and false acquittals can be categorized as either “deterrence costs” or “sanctioning costs”. Specifically, false convictions and false acquittals are socially costly under the traditional error cost rationale to the extent that they lead to sub-optimal deterrence–that is, to a deterrence level either above or below the social optimum. Sanctioning costs are the losses society bears by punishing a convicted offender, such as the social costs of maintaining prisons, the forgone labor of the convicted offender, the deprivation of his liberty, and stigma or reputational costs.

Because false acquittals involve no punishment at all, the only costs we need concern ourselves with for them are deterrence costs. In the case of false convictions, we need to consider both deterrence and sanctioning costs. Thus,

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44 See Posner, supra note 4, at 604 – 05; Thomas R. Lee, Pleading and Proof: The Economics Of Legal Burdens, 1997 B.Y.U.L. Rev. 1, 5 (1997) (noting that “error costs are the social costs associated with erroneous legal judgments. Erroneous legal judgments include decisions for undeserving defendants (Type I errors) and decisions for undeserving plaintiffs (Type II) errors.”); Peter Wendel, A Law and Economics Analysis of the Right to Face-to-Face Confrontation Post-Maryland v. Craig: Distinguishing the Forest from the Trees, 22 Hofstra L. Rev. 405, 412-13 (1993) (stating that the risk of erroneous legal judgement, or cost of error, is the probability of an erroneous conviction times the cost of erroneous conviction, plus the probability of an erroneous acquittal times the cost of an erroneous acquittal).

45 See Posner, supra note 4, at 604 – 05; Lee, supra note 44, at 26 n.79.

46 See Posner, supra note 4, at 604 – 05; Gary S. Becker, Crime and Punishment: An Economic Approach, 76 J. Pol. Econ. 169, 180 (1968); Wendel, supra note 44, at 426. The stigma factor suggests that the cost of a false conviction exceeds that of a true conviction. Although we have treated conviction costs as uniform (i.e., the same for correct and false convictions) in this discussion, it is a trivial change to take this feature into account. Our discussion in this section is in no sense distorted by the simplifying assumption that conviction costs are uniform.
the costs we are concerned with are the incremental deterrence costs of false convictions, the incremental deterrence costs of false acquittals, and the incremental sanctioning costs. To be precise, let $D_{fc}$ = the incremental deterrence cost of a false conviction, let $D_{fa}$ = the incremental deterrence cost of a false acquittal, and let $C_c$ = the incremental social costs of imposing sanctions.

We are now in a position to state a rough empirical test to determine whether the reasonable-doubt rule is preferable to the preponderance standard on traditional error cost grounds. Assuming that convictions drop under the reasonable doubt rule relative to the preponderance standard then we have fewer sanctioning costs. Further, under the reasonable doubt rule we would expect deterrence to worsen relative to the preponderance rule. The reasonable-doubt rule is thus preferable if the incremental sanctioning costs under the preponderance rule exceed the incremental deterrence costs (or "underdeterrence" costs) under the reasonable-doubt rule. Using Figure 1, the reasonable-doubt rule is preferable if $(\Delta)C_c > (BDEF)D_{fa} - (ABCD)D_{fc}$, where $\Delta$ is the incremental probability of conviction.

The empirical evidence does not directly address the question of whether the preponderance rule's additional sanctioning costs exceed the reasonable-doubt rule's additional underdeterrence costs, but it does allow us to determine approximately whether this necessary condition is likely to obtain. If

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47 The question is whether $D_{fa}$ should be larger than $D_{fc}$. As a theoretical matter, this is demonstrable. First, both are positive because increases in either type of error reduce the difference in payoffs for complying and not complying with the law, see, e.g., Louis Kaplow & Steve Shavell, Accuracy in the Determination of Liability, 37 J.L. Econ. 1, 5 (1994). Second, $D_{fa} > D_{fc}$, as a theoretical matter for the following fundamental reason: in a well functioning enforcement system, enforcement efforts will be targeted at guilty actors. Given this, changes in false acquittal probabilities (which apply to guilty actors) will far outweigh changes in false conviction probabilities (which apply to innocent actors) in terms of their influence on incentives. For an independent formal analysis that reaches the same conclusion, see Henrik Lando, The Optimal Standard of Proof in Criminal Law When Both Fairness and Deterrence Matter. SSRN Working Paper available at http://papers.ssrn.com/paper.taf?abstract_id=238334. Both the framework here and Lando's are easily reconcilable with Craswell and Calfee's important article on the deterrence effects of error. See Richard Craswell & John E. Calfee, Deterrence and Uncertain Legal Standards, 2 J. L. Econ. & Org. 279 (1986). For an analysis of the deterrence effects of error in the negligence context, see Keith N. Hylton, Costly Litigation and Legal Error Under Negligence, 6 J. L. Econ. & Org. 433 (1990).

48 Note that if $P$ is the share of guilty individuals in the population, the incremental conviction probability, $\Delta$, is equal to $P(BDEF) - (1-P)(ABCD)$. Since $BDEF > ABCD$, and since $D_{fa} > D_{fc}$, the incremental deterrence costs of the reasonable-doubt rule are definitely positive, and it is an open (empirical) question whether the sanctioning costs under the preponderence rule exceed these incremental deterrence costs.

49 See David Anderson, The Aggregate Burden of Crime, 42 J. Law & Econ. 611 (1999); John J. Donohue III & Peter Siegelman, Allocating Resources Among Prisons and Social Programs in the Battle Against Crime, 27 J. Legal Stud. 1 (1998). See also United States Department of Justice, Bureau of Justice Statistics, Costs of Crimes to Victims (1994) (setting out the costs of specific crimes to victims, such as crimes of violence, rape, robbery, assault, theft, and motor vehicle theft).

50 See Anderson, supra note 49. The sanctioning costs of the death penalty are not discussed here because of the number of executions each year. See Hashem Dezhbakhsh, Paul H. Rubin, & Joanna Mehlhop
we use, as a conservative definition of the aggregate harm from crime, the sum of losses due to injuries and property theft (including fraud), Anderson’s study suggests the annual aggregate harm due to crime is roughly $1,031 billion.\textsuperscript{51} If we measure sanctioning costs by adding the opportunity costs of the inmate’s time while locked up plus the costs of maintaining inmates in prison, Anderson’s study suggests that the annual sanctioning cost for all convictions is $71 billion.\textsuperscript{52} We recognize that these numbers miss some important costs. Indeed, they do not include the stigma costs, part of the liberty costs, and the moral disutility costs of diluting the moral force of the criminal law referred to by the Court in In Re Winship. However, we are using the numbers only to determine whether the sanctioning and deterrence costs of errors, as commonly understood, would justify the reasonable doubt rule. An important part of our analysis is to show the rough magnitude of other costs that need to be considered to justify the reasonable-doubt rule if standard sanctioning and deterrence costs do not.

From these numbers one can see that the aggregate costs of crime, which can be treated as underdeterrence costs, are on the order of 15 times greater than the sanctioning costs associated with all convictions. In view of the sheer magnitude of this differential, it seems improbable that the savings from a measure that reduces the costs of crime by improving deterrence, such as moving to the preponderance standard, would be swamped by a rise in sanctioning costs.

\begin{footnotesize}
\begin{itemize}
\item \textsuperscript{51} See Anderson, supra note 49, at 629 (providing a figure of $1,102 Billion which represents the sum of ‘Risks to life and health’, ‘Crime-induced production’, and ‘Opportunity Costs’ (for criminals and victims)). We have reduced this amount by $71 Billion, which represents the sanctioning costs associated with using prison as a penalty as this is more appropriately accounted for as sanctioning costs for our analysis. See infra note 52. The “risks to life and health” reflect the value of crime-related lives lost (approximately 72,111 lives lost per year valued at about $6.1 Million each) and the value of non-fatal injuries. See id., at 624 – 626. The $6.1 Million per life measure appears to be about the average value from many previous studies. See id., at 626. The value of non-fatal injuries is also based on an average of prior studies valuing non-fatal injuries. See id., at 626. The “crime-induced production” reflects the estimated amount of resources spent on items that result from or are associated with crime and hence cannot be spent on other items. See id., at 616 – 617. “Examples include the production of personal protection devices, the trafficking of drugs, and the operation of correctional facilities.” Id. at 616. Andersen provides a fairly detailed list of these expenditures. See id., at 620. The “opportunity costs” associated with crime in the text represent the value of the days victims’ were unable to work due to the crime event, the time and effort spent by criminals in undertaking crime, and the time and effort of victims in attempting to prevent crime (e.g., locking things). See id., at 623 – 624.

\item \textsuperscript{52} See id., at 620, 624 (providing this figure which represents the sum of “Crime-Induced Production: Corrections” and “Criminal lost workdays: in prison”).
\end{itemize}
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For example, if shifting from the reasonable-doubt to the preponderance standard improved deterrence by 30% it would reduce the annual cost of crime by about $309 billion. To disfavor such a move, we would need to believe that the sanctioning costs would rise by more than $309 billion - i.e., from roughly $71 billion to $380 billion. This would be equivalent to a near six-fold increase in the prison population. If the reduction in crime costs were 20% (saving about $206 billion), we would need sanctioning costs to increase from $71 billion to $277 billion to offset the gain (almost a four-fold increase in the prison population). If the crime reduction benefit were only 10% (saving about $103 billion), we would need an increase of sanctioning costs to $174 billion to offset the gain. While it is impossible to rule out these scenarios, they each require the combination of a relatively modest impact on deterrence and an extremely large increase in sanctioning costs, on the level associated with about a tripling of the prison population. However, the empirical evidence on the responsiveness of crime rates to changes in prison population suggests that this combination is unlikely to be observed.

The empirical evidence on the elasticity of crime with respect to incarceration puts the figure in a range from roughly .15 to .30. In other words, a one percent increase in the prison population results in a reduction in crime somewhere between .15 and .3 percent. Using the lower figure, an increase in sanctioning costs of 200% (i.e., tripling the prison population and increasing...
sanctioning costs from $71 to $213 billion - a net increase of $142 billion), should be associated with a reduction in crime on the order of 30%, \((200)(.15) = 30\).\(^{57}\) This yields a deterrence benefit of $309 billion. Since the sanctioning cost of tripling the prison population ($142 billion) is less than the expected deterrence benefit ($309 billion), a switch to the preponderance standard would be desirable on traditional error-cost grounds. If we use the higher elasticity figure (.3), the benefit from crime reduction would be $619 billion (i.e., a 60% decrease in the cost of crime) and it would clearly be desirable to switch to the preponderance standard. In short, the empirical evidence suggests that it is very unlikely that increases in sanctioning costs would fully offset the crime-reduction benefits from switching to the preponderance rule.\(^{58}\)

There are two conclusions one could draw from this analysis. One is that for the traditional error-cost rationale to justify society’s choice of the reasonable-doubt standard, other sanctioning costs not explicitly considered in this analysis must be quite large. Our discussion relies on Anderson’s estimate of the total sanctioning cost, which limits itself to the opportunity costs of the convict’s time and the cost of maintaining prisons. For simplicity, let us refer to Anderson’s as a measure of primary sanctioning costs. We know that this excludes certain secondary sanctioning costs, such as the stigma or reputational harm associated with a conviction, especially a false conviction. Our approach also excludes the disutility costs that may result from diluting the moral force of the criminal law.\(^{59}\) We have no estimates of the aggregate harm due to such secondary

\(^{57}\) There is a net gain of $167 Billion on these numbers by switching to the preponderance standard. Crime has dropped by $309 Billion and sanctioning costs have risen to $213 Billion from $71 Billion (i.e., an increase of $142 Billion). Thus, $309 Billion less $142 Billion is $167 Billion, which makes switching to the preponderance rule desirable on traditional error-cost grounds.

\(^{58}\) We should address a few issues raised by this discussion. First, the numbers we have chosen from the Anderson study are the most conservative figures that he uses, in the sense that they represent the lowest estimate of the cost of crime that Anderson provides. Thus, they should be the most supportive of the traditional error cost rationale, but even they do not support the traditional error cost rationale. Second, we have excluded costs associated with risk bearing. In particular, we have excluded the risk bearing costs of being a potential victim and of being falsely convicted. However, since the risk bearing costs associated with becoming a victim are probably far larger than those associated with a false conviction, this exclusion biases the example against our thesis – including these numbers would only strengthen our argument. Third, the numbers used in the Anderson study are based on a “basket” of crimes, and do not appear to be driven by the costs for one particular crime (e.g., murder costs appear to be only 10 percent of the total costs of risks to health and safety in his study). Fourth, another estimate of the total cost of crime per year is $728 Billion. See Sara Collins, Cost of Crime 674 Billion, U.S. NEWS AND WORLD REPORT, January 17, 1994, p. 40. Even if we use this figure (which does not include opportunity costs, see Anderson, supra note 47, at 614) and $71 Billion as our estimate for total sanctioning costs then relying on the elasticity figures above still suggests that the gain from enhancing deterrence would be worth the added sanctioning costs. In fact, this example actually underestimates the strength of our theory. The reason is that the cost of crime in Collins’ study is from 1994 and the sanctioning costs are from 1997 (i.e., Anderson’s study).

\(^{59}\) The stigma and disutility someone suffers who is falsely convicted could be greater than that suffered by someone who is correctly convicted. This notion can be considered as in supra note 46.

Our suspicion is that the secondary sanctioning costs estimates will prove to be the most important in this determination. The reason is that moral-disutility costs should be of roughly the same order of magnitude on both sides of the relevant equation. That is, a move from the reasonable-doubt to the
sanctioning costs and moral disutility costs, but the analysis here allows us to see the rough size that must be assumed of such costs in order to justify society’s preference. For example, return to the scenario in which a tripling of the prison population produces a deterrence benefit of $309 billion and an increased primary sanctioning cost of $142 billion. To justify the reasonable-doubt standard in this scenario we would have to assume that the secondary sanctioning-cost correction plus the moral disutility costs would add $167 billion to the change in total sanctioning costs. To sum up, in order to justify the reasonable-doubt standard under this analysis, the change in secondary sanctioning and moral disutility costs associated with a move from the reasonable-doubt to preponderance standard, must be substantially larger than the change in primary sanctioning costs.

The second conclusion one could draw is that the traditional error-cost rationale for the reasonable-doubt standard falls short of providing a good explanation for it. The expected costs of false convictions generated under the preponderance standard do not appear likely to exceed the expected costs of false acquittals generated under the reasonable-doubt rule by a sufficient amount. Put another way, Blackstone’s assertion that it is better to let 10 guilty men go free rather than punish one innocent is not supported by the traditional error-cost analysis to the extent these costs can be measured with existing data. Some other justification should be considered for the pro-defendant bias in the standard of proof. 60

IV. Another Justification for Pro-Defendant Procedural Protections

If the traditional justification for the reasonable-doubt standard is not altogether satisfying or complete, perhaps other justifications provide greater support for it. One such justification, we suggest, is that the reasonable-doubt preponderance standard means incurring more false conviction costs in exchange for fewer false acquittals. Since both errors weaken the moral force of the criminal law, it is not clear how one would determine which type of error deserves greater weight.

60 In addition, even without the foregoing analysis one might be somewhat skeptical about traditional error costs explaining the pro-defendant bias in criminal procedure. If one was only interested in reducing false convictions relative to false acquittals it might be more direct to simply increase the standard of proof to something beyond reasonable doubt (e.g., virtual certainty) rather to rely on the reasonable doubt standard plus other protections. Further, Double Jeopardy and the right to a jury trial and so many other protections may not have particularly clear or significant influences on the number of false convictions or false acquittals. See Khanna, supra note 29, at 360 – 88; Timothy Feddersen & Wolfgang Pesendorfer, Convicting the Innocent: The Inferiority of Unanimous Jury Verdicts (Draft, 1997)(on file with authors)(arguing that under plausible assumptions the unanimity requirement may result in an increase in false convictions relative to a supermajority vote requirement). The mere presence of different criminal procedural protections that do not directly or significantly change error rates suggests that either a more nuanced view of error analysis is needed or that perhaps error analysis is not a complete explanation for the presence of criminal procedural protections. See Stuntz, supra note 11, at 1 (suggesting that the procedures are not necessarily correlated with guilt or innocence). This suggests that the traditional error cost justification seems a weak justification. See Stuntz, supra, at 100.
standard is designed to make it harder for individuals and groups to use the
criminal process as a mechanism for wealth extraction or to obtain some other
advantage. This reduces the social costs associated with rent-seeking efforts and
enhances the deterrent effect of the law.

Implicit in this justification for pro-defendant criminal procedure is the
assumption that the state and its enforcement agents may have incentives that
diverge from those of the social ideal. The social ideal is the outcome that a
platonic philosopher-king would choose in order to maximize social welfare. For
reasons that have been explained in the public choice literature, it is not
necessarily the choice made by a democratically elected legislature, much less
that of a non-democratic government.

Prosecutors might have interests that diverge from the social ideal for a
number of reasons. First, prosecutors might not value the same things that
comprise the social ideal. For example, the social ideal might be to maximize
the number of correct convictions and minimize the number of false convictions
subject to a budget constraint. Prosecutors, however, might be interested in
trying to maximize the number of convictions, to advance further in their careers,
make money, or a variety of other things. Second, prosecutors and
philosopher-kings may consider the same things important, but weight them
differently. For example, a philosopher-king might value the avoidance of a false
conviction more than a prosecutor might. Third, error by prosecutors in

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61 See Jonathan R. Macy, Promoting Public-Regarding Legislation Through Statutory Interpretation: An
groups can use to influence the political process, and noting that interest groups can distort legislators’
thinking, which would then serve special interests rather than public interest). See also Gary Minda, Interest
Groups, Political Freedom, and Antitrust: A Modern Ressessment of the Noerr-Pennington Doctrine, 41 HASTINGS
L.J. 905, 945 (1990) (commenting that “[i]nterest groups are seen as ‘rent-seekers’ who influence the political
process to achieve their selfish economic interests, and legislators are seen as motivated to advance their
(articulating that as an agent of the state, prosecutors’ decisions “tend to diverge from those that would
most efficiently serve the public interest” due to personal or professional reasons); Stephen J. Schulhofer, Criminal

62 See Khanna, supra note 29, at 361 – 62. For a similar approach, also see Edward Glaeser & Andrei
Schleifer, Incentives For Enforcement, Draft 2000; Scott Baker & Claudio Mezzetti, Prosecutorial Resources, Plea
Bargaining, and the Decision to Go To Trial, forthcoming 17 J. L. ECON. & ORG. (2001) (using a model where
prosecutors are concerned about correct convictions and false convictions amongst other things); Dirk G.
Duke L. J. 311 (1981); Darryl K. Brown, Criminal Procedure Entitlements, Professionalism, and Lawyering Norms,

63 See Edward L. Glaeser et al., What Do Prosecutors Maximize? An Analysis of the Federalization of
Drug Crimes, 2 J.L. & ECON. 259, 262-266 (2000); Gordon Van Kessel, A Versary Excess in the America; Criminal
Trial, 67 NOTRE DAME L. REV. 403, 441 (1992); William M. Landes, Economic Analysis of the Court, 14 J. LAW &
ECON. 61 (1971); Standen, supra note 15, at 1477-78; Daniel C. Richman, Essay Old Chief v. United States:
Stipulating Away Prosecutorial Accountability? 83 VA. L. REV. 939, fn. 93 (1997); Christensen, supra note 62, at
321.

64 Society might also value certain convictions more than prosecutors might (e.g., society might
value the conviction of one drug overlord more than 20 convictions of small time drug dealers, but
assessing the social value of certain cases may further widen the gap between prosecutorial and social welfare maximizing behavior. This divergence would be further compounded if the state’s interests were divergent from the social ideal because the state would then set up reward systems for prosecutors that would maximize its goals rather than social welfare.

Because prosecutorial or state interests may not match the social ideal we face what can be termed an “agency cost” problem. In other words, to the extent state actors take decisions that deviate from the social ideal, we can think of the social welfare losses associated with their decisions as “agency” or incentive-divergence costs. This can manifest itself in behaviors that induce lobbying of prosecutors or other state actors.

Lobbying prosecutors to bring cases selectively can occur in a variety of forms. However, we think two general types capture the observed forms of rent-seeking. One is inter-group wealth expropriation, which arises when one group attempts to gain some advantage from the prosecutor at the expense of other members of society. Equivalently, we might describe this type of rent-seeking or lobbying as an advanced version of tribalism. We treat this as wealth expropriation – group A attempts to obtain gains at the expense of other groups

prosecutors might view things differently). Note this seems to depend on how (and for what) prosecutors are rewarded. See Christensen, supra note 62, at 311; Daniel C. Richman, Federal Criminal Law, Congressional Delegation and Enforcement Discretion, 46 UCLA L. Rev. 757, 818 n. 101 (1999); Tracey L. Meares, Rewards for Good Behavior: Influencing Prosecutorial Discretion and Conduct with Financial Incentives, 64 Fordham L. Rev. 851 (1995). See Glaeser, et al., supra note 63, at 261 (noting that decisions to prosecute are often influenced by prosecutors’ interest in running for a higher office); Van Kessel, supra note 63, at 442 (1992) (noting how win-loss records are very important to state prosecutors). This raises interesting questions about why we reward prosecutors in the way we do. This is the subject of a separate paper and outside the scope of our present inquiry. As a first cut, one suspects convictions rates are the more verifiable assessment criteria relative to others (much like profits are a bit easier to verify as assessment criteria relative to others in the corporate sphere when dealing with the agency problem in that context).

66 For example, assume that the prosecutor does value the same things and to the same degree as society. Thus, the prosecutor wants to maximize correct convictions, minimize false convictions subject to a budget constraint and values the avoidance of a false conviction as much as society. However, the prosecutor may incorrectly believe that a certain defendant is guilty even when in fact he may not be. In this situation, the prosecutor may pursue this innocent defendant even though the prosecutor values the same things and to the same extent as society.

67 Admittedly, this is a different approach to agency costs. The standard account in Jensen & Meckling’s article treats agency costs as the costs that result because the agent’s incentives differ from those of the principal. See Jensen & Meckling, supra note 66. In our description in the text, we are treating agency costs as the costs that result because state actors have incentives that deviate from those of a platonic philosopher-king.

in society. The other general type of rent-seeking is simple corruption, which occurs when an offender or potential offender uses bribery or some other means to induce an enforcement agent to selectively enforce the law.

A. Inter-Group Wealth Expropriation

Rent-seeking behavior is a result of prosecutors acting in their unconstrained self-interest. If there are no constraints prosecutors may use the criminal process to benefit themselves by selling their power to enforce the criminal law to the highest bidder. What prosecutors receive could include direct or indirect monetary gain, enhanced chances for power and prestige, or anything else of value to the prosecutor. To simplify we can say that prosecutors receive a certain sum – say $1 million – from the highest bidding group (A) to enforce the law in a particular manner. Enforcement of the law in this manner must benefit the highest bidding group by more than $1 million – say $1.5 million – and these gains would appear to come at the expense of the non-A groups (i.e., group B for simplicity). Thus, in a sense, A is using the prosecutor and the criminal process to extract $1.5 million from B by paying the prosecutor $1 million. The various groups realizing that the prosecutor is willing to sell his services will lobby to secure some of these gains from prosecutors and to prevent other groups from extracting wealth from them. The lobbying and counter-lobbying efforts, we will see below, can generate significant social costs.

Inter-group wealth expropriation can be effected in a number of ways. For example, there is lobbying that results in targeted enforcement. This occurs when prosecutors disproportionately target certain groups in society for purposes of bringing prosecutions due to the lobbying efforts of other groups. The quintessential case would be where prosecutors disproportionately brought charges against members of group B because of the lobbying efforts, or simply to curry the favor, of the dominant group A. This permits group A members to shift the burden of criminal enforcement they might otherwise bear onto group B.

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69 See, e.g., Richman, supra note 64, at 818, n. 102 (noting prosecutors' eagerness for career advancement); Christensen, supra note 62, at 318 (noting that prosecutors are financially motivated).
70 See MUELLER, infra note 90. See also Steven Shavell, The Fundamental Divergence Between the Private and the Social Motive to Use the Legal System, 26 J. LAW & ECON. 575, 612 n. 46 (1997)(discussing factors that influence prosecutors from state compensation to collective private efforts).
71 See Paul H. Rubin & Martin J. Bailey, The Role of Lawyers in Changing the Law, 23 J. LEGAL STUD. 807, 822-23 (1994)(discussing how rent-seeking motives of lawyers result in social waste). We have assumed that each group acts as a monolith. That is, we are abstracting away from intra-group sharing issues. Of course, in reality even within each group there may be some competition for the rents that the group earns. Discussion about how this affects our analysis is left for another time. See generally Gary S. Becker, A Theory of Competition Among Pressure Groups for Political Influence, 98 QUARTERLY JOURNAL OF ECONOMICS 371 (1983); Sun & Ng, infra note 102 (noting how size and number of interest groups affects rent-dissipation (i.e., may initially increase then decrease)).
members or to otherwise impose costs on group B members which result in some benefit to group A—e.g., the maintenance of a caste system. 72 Indeed, in regimes in which prosecutors are elected, candidates for the position will have incentives to seek support from group A by promising to direct enforcement efforts against group B.73 Perhaps the best known example of this in United States history is law enforcement in the South during the Jim Crow period, which involved numerous instances of prosecutors refusing to enforce the law against white citizens, while using the threat of criminal punishment to coerce black citizens.74

Another example of wealth expropriation in the enforcement process is where prosecutors directly ask for some benefit to avoid bringing charges against members of politically marginal groups. This is akin to extortion or a protection racket. Knowing that politically powerful groups will have him removed from office if he threatens their interests, the self-interested prosecutor could focus his extraction efforts on the politically marginal.75 In this version of wealth expropriation, the prosecutor seeks to extract wealth from members of politically marginal groups, while providing benefits to the politically powerful in order to keep his position. The difference between this version of inter-group wealth extraction and the first is slight: in the first, the powerful group initiates the wealth extraction process and in the second, the prosecutor initiates the extraction process. In the first case, the powerful group is likely to pay the prosecutor the smallest amount necessary to accomplish their ends, allocating the surplus to themselves. In the second, the prosecutor who initiates the wealth extraction process will allocate the surplus to himself. One example of this process occurs in rural areas of China, where local police officers have tried to enrich themselves by enforcing certain prohibitions, such as the one-child policy, against relatively poor farmers.76

73 See Daniel C. Richman, supra note 64, Stuntz, supra note 8, at 20 – 37 (discussing the incentives of various participants in the American Criminal Justice system); John A. Horowitz, Prosecutorial Discretion and the Death Penalty: Creating a Committee to Decide Whether to Seek the Death Penalty, 65 Fordham L. Rev. 2571 (1997); Tracey L. McCain, The Interplay of Editorial and Prosecutorial Discretion in the Perpetuation of Racism in the Criminal Justice System, 25 Colum. J.L. & Soc. Probs. 601, 648, n. 81 (1993) (noting that decisions to prosecute are susceptible to political influence because most prosecutors are elected); Dwight L. Greene, Abusive Prosecutors: Gender, Race & Class Discretion and the Prosecution of Drug-Addicted M others, 39 Buff. L. Rev. 737, 777 (1991) (noting that “Prosecutors ... are capable of conducting their offices in ways to advance their own political careers”).
74 See Epstein, supra note 72; William J. Stuntz, Race, Class, and Drugs, 98 Colum. L. Rev. 1795, 1839 (1998) (noting that robbery laws in the Jim Crow era were enforced against blacks more often than whites especially where white robbers stole from black victims).
75 See William N. Eskridge, Religion, Homosexuality, and Collisions of Liberty and Equality in American Public Law, 106 Yale L.J. 2411, 2447 (1997); Greene, supra note 73, at 799.
Yet another example of the potential for wealth expropriation is the passing of laws (including criminal laws) with disproportionate burdens on different groups.\(^77\) This is analogous to targeted enforcement. In order to effect wealth expropriation, the laws need not apply directly to group B members. The dominant group (A) may find that certain activities are carried out only, or predominantly, by group B members, or that group B members carry out these activities in a different manner from others.\(^78\) With this information, the dominant group may prohibit or place special burdens on the activity when carried out in a particular manner. For example, white majorities in the western United States enacted several facially neutral statutes in the late 1800s that had the effect of prohibiting Chinese laundries, both to limit competition from them and to limit the independent work options of Chinese laborers.\(^79\)

All three of these cases are united by a common theme: one group benefits at the expense of others – wealth expropriation – by using the governmental process, whether law enforcement, legislation, or adjudication. As our concern is with prosecutorial behavior, we will not discuss in much depth the passing of laws with disproportionate burdens as that is the legislative context.\(^80\) However, it is important to note that the legislative and law enforcement processes provide alternative routes through which a predatory dominant group could extract wealth from other groups.\(^81\) In this sense, the legislative and law enforcement processes are substitutes in the eyes of the wealth extractor. The laws controlling lobbying/rent-seeking in these governmental processes can often be understood as complements, in the sense that they prevent a predatory dominant group from shifting its expropriation efforts from one governmental process to another.\(^82\)

\(^77\) See, e.g., Stuntz, supra note 74, at 1795 (discussing the heightened police attention given to urban crack markets dominated by the lower economic class while law enforcement pays relatively little attention to the upscale powder-cocaine market); 1976 Supreme Court, Term 1: Constitutional Significance of Racially Disproportionate Impact, 90 HARV. L. REV. 114, 119 (1976).


\(^82\) For discussion of how the procedural protections may induce greater lobbying at the legislative level see Stuntz, supra note 8 passim. We discuss this matter at infra text accompanying notes 160 – 163.
B. Simple Corruption

The other type of rent-seeking, simple corruption, involves the effort of a single individual or group to extract wealth from the general population. We have in mind two cases: that of an enforcement agent (police officer or prosecutor) who threatens to apprehend and charge an individual unless he pays the agent (e.g., extortion), and that of an enforcement agent who is merely willing to accept bribes from the general public.\textsuperscript{83} In general, these payoffs can take two forms. One, ex ante bribery, occurs when an individual bribes an enforcement agent before he commits a crime in exchange for an agreement by the agent not to enforce the law against him. In the other form, ex post bribery, the individual bribes the agent after he commits the crime.\textsuperscript{84}

There are many examples of simple corruption. A common example of ex post bribery is a police officer that accepts bribes in return for not issuing a ticket to a speeding motorist. Ex ante bribery appears to be less common, though there are many examples of it too. In most towns in the U.S., local government business is carried out by boards made up of residents with deep and strong connections to many of the parties who appear before them.\textsuperscript{85} In these settings, it is hard to distinguish the ordinary reciprocal exchanges that are part of normal social intercourse from ex ante bribery. The Supreme Court grappled with a rather routine example of this in City of Columbia v. Omni Outdoor Advertising,\textsuperscript{86} which involved the efforts of a local billboard company to protect its incumbency advantage by encouraging the city council to prohibit the erection of new billboards.\textsuperscript{87}

Because the criminal law enforcement process can be used by groups or by individuals as a means to extract wealth, we should anticipate a steady stream of efforts to use it for that purpose. In light of this it becomes important to get a

\textsuperscript{83} See James Lindgren, The Theory, History, and Practice of the Bribery-Extortion Distinction, 141 U. PA. L. REV. 1695, 1701 (1997). One could argue that the simple corruption category is the same as our second example of inter-group expropriation, and we concede that the difference is more a matter of degree than of character. In the second example of wealth expropriation, the enforcement agent maintains his position through the support of local dominant groups. In the simple corruption story, the enforcement agent is either unconcerned with maintaining support from local dominant groups (in the case of the actively predatory enforcer), or passively accepts bribes in exchange for not enforcing the law.

\textsuperscript{84} See Mehmet Bac & Parimal Kanti Bag, Law Enforcement Costs and Legal Presumptions 5 - 6 (Draft, 2000)(on file with authors). See also Mehmet Bac, Corruption, Supervision and the Structure of Hierarchies, 12 J.L. ECON & ORG'N. 277 (1996).


\textsuperscript{87} The excluded firm brought an unsuccessful antitrust lawsuit on the ground that the incumbent firm had colluded with city officials. The Supreme Court's reluctance to apply the antitrust laws to this behavior is based in large part on the difficulty in distinguishing ex ante bribery from ordinary social intercourse. See id. at 379 – 80.
sense of the costs generated by such behavior (Part V) and also some methods for constraining them (Part VI).

V. Costs Associated With “Rent-Seeking” Behavior in the Criminal Process

We divide the discussion of the costs of rent-seeking into two parts. First, in section A, we discuss the costs related to the act of lobbying. Second, in section B, we discuss the costs related to the effect of lobbying (and the perception of successful lobbying) on the deterrent force of the criminal law.

A. Direct Costs from Rent-Seeking – Wasteful Expenditures

Rent-seeking in the criminal process involves lobbying efforts by certain individuals or groups to influence the selection and prosecution of cases. The process of lobbying itself generates costs that are, from a societal perspective, often essentially wasteful. In order to discuss these costs in greater depth a useful starting point is an analogy to the efforts to obtain a monopoly. Monopoly status provides the person holding it with the ability to extract supra-competitive prices for some period of time and hence make supra-normal profits. These profits are attractive and are likely to induce people to spend resources on obtaining this monopoly. This expenditure of resources is sometimes socially desirable and at other times socially undesirable.

Expenditures to obtain a monopoly may be desirable when a firm secures a dominant position through competition because a firm typically does this by improving its product, or reducing its costs, activities that increase the total surplus. In general, this is a benefit to society because competition to be the “best” inures to the benefit of consumers and society.

However, certain expenditures to obtain or maintain a monopoly are wasteful from society’s perspective. Such expenditures include duplicative lobbying efforts to obtain a government privilege (e.g., an exclusive license or

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88 The conflict between society’s best interests and the interests of enforcement agents is similar to the conflict of interest that can be a problem for individuals with decision-making authority in a corporation, since these individuals may have to decide between their own welfare and the welfare of the corporation. See ROBERT CHARLES CLARK, CORPORATE LAW 147 (Little, Brown, & Company 1986).

89 See PHILLIP AREEDA & LOUIS KAPLOW, ANTITRUST ANALYSIS PROBLEMS, TEXT, AND CASES 16 (5th ed. 1997).


91 See AREEDA & KAPLOW, supra note 89, at 7 (noting that “[c]ompetitive forces generate efficiency in two ways. Productive efficiency occurs as low cost producers undersell and thereby displace the less efficient. Allocative efficiency occurs as exchanges in the marketplace direct production away from goods and services that consumers value less and toward those they value more...”).

92 See id.
tariff protection), to obtain certain kinds of governmental behavior, to retard research progress, and others. This kind of naked wealth extraction creates no additional surplus (i.e., no benefit to society) and merely transfers an asset from one party to another. The gap between the resources expended and the benefit to society (the benefit is zero in the case of pure transfer of wealth) is wasteful from society's perspective.

In the context of criminal law enforcement, efforts to lobby the prosecutor are often wasteful in a sense similar to naked wealth extraction. If we assume an unbiased prosecutor then lobbying such a prosecutor to bring selective enforcement against one group (say, group B) by members of group A could be wasteful in certain instances. Of course, the result is not entirely wasteful if targeting group B reduces the overall costs of crime. However, there is little reason to believe that lobbying for selective enforcement will always bring about an efficient result. For example, group A will have no interest in inducing the prosecutor to go after cases of crime involving only members of group B as victims. Further, group A members may discourage the prosecutor from enforcing the law when members of their own group commit crimes against group B. In these cases lobbying is a social waste.

This waste includes some portions of the lobbying efforts of politically dominant groups, the counter-lobbying efforts of politically non-dominant groups, and some portion of the effort and time spent by government officials in addressing wealth transfers and maneuvering to obtain positions in which they

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93 See MUELLER, supra note 90, at 229 - 46.
94 See id., at 231.
95 See id., at 229 – 246.
96 It might be that lobbying coincides with what might be socially desirable. Also lobbying is not necessarily limited to inter-group lobbying. For example, if the victims of crimes by members of group B are other group B members then group B may lobby prosecutors to stop crime in their areas and hence lobby for prosecutions against other group B members. This sort of lobbying does not raise the kinds of concerns we are discussing in this paper. See Gordon Tullock, Efficient Rent-Seeking, in TOWARD A THEORY OF THE RENT-SEEKING SOCIETY 97 – 112 (James M. Buchanan, R.D. Tollison & Gordon Tullock eds., 1980).
97 Note that even if the prosecutor is unbiased she may still not prosecute the cases that would be in society's interests. This stems from the prosecutorial agency costs discussed earlier. See supra Part IV. Further, lobbying may in some instances overcome (or reduce) the agency problem, but in others it might exacerbate them. For example, if prosecutors make errors in assessing the social value of cases then lobbying may generate more accurate or sometimes less accurate decisions.
98 Group A members may do this for a variety of reasons. For example, if they have their own methods of social control (for A members) besides official law enforcement then they may prefer to rely on those methods rather than official law enforcement. See Kelly D. Hine, Vigilantism Revisited: An Economic Model of the Law of Extra-Judicial Self Help or Why Can't Dick Shoot Henry for Stealing Janet's Truck? , 47 AM. U. L. REV. 1221 (1998).
99 Even if lobbying did produce an efficient rule (i.e., an overall reduction of crime) it might be that there was too much lobbying to achieve that end or that an alternative means of influencing prosecutorial behavior would have lower costs. See generally GORDON TULLOCK, THE ECONOMICS OF SPECIAL PRIVILEGE AND RENT SEEKING 11-27 (1989).
can direct such transfers.\textsuperscript{100} The easier it is to obtain governmental favors the more lobbying should appear.\textsuperscript{101} Also, as the value of the issues at stake increases one should expect greater expenditures as well.\textsuperscript{102}

To this point we have focused on the costs associated with inter-group expropriation efforts, but analogous arguments apply in the context of simple corruption.\textsuperscript{103} Corruption creates costs in terms of the resources spent in bribing the enforcement agent and the efforts of the agent in positioning himself to take bribes. However, there is an important feature of the corruption model that suggests that rent-seeking costs can be much larger than appears initially. The enforcement process is vertically fragmented, in the sense that it moves through a chain beginning with a police officer (and next his superiors), moving to a prosecutor, and on to a magistrate or judge, and so on. If each one of these

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\textsuperscript{101} See Mueller, supra note 90, at 334; Beermann, supra note 100, at 183.

\textsuperscript{102} See Daniel Fischel & Alan O. Sykes, Corporate Crime, 25 J. LEGAL STUD. 319, 324 (1996); Arthur B. Laby, W. Hardy Calicott, Patterns of SEC Enforcement Under the 1990 Remedies Act: the Civil Money Penalties, 58 ALB. L. REV. 5, 50 (1994) (noting that more defendants are willing to invest in litigation against the SEC rather than settle since the penalties have been increased under the Remedies Act); Stephen J. Spurr, An Economic Analysis of Collateral Estoppel, 11 INT’L REV. L. & ECON. 47 (1991). Also, as the number of groups, political or otherwise, increase (e.g., the more heterogeneous the population) the more potential lobbying groups and the more likely that wasteful spending might occur. See also Guang-Zhen Sun & Yew-Kwang Ng, The Effect of the Number and Size of Interest Groups on Social Rent Dissipation (Draft) (on file with authors), suggesting that the amount of resources expended in rent-seeking would probably first increase as the number of groups increased and then, after some point, begin to taper off.

\textsuperscript{103} Note that a bribe might be efficient in some cases, much as lobbying for targeted enforcement might be. See Gary S. Becker & George J. Stigler, Law Enforcement, M alfeasance and Compensation of Enforcers, 3 J. LEGAL STUD. 1 (1974); Padideh Alai, The Legacy of Geographical Morality and Colonialism: A Historical Assessment of the Current Crusade Against Corruption, 33 Vand. J. TRANSNAT’L L. 877, 899 (2000). Such a situation would be subject to the same arguments as with targeted lobbying (if efficient). See supra note 97. See also Rebecca A Pinto, The Public Interest and Private Financing of Criminal Prosecutions, 77 Wash. U. L. Q. 1343, 1367 (1999) (noting that “private financing has the potential to further public values by providing a corrective offset of fiscal and other institutional influences on prosecutorial discretion that lead to inequitable allocation of criminal justice resources. Canceling out such influences would enable prosecutors to make charging decisions on a financially-level playing field and enhance the prosecutor’s freedom to pursue cases and offenders most deserving of prosecution.”); See also Tracey L. Meares, Rewards for Good Behavior: Influencing Prosecutorial Discretion and Conduct with Financial Incentives, 64 FORDHAM L. REV. 851 (1995).

The problem here is entirely analogous to the familiar double-marginalization problem in the theory of vertical integration. See Andy C.M. Chen & Keith N. Hylton, Procompetitive Theories of Vertical Control, 50 HASTINGS L.J. 573, 623 (1999) (noting that “the monopolist manufacturer must worry about the ‘double-marginalization’ problem...the monopolist will apply a monopoly surcharge to the item he produces, and the distributor will apply an additional monopolistic surcharge to the same item at the downstream level.”). A fragmented enforcement process allows several individuals to impose a monopoly surcharge for their services. A vertically-integrated enforcement process allows one individual to impose a surcharge. See id., at 624 (noting again that “the monopolist can eliminate this problem by vertically integrating forward, and transferring his own products at marginal cost to the downstream segment of the integrated unit.”). The overall costs of corruption and reduction in service are considerably greater under the fragmented regime. See Schleffer & Vishny, infra note 132.
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agents demands bribes, then the total social waste will be considerably larger than in a vertically integrated enforcement regime in which a single agent controls the process from arrest to punishment.104

The vertical fragmentation of the enforcement process means that each individual agent is in a position similar to that of successive owners of the pieces of a long toll road. One of the standard results of economics is that the sum of the tolls charged by successive owners will be larger than the toll charged by a single owner of a road.105 The reason is that successive owners do not take into account the fact that any increase in their individual tolls will reduce the revenue to the owners of the other pieces of the toll road. The same phenomenon is likely to be observed in the law enforcement process when corruption is rampant.

Although the costs of lobbying and corruption could be quite large, that does not end the potential costs associated with rent-seeking. In the context of the criminal process rent-seeking might have effects on compliance with the law and with deterrence that need to be accounted for as well.

B. Deterrence and Other Costs from Rent-Seeking

In the context of the criminal process rent-seeking, if successful in any measure, has the effect of skewing the enforcement of the law. If members of society perceive (i) skewed enforcement and (ii) that such enforcement is related to rent-seeking or lobbying efforts by certain groups then compliance with the law and the deterrent effect of the law are likely to be compromised. The effects on compliance and deterrence are multi-faceted and we address them in the following sections.

104 We are not suggesting that law enforcement should be vertically integrated (this may raise “checks and balances” concerns), but we are saying that fragmenting enforcement can increase the amount of loss from corruption.

105 See Howard A. Shelanski & J. Gregory Sidak, Antitrust Divestiture in Network Industries, 69 U. Chi. L. Rev. 1, 23 (2001) (arguing that “under simple models of vertical control where the downstream firm is assumed to have market power, social welfare is unambiguously increased by the elimination of the double marginalization. One firm rather than two marks up the price of the upstream product, leading to a lower price and higher output.”); See John E. Lopatka & Andrew N. Kleit, The Mystery of Lorain Journal and the Quest for Foreclosure in Antitrust, 73 Tex. L. Rev. 1255, 1297 (1995) (arguing that “if the products were complements, their provision by a single supplier could increase efficiency, for monopoly provision of complementary products can avoid the kind of double-marginalization problem well recognized in the context of vertically related, or successive, monopolies.”) For discussion of a related problem – the problem of the anti-commons see Michael A. Heller, The Tragedy of the Anticommons: Property in the Transition from Marx to Markets, 111 Harv. L. Rev. 621 (1998); James Buchanan & Yong J. Yoon, Symmetric Tragedies: Commons and Anticommons Property, Journal of Law and Economics, (forthcoming 2000); Francesco Parisi, Ben Depoorter, & Norbert Schulz, Duality in Property: Commons and Anticommons, University of Virginia School of Law, Law & Economics Research Papers Series, Research Paper No. 00-16 (Draft 2001) (on file with authors).
1. Some deterrent effects of selectively enforcing the law

Selective enforcement of the law due to lobbying by certain groups can have corrosive effects on deterrence. In this section we consider two scenarios. First, where lobbying by group A members results in selective law enforcement against group B members with little regard to the actual guilt of the defendants and disproportionately less enforcement against group A members (case 1). Second, where lobbying by group A members leads to selective enforcement against group B members focusing on those who are guilty, but again with disproportionately less enforcement against group A members (case 2).

In case 1, deterrence is likely to drop for both groups A and B. To see this we need to first step back and examine how deterrence can be achieved in this context. Deterrence can be achieved through substitution effects or scale effects. Substitution effects occur when a change in the effective sanction leads potential offenders to substitute legitimate, law-complying conduct for illegitimate, undesirable conduct. Scale effects occur when enforcement causes potential offenders to stay out of certain areas, or off the streets at certain times. A selective enforcement policy in which group B is targeted implies, within a fixed budget setting, a diversion of resources from substitution-oriented policies to scale-oriented policies. This is analogous to shifting from a strategy of ticketing every motorist that speeds (inducing substitution toward slow driving) to a strategy of ticketing motorists who meet the profile of a speeder (inducing drivers who fit the profile to stay off the roads).

Now, in case 1, the group A members will be under-deterred because they are facing low expected sanctions for engaging in undesirable activities (as law enforcement occurs less frequently against them due to their lobbying). Consequently, they have an increased incentive to engage in these activities relative to where law enforcement was not biased in their favor. The deterrent effect on group B members would also be reduced. This is because they are now increasingly punished whether they have acted "good" or "bad." In other words, the incentive to act "good" is reduced for group B members because the payoffs from acting "good" and "bad" have gotten closer. Thus, deterrence for both groups (A and B) drops.

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106 See Polinsky & Shavell, supra note 37.
107 See id., at 104 (stating that "A type II error (a truly innocent defendant is found liable) lowers the incentive to obey the law because he will face liability even if he obeys, thereby reducing the benefit to him of obeying the law"); Joel Schrag & Suzanne Scotchmer, Crime and Prejudice: The Use of Character Evidence in Criminal Trials, 10 J. L. Econ. & Org. 319 (1994) (demonstrating that if the jury is prejudiced against "habitual criminals," they will punish them indiscriminately, so deterrence is improved by denying character evidence to the jury).
An enforcement policy chosen by group A members that reduces deterrence may seem irrational, because it could lead to additional crimes being committed against group A members. However, there are scenarios in which such a policy could be chosen rationally by group A. For example, if groups A and B are geographically segregated, group A may choose to reduce potential crimes by Bs on As by apprehending all Bs who venture into their territory, whether or not the Bs are complying with the law.108 Such a policy would make it costly for Bs to move among As, encouraging the Bs to stay in their own territory.109 In other words, group A members may choose to rely on scale effects to reduce the risks posed to them by group B offenders. Such a policy, in a fixed budget setting, could easily result in a weakening at the substitution-effect level in deterrence among Bs.110

Case 2 presents the same potential under-deterrence problem for group A members because again they face low expected sanctions. However, for the group B members the situation has changed. The deterrent effect on group B members may still remain or be enhanced because in this case if a group B member acts “good” he is probably not going to be prosecuted and if he acts “bad” he is more likely to be prosecuted.111 However, given that A members are

108 See, e.g., David A. Harris, The Stories, The Statistics, and the Law: Why “Driving While Black” Matters, 84 MINN. L. REV. 265, 271 (1999)(discussing law enforcement’s tendency to subject black drivers in upscale neighborhoods to traffic stops); Tracy Meares, Social Organization and Drug Law Enforcement, 35 AM. CRIM. L. REV. 191, 203-4 (noting that “Law-abiding African Americans who are unable to physically separate themselves from victimizers might desire to draw legal boundary lines in order to reconstitute healthy, law-abiding communities around them. These law-abiding African Americans might argue in favor of calling upon the machinery of the state to make a distinction between themselves and law-breaking African Americans who reside in their neighborhoods. Under this view, imprisonment might be the most effective form of line-drawing because imprisonment distinguishes law-abiders from law-breakers by removing law-breakers from the community. By relying on incarceration, law-abiders can create physical distances between themselves and law-breakers. In this way, severe legal sanctions that lead to the removal of law-breakers from the community are akin to leaving the neighborhood. Indeed, this reasoning suggests that victimized law-abiding African Americans should welcome state enforced distinctions between law-abiding and law-breaking African Americans”).

109 This is one potential explanation for racial profiling, to the extent it exists. For some empirical evidence on racial profiling see John Knowles, Nicola Persico & Petra Todd, Racial Bias in Motor Vehicle Searches: Theory and Evidence, 109 J. Pol. Econ. 203 (2001); John J. Donohue III & Steven Levitt, The Impact of Race on Policing, Arrest Patterns, and Crime (Draft 1998)(on file with authors).

110 In the case of crime by A on A it is possible that A may prefer to avoid official law enforcement. This could involve issues of intra-group wealth extraction, other benefits from avoiding enforcement by officials (reputation, etc.), and that alternative means of policing A members may be available (e.g., social norms). If the social norms option is the driving force it may be that deterrence in group A would not suffer as a result of lobbying for less official enforcement because the social norms may engender adherence to the law or the norm. Of course, this raises all kinds of issues about whether the social norms track the law, are the norms efficient, and whether the amount of deterrence obtained through social norms is the same as the amount through official law enforcement. See Jonathan Simon, Law, Democracy, and Society: Megan’s Law: Crime and Democracy in Later Modern America, 25 LAW & SOC. INQUIRY 111, 1119 (2000) (arguing that “in most of the original cases charges resulted in acquittals or were never brought at all as juries, prosecutors, and police seemed to collude in sheltering concededly fringe elements of the white community”).

111 Since under this scenario, the marginal expected sanction either increases or stays the same, deterrence (at the substitution-effect level) remains intact. The marginal expected sanction is the difference
assumed to control the enforcement process, the more probable scenario is one in which their agent (the prosecutor) is unable, because of unfamiliarity or indifference, to distinguish complying from non-complying members of group B. With a prosecutor unable or unwilling to distinguish the “good” from the “bad” among group B, a policy of targeting the bad in group B would be infeasible. This suggests that case 1, in which deterrence clearly falls, is the more likely outcome of selective enforcement.

2. Other costs: stigma effects, expressive effects, enforcement cost effects

Rent-seeking behavior may also reduce the stigma associated with the criminal law and thereby dilute deterrence. If the criminal label carries some stigma then that becomes part of the total sanction (i.e., the official sanction plus the stigma) for criminal behavior and influences deterrence.驶 If something reduces the stigma without a countervailing increase in the official sanction then deterrence is reduced because potential wrongdoers face a lower expected sanction.

The stigma from being labeled a criminal stems in part from a belief that the person so labeled has violated a societal norm meriting condemnation and has been adjudicated in a “fair and impartial” manner.驶 If, however, being labeled a criminal is perceived by members of your social circle as indicative of a political or biased use of the law, then the stigma from the criminal label diminishes.驶 In this case the stigma from being labeled a criminal is less than

between the expected penalty for behaving legally and the expected penalty for behaving illegally. The expected penalty for behaving legally is the probability that an innocent person will be apprehended and falsely convicted times the penalty for the behavior at issue. The expected penalty for behaving illegally is the probability that a guilty person will be apprehended and correctly convicted times the penalty for the behavior at issue. If innocents are not increasingly targeted then the penalty for behaving legally remains the same and if the guilty are increasingly targeted then the penalty for behaving illegally increases. This should enhance deterrence as the gap between the expected penalties for behaving legally and illegally is increasing and this should lead people to engage in more law-abiding behavior.


驶 See ERIC POSNER, LAW AND SOCIAL NORMS 97 – 100 (2000) (noting that criminal offenders can signal loyalty to a subcommunity by violating the law and being punished by the dominant group. The subcommunity is more likely to view criminal punishment as a signal of loyalty to the subcommunity the more the subcommunity believes the criminal justice system is “infected with a political agenda”); Dan Kahan, supra note 113, at 357 – 58; Nadler, supra note 114, at 10 (suggesting that, if the law is seen to be imposed in an irrelevant or immoral manner, it will not be deferred to).
the stigma suffered by someone labeled a "criminal" who is part of a group of people who believe that adjudication is fair and impartial to their group.116

This is consistent with anecdotal evidence that some criminal sub-cultures form that do not consider the criminal label to be stigmatizing.117 If there is a differential stigma impact when rent-seeking or lobbying is perceived to be a problem as compared to when it is not then the presence of rent-seeking reduces the stigma suffered by violators and hence reduces the deterrent impact of the criminal law.118

For reasons similar to those related to the stigma argument, greater rent-seeking is likely to reduce any “expressive” features of the criminal law. The expressive effects of the criminal law are argued to take many forms and we focus on two here to highlight our argument:119 First, that the criminal law expresses to society what is undesirable behavior and this encourages individuals not to engage in this activity because they respect or otherwise value the law (i.e., legal norm internalization).120 If so, then a perceived increase in rent-seeking can only serve to weaken this respect because the message that the activity is undesirable is clouded by the message that law enforcement is selective and biased. This reduces, one would expect, whatever ability the criminal law has to shape preferences and influence behavior outside of pure deterrence, which is based on expected sanctions.121 Second, members of society may derive some utility from expressing condemnation.122 Although this may be true in some instances the benefits inuring from this must be weighed against the costs of rent-seeking and how much the perception of rent-seeking reduces the utility from expressing condemnation.123

116 See Posner, supra note 115, at 98; Kahan, supra note 113; Nadler, supra note 114, at 10. For this argument to work all we need is that stigma is different (and lower) if some part of your social circle will not ostracize you because of perceived misuse of the criminal process.

117 See Kahan, supra note 113, at 357 (suggesting that sometimes gang members wear their convictions and prosecutions like “Badges of Honor”); Moran, supra note 113.

118 This seems to suggest differential sanctions for different groups in society based on how much stigma they are likely to perceive from the criminal label. However, engaging in differential sanctioning may further exacerbate the perceived political use/ misuse of law enforcement.


121 See Kahan, supra note 120; Sunstein, supra note 120.


123 See generally Kaplow & Shavell, supra note 55.
In addition to stigma and expressive effects, rent-seeking may have enforcement cost effects. If law enforcement is perceived to be biased then it is likely that some people will refuse to assist law enforcement. An “us” and “them” mentality may arise making it difficult to solicit information and evidence. This would increase the difficulty and costs associated with apprehensions and prosecutions, which in turn reduces the likelihood that wrongdoers would be sanctioned. As the probability of being sanctioned decreases the deterrent effect of the law is reduced because the expected sanction drops.

VI. METHODS OF CONSTRAINING RENT-SEEKING

Taken together, the direct and deterrence-related costs of lobbying or rent-seeking seem significant enough to consider methods of constraining them, subject to how much we want to spend monitoring prosecutorial behavior. In this Part we examine two structural methods of constraining prosecutorial behavior: procedural protections and restrictions on penalties.

Constraining prosecutorial behavior to reduce rent-seeking costs is, in a rough sense, analogous to the efforts of corporate law in constraining the agency costs arising from the separation of ownership and control. The prosecutor can be viewed as an agent for society in a manner similar to how a manager or employee is often viewed as an agent for a corporation. However, unlike the corporate context, environmental factors that constrain the agency costs of private firms are not present in the case of governments. Since governments do not issue stock, we do not observe discounts in their share prices due to agency costs, nor do governments face the same risk of losing out to competitors as

124 Cf. Nadler, supra note 114, at 32 – 41 (discussing results of certain experiments which suggest that group identity does matter when law enforcement is perceived to be “unjust” reflected in willingness to commit unrelated wrongs and mock juror verdicts).

125 One possibility worth noting is that if a group of people are reluctant to provide information to law enforcement about other members in their group (absent selective enforcement issues) then that might be a reason itself to proceed with selective enforcement in that group to increase the probability of being sanctioned. See Kay B. Perry, Fighting Corruption At The Local Level: The Federal Government’s Reach Has Been Broadened, 64 Mo. L. Rev. 157, 162 (1999). Of course, such a policy might only exacerbate the “us” and “them” mentality.

126 As we noted earlier, the analogy is far from perfect. We want enforcement agents to protect society’s interests, even if they diverge from those of the government. In the corporate context, we usually ask corporate agents to act on behalf of shareholders, whether or not shareholder interests diverge from the social ideal. On the separation of ownership and control, see generally Robert C. Clark, Corporate Law (1996); William A. Klein & J. Mark Ramseyer, Business Associations – Agency, Partnerships, and Corporations (4th ed. 2000).

127 See Rebecca Holland-Blumoff, Getting to “Guilty”: Plea Bargaining as Negotiation, 2 Harv. Negotiation L. Rev. 115 (1997) (noting that “[a] prosecutor... is the agent of the people whom the office purports to protect.”); Caroline Heck Miller, Knowing the Danger from the Dance: When the Prosecutor is Punished for the Government’s Conduct, 29 Stetson L. Rev. 69, 78 (1999) (stating that “[p]rosecutors are agents of the sovereign that employs them.”).
business enterprises do.\textsuperscript{128} Hence, explicit constraints on rent-seeking play a relatively important role in the public sector.

A. Procedural Protections

Procedural protections constrain rent-seeking costs in the criminal process by making the process costly for both law enforcement agents and for society. These costly protections deter those who would seek to use the criminal process as a means to transfer wealth. Procedural protections increase costs to society because they require greater effort by the prosecutor to obtain convictions, which increases the cost of bringing prosecutions as well as potentially increasing the number of false acquittals and the number of meritorious cases not brought.\textsuperscript{129} Prosecutors, who are rewarded when conviction rates are high, bear much of the brunt of these procedures.\textsuperscript{130}

A key function of pro-defendant procedural protections is to increase the probability that a prosecutor and a bribing party will be unable to find a mutually-acceptable bribe, thus making the set of contractible bribes zero or close to it. This works as follows. On the prosecutor's side, procedural protections raise the cost of targeting innocent parties. If the prosecutor targets innocent group B members, he is unlikely to be successful given all the pro-defendant procedures.\textsuperscript{131} If he maintains his promise to target group B, he will have very few successful prosecutions, and will probably lose his job (as high conviction rates are important to prosecutors). This suggests that the prosecutor will demand a very high bribe in order to adopt a selective enforcement policy. Moreover, given the risk of losing his job, potential bribers should doubt the

\textsuperscript{128}See \textit{Clark}, supra note 126, Ch. 4 (1986); Tamar Frankel, \textit{Fiduciary Law}, 71 Calif. L. Rev. 795, 811 (1983) (arguing that different compensation schemes and techniques should have the effect of reducing conflicts of interest with fiduciaries.)

\textsuperscript{129}See generally \textit{Atkins} & \textit{Rubin}, supra note 1; \textit{Cassell}, Guilty & Innocent, supra note 1; \textit{Cassell}, Miranda's Social Costs, supra note 1; Donohue, supra note 1; Kahan, supra note 1, at 389.

\textsuperscript{130}See \textit{J. Mark Ramseyer} & \textit{Eric B. Rasmusen}, \textit{Why is the Japanese Conviction Rate So High}, 30 J. Legal Stud. 53 (2001) (arguing that because of the stigma in Japan of acquitting defendants and the corresponding detrimental career effects it may have for prosecutors and judges, they prosecute only strong cases); \textit{Fred C. Zacharias}, Structuring the Ethics of Prosecutorial Trial Practice: Can Prosecutors Do Justice, 44 Vand. L. Rev. 45, n. 264 (arguing that "[t]o the extent a prosecutor's conviction rate is all that counts, the institutional incentives point toward minimizing the responsibility to 'do justice.'") See also \textit{Tracey L. Meares}, Rewards for Good Behavior: Influencing Prosecutorial Discretion and Conduct with Financial Incentives, 64 Fordham L. Rev 851 (proposing a system of incentives to effect prosecutors' conduct).

The difficulty of using the process and the attendant cost involved makes it less useful as a wealth-extraction tool than perhaps other options and should shift lobbying and rent-seeking away, to some extent, from the criminal process to other methods of influencing government behavior. See Paul H. Rubin, Christopher Curran, & John Curran, \textit{Litigation Versus Legislation: Forum Shopping by Rent-Seekers}, Draft 1999 (on file with authors).

\textsuperscript{131}But see \textit{Stuntz}, supra note 8, at 27 – 28 (noting that while the constitution defines what the criminal law process looks like, it is prosecutors and defenders who define what issues and contests to bring). We address some of these points and issues related to legislative lobbying in text accompanying notes 160 – 163.
credibility of the prosecutor’s promise to selectively enforce. Given the difficulty of implementing a successful selective enforcement policy, the doubtful credibility of the prosecutor, and the negligible benefits to both parties, the potential briber’s willingness-to-pay should fall substantially. 132

Procedural protections also make it more difficult for corruption to flourish. A prosecutor who threatens to arrest individuals on false charges would find it considerably more difficult to mount a credible threat against his victims in the presence of pro-defendant procedural protections, relative to where these protections were absent. Hence, the prosecutor’s power to shake down individuals for money in exchange for a promise not to bring charges should be considerably less in the regime with procedural protections. Even the prosecutor’s ability to credibly promise not to enforce the law against a particular defendant should fall. For if the prosecutor charges the wrong person or no one at all, he most likely will be unsuccessful in obtaining a conviction for the crime. Given his difficulty in charging and convicting an alternate candidate, the cost to the prosecutor of promising not to enforce against a particular defendant is relatively high, and the promise probably cannot be considered credible. These factors suggest the prosecutor will demand a large bribe. From the perspective of the potential defendant (who is in the process of a shake down), his willingness to pay a bribe falls since he is less likely to be convicted in the first place, and any promise by the prosecutor not to enforce cannot be regarded as credible. 133

We can see how this works in the context of the two major types of procedural protections we have identified: the reasonable doubt standard and the double jeopardy rule. Both reduce the prosecutor’s power to selectively enforce and hence help to constrain rent-seeking and related costs. In this sense, they clearly fall within the analysis of this section because they simultaneously raise the cost to the prosecutor of implementing a selective policy and lower the value to the potential beneficiary of seeking such a policy. The reasonable-doubt rule accomplishes this task by directly reducing the probability of a guilty verdict.

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133 We do not discuss what might happen if the defendant suffered a large stigma simply from being charged or indicted for certain kinds of wrongdoing. See In re Fried, 161 F.2d 453, 458 (2nd Cir. 1947) (noting that “[f]or a wrongful indictment is no laughing matter; often it works a grievous, irreparable injury to the person indicted. The stigma cannot be easily erased.”); Rasmusen supra note 53. In such cases the potential for corruption and wealth extraction are greater because the prosecutor can gain or impose costs without actually having to win at a trial (i.e., without having to obtain a conviction). These instances are simply outside the scope of this paper.
and increasing the amount of evidence necessary for conviction. The double jeopardy rule aids in this task by preventing the prosecutor from bringing successive prosecutions against the same defendant, with the hope of eventually learning how to convict the defendant on weak evidence. For example, a prosecutor who loses his first case against a particular defendant could discover that his loss was due in large measure to the weak testimony of a non-credible witness. Upon learning this, the prosecutor might have an incentive, in the absence of a double jeopardy rule, to coach his originally non-credible witness in order to boost his credibility before a jury in a later trial.

The theory developed here suggests that the reasonable doubt and double jeopardy rules work hand-in-hand as complementary rules. Both rules impose important restraints on a prosecutor who seeks to implement a selective or predatory enforcement policy. The reasonable doubt rule reduces the probability of success in each case of targeted enforcement. But no matter how low the probability of success is reduced, the prosecutor may still have an incentive to adopt a selective enforcement policy if he can bring successive actions against a particular defendant. Suppose, for example, that the probability of conviction is the same in every trial. In the extreme case in which the prosecutor can bring an infinite number of successive actions against the defendant, he is very likely to eventually get a conviction, no matter how small the probability of conviction in the individual trial. The more worrisome case, however, is where the prosecutor learns from a previous mistake and uses the information from a “test trial” to boost the probability of conviction to a near certainty in the second trial. In either of these cases (fixed probability of conviction or increasing probability of conviction), the reasonable-doubt rule alone is probably insufficient to dampen the prosecutor’s incentive to selectively enforce. The double-jeopardy-like rule emerges in this framework as a rule designed to prevent enforcement agents from substituting toward a successive prosecution strategy in order to avoid the reasonable doubt rule.

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135 See id.

136 Suppose the probability of conviction in one trial is p. If the prosecutor can bring an infinite number of successive actions, each with the same probability of conviction, the likelihood of eventual conviction is \( p + (1-p)p + (1-p)p + \ldots + (1-p)^Np \), which approaches 1 as N approaches infinity. For example, if p is 30% against an innocent individual then by the fourth trial the cumulative probability of conviction has risen to approximately 75%.

137 See Developments, supra note 134.

138 This statement is not meant to exclude alternate means of perhaps restraining prosecutorial retrials. For example, if in the initial trial the reasonable doubt standard required 95% certainty of guilt before conviction then we could require a 96% certainty of guilt in retrial number 1. If there was a second retrial then we could require a 97% likelihood of guilt and so forth. Even then, given the argument in supra note 136 it is doubtful that much would be gained through this approach.
B. Penalty Restrictions or “Inefficient Punishments”

Another way to constrain the costs associated with abuses of prosecutorial or governmental authority is to put restrictions on the size of penalties or the process by which they are levied. David Friedman has described the size and process restrictions as “inefficient” punishments. This epithet is not meant to be pejorative. Friedman distinguishes “inefficient” punishments, like prison, from “efficient” punishments, like the death penalty administered quickly or a large monetary penalty equal to the defendant’s wealth. The argument is that efficient punishments do not impose large direct costs on the state and hence prosecutors may have an incentive to use them to extract wealth from defendants. However, inefficient punishments impose greater costs on the state than efficient punishments (e.g., the costs of maintaining prisons) and hence reduce the incentive of prosecutors and the state to use the criminal process to extract wealth.

At least two types of penalty restrictions are relevant to this analysis: the prohibition of retroactive punishments and the prohibition on cruel and unusual punishments. The latter restriction fits comfortably with the analysis here as well as Friedman’s. The state could easily adopt a low-cost system of punishment. Defendants could be executed, enslaved, or put into laboratories for scientific experimentation and the harvesting of organs and tissue. Instead, we observe a system in which the state forgoes the opportunity to extract all of the defendant’s wealth in the form of a penalty, and prison terms force the state to forgo the full value of the convict’s labor. The constitutional prohibition on cruel and unusual punishments is in part responsible for this choice, although the choice seems to have been made in some countries where there is no such prohibition.

The historical evidence is consistent with this view of the purpose of the cruel and unusual punishment clause. The first restrictions on excessive

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139 See Friedman, supra note 13, at 259.
140 See id., at 260 – 61.
141 See id., at 261.
142 See id., at 263 – 64.
143 See U.S. CONST. ART I, § 9, CL. 3 (stating “No Bill of Attainder or ex post facto Law shall be passed.”) A similar prohibition applies to the states: “No State shall . . . pass any Bill of Attainder . . . .” Id., ART. I, § 10, CL. 1; U.S. CONST. AMEND. VIII (stating “Excessive bail shall not be required, nor excessive fines imposed, nor cruel and unusual punishments inflicted.”).
144 See Friedman, supra note 13.
145 For example, Malaysia, Morocco, Senegal, and the Ivory Coast do not have a rule prohibiting cruel and unusual punishment. Yet, the state in those countries has apparently not gone to the extreme of trying to profit from punishing the guilty. For information on Transparency International’s Corruption Perceptions Index, see <http:// www.worldbank.org/ html/ prdcr/ trans/ >.
penalties in English law appeared in the Magna Carta, in chapters regulating discretionary fines.\textsuperscript{147} The discretionary fines, or “amercements,”\textsuperscript{148} obviously had the potential to be used a source of revenue for the state, and as a source of private income in a period in which much of criminal prosecution was undertaken by private parties.\textsuperscript{149} It was apparently their abuse that led the authors of the Magna Carta to devote three chapters to their control.\textsuperscript{150} These provisions later evolved into the more modern prohibitions of excessive and disproportionate punishments.\textsuperscript{151}

Consistent with Friedman’s argument, our analysis suggests that the adoption of inefficient punishments increases the cost of punishment to the state, thereby dampening incentives for wealth extraction, and at the same time reduces the amount a potential defendant would be willing to pay in order to avoid being charged with a crime. The prohibition on cruel and unusual punishments reduces the potential for the state or the prosecutor to punish innocent individuals in order to profit from their punishment. By raising the cost of punishment, or simply making punishment costly, the prohibition enhances the likelihood that the state will punish only the guilty.\textsuperscript{152} It also dampens incentives individuals might have to become prosecutors in order to enrich themselves.

The prohibition of retroactive punishments – a restriction on the penalty imposition process – constrains rent-seeking at the legislative level. In the absence of such a restriction, interest groups could use the criminal process to confiscate the wealth of other groups or of particular individuals. A predatory enforcement regime could retroactively impose a criminal penalty on the activity of a particular group and use the new law as leverage to expropriate their wealth. The ex post facto and bill of attainder clauses in the Constitution both apply to this type of activity. The ex post facto clause applies specifically to legislative attempts to punish retroactively.\textsuperscript{153} The bill of attainder clause applies

\begin{itemize}
  \item \textsuperscript{147} See id., at 845.
  \item \textsuperscript{148} Id.
  \item \textsuperscript{149} See \textit{Grannuci}, supra note 146, at 845 – 846. One might surmise that since so many cases involved disproportionate fines that there may have been a profit motive involved in some of the criminal cases that were brought. See id.
  \item \textsuperscript{150} See id.
  \item \textsuperscript{151} The reason for why the incentive to go after the truly guilty increases because of inefficient punishments requires some explanation. An inefficient punishment increases the costs of convicting anyone (guilty or innocent), and hence increases the costs of convicting both types of defendants. This should result in the state (and the prosecutor) shifting more resources towards targeting the truly guilty rather than bringing cases against the innocent as the expected payoffs from convicting the truly guilty are probably higher than the expected payoffs from convicting the innocent as a general matter.
\end{itemize}
to legislative attempts to punish particular individuals without a trial. As we will argue below, our approach to criminal procedure provides some insight into the doctrines courts have developed to deal with these challenges.

The similarity in our explanations of procedural protections and penalty restrictions raises a new question – why do we need procedural protections when we could use inefficient punishments or vice versa? For example, if we thought our current level of inefficient punishments had not sufficiently reduced the costs associated with abuses of prosecutorial authority we could simply make punishment even more inefficient rather than creating a pro-defendant bias in criminal procedure. The presence of both methods of constraining prosecutorial behavior suggests that that may be some advantages that the pro-defendant procedures possess that make them attractive relative to simply making punishments more inefficient.

The key difference between procedural protections and penalty restrictions has to do with how much of the cost of each method the prosecutor bears. The costs of penalty restrictions or inefficient punishments are borne largely by the state and society, but not particularly by the prosecutor. They impose only an indirect cost on the prosecution. In contrast, pro-defendant procedures impose direct costs on prosecutors because they make obtaining convictions more difficult. Given that high conviction rates are important to many prosecutors for career reasons, we would expect prosecutors to respond more to these direct measures than to indirect concerns about how much a punishment is costing the state. This is especially so when many prosecutors are paid by local authorities and prisons are funded by state authorities. Consequently, one can view procedural protections as a complementary and more direct means of influencing prosecutorial behavior than making punishments inefficient.

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154 See Jane Welsh, The Bill of Attainder Clause: An Unqualified Guarantee of Process, 50 BROOK. L. REV. 77 (1983); Thomas B. Griffin, Beyond Process: A Substantive Rationale for the Bill of Attainder Clause, 70 VA. L. REV. 475 (1984). We will focus our discussion infra on the ex post facto clause for the sake of brevity. Note that both clauses induce a reactive type of rent seeking, as they seem to invite defendants to challenge virtually every effort to punish on the ground that it is either a disguised bill of attainder or retroactive penalty.

155 See Sanford I. Weisburst, Judicial Review of Settlements and Consent Decrees: An Economic Analysis, 28 J. LEGAL STUD. 55, 88 (1999) (arguing that if a prosecutor feels his efforts will escape public notice, the prosecutor will expend less personal effort and the result will not be aligned with the public’s desire to punish). In some respects one can view the procedural protections as alignment measures – trying to align prosecutors’ interests with social welfare (or the benevolent state), whereas the inefficient punishments might be seen as constraints on a non-benevolent state.

156 See Stuntz, supra note 8, at 20 – 37 (discussing the incentives of the different actors in law enforcement).

157 We could also in theory directly punish prosecutors by imposing fines or sanctions on them for bringing such cases. We do not discuss this possibility here.
The distinction between penalty restrictions and procedural protections suggests another sense in which rules designed to dampen rent-seeking serve as complements: some work better in the short run while others work better in the long run. The procedural protections described earlier – the reasonable-doubt rule and the double-jeopardy rule – may work well in the short run in removing the incentives for the prosecutor to selectively enforce the law. However, if the background institutional structure is one that allows the state to profit in some sense from the punishment of individuals, we should worry about how long the prosecutor will be able to stay out of the predatory enforcement game. Just as the potential for profit induces entry of new businesses in the private sector, the potential for profit in enforcement should induce entry of a similar sort in the public sector. Creative prosecutors would find ways to modify the procedural rules, plea bargain around them, or to lobby the legislature until the desired changes were enacted. Eventually the procedural protections would be watered down to a point that would enable self-interested enforcement agents, and their support coalitions, to reap the rewards from selective enforcement.  

Penalty restrictions (or inefficient punishments) constrain this by reducing or removing the potential for profit in criminal law enforcement. Thus, penalty restrictions and procedural protections work as complements in the short run and long run, with penalty restrictions carrying more weight in the long run.

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158 See Stuntz, supra note 11, at 26 (arguing that despite pro-defendant protections, prosecutors have held conviction rates constant and lowered the average cost of prosecution by prosecuting “winning” cases). See Stuntz, supra note 8, at 6 – 15 (arguing that because criminal codes are so broad it gives a prosecutor the ability to selectively enforce).

159 One point to note is that procedural protections, inefficient punishments, and other measures may work as substitutes to some extent as well. There may be some overlap with each kind of measure (even though there are differences too). Which is the optimal balance of measures is outside the scope of this current paper, but is a matter worthy of greater inquiry.

In addition to the procedures discussed above there may be other areas of law (e.g., mens rea requirements in criminal law) that have some tendency to curtail self-interested behavior by prosecutors even though that may not be the primary reason for that area of law. See Cass & Hylton, supra note 13, at 45 – 53 (suggesting that intent requirements may constrain rent-seeking behavior as they limit the ability of litigants (whether plaintiffs or prosecutors) to threaten to bring suits in the antitrust context). By making conviction harder to obtain (due to the requirement of proving mens rea) we reduce the incentive of prosecutors to use the criminal law to benefit themselves. See Mens Rea In Federal Criminal Law 111 Harv. L. Rev. 2402, 2419 (1998). Although this may sometimes be a benefit of intent requirements we argue that these requirements are different to the procedural protections we are considering in a number of ways.

First, intent standards are subject to some change by the legislature, whereas the Constitutional procedural protections are not that easy to change by the legislature. See William A. Lauffer, Culpability and the Sentencing of Corporations, 71 Neb. L. Rev. 1049 (1992)(discussing how many mens rea standards exist at the federal level for corporate crime). Second, even if the intent requirement is not met there may be a lesser-included offense of which the defendant might be guilty. If so, the prosecutor can still threaten the defendant with that lesser offense (although since it probably carries a less severe penalty than the mens rea offense the threat may not be as strong). See Stuntz, supra note 11, at 7 (noting that the use of simple traffic laws to procure reasonable suspicion and sodomy laws in sex cases are means that prosecutors use to punish defendants without proving the real crime). However, if there is a violation of a procedural protection it will be difficult to convict the defendant at all (absent harmless error or some other exception). See Dressler, supra note 3, at 57 – 61 (discussing harmless error doctrine). Third, intent requirements may be justified by many other things besides a concern with rent-seeking, whereas procedural protections appear more clearly designed to target abusive behavior by prosecutors. See Jeffrey S. Parker, The Economics
One final point, the procedural constraints we have been discussing might reduce the incentive to lobby law enforcers, but might lead parties to more lobbying on the legislative side. 160 We might then ask: what have we really achieved if lobbying occurs less in the law enforcement side, but more on the legislative side than before? Our response is two-fold. First, we do not claim that procedural protections will perfectly align prosecutors’ interests with social welfare; they merely reduce the incidence and costs of rent-seeking in the criminal enforcement process relative to where the protections are absent. 161 Second, an increase in legislative lobbying due to procedural protections does not mean there has been no improvement in social welfare as a result of the protections. Absent any constraints we would expect interest groups to lobby at all levels of law enforcement (e.g., investigation and enforcement, adjudication, legislation) until the marginal benefits from each kind of lobbying equaled the marginal costs. 162 This division of lobbying efforts should provide the highest returns to interest groups. Further, it seems safe to assume that lobbying is subject to diminishing returns (i.e., after a certain point the payoffs from lobbying in one sphere begin to diminish relative to earlier expenditures). When we impose pro-defendant constraints we make the costs of rent-seeking higher in the criminal enforcement context and drive some of the lobbying in that sphere into some other area (e.g., legislation). Given that the pre-constraints resource division provided the highest gain to the group and that the constraints force movement away from that we would expect reduced gains to the interest groups from lobbying relative to where there were no protections. 163

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160 See Stuntz, supra note 8, at 27 – 28, 30.
161 See id.
162 See Khanna, supra note 29, at 360 – 67 (discussing a similar argument in the context of expenditures at different trial and appeal levels).
163 Assume that if there were no constraints interest groups would expend resources in the amount of $100 in legislative lobbying and $100 in enforcement lobbying resulting in a gain of $250 to the groups (a net gain of $50). When we impose pro-defendant constraints what we do is to make the costs of rent-seeking higher in the criminal enforcement context and drive some of the lobbying in that sphere into some other activity (e.g., lobbying for legislation). By assumption, this reduces the gains to the interest groups (the pre-constraint equilibrium produced the highest net gain to the groups) relative to where there were no protections. Thus, with constraints we may have $150 spent on legislative lobbying and $50 in enforcement lobbying providing a gain of $205. In other words, the abuse defendants suffer (i.e., the wealth extracted) in total should be less than without the protections (i.e., $205 versus $225). Whether this amount should be reduced further, how, and at what cost is outside the scope of this paper. See Stuntz, supra note 8, at 75 – 76 (discussing how the constitution should be restructured to prevent abuses to criminal defendants). See also William J. Stuntz, Self-Defeating Crime, 86 V A. L. Rev. 1871, 1891-95 (2000) (discussing how prosecutorial discretion undermines the goals of criminalization). Our point is that just because procedural protections force a shift in lobbying activity to a different level of government (i.e., from enforcement to legislation) does not mean that the harm to society is the same – it is still less than when the constraints were absent. Further, some of the procedural protections and constitutional law doctrines are targeted at making rent-seeking in the legislative process more difficult (e.g., void-for-vagueness and penalty restrictions). Penalty restrictions
C. Some Implications for the Jury

Although we have focused on rent-seeking in the enforcement process rather than in the legislative process, the jury serves as an important constraint against both types of rent-seeking. A prosecutor who brings politically motivated charges against members of politically weak groups faces the risk, under the jury system, of being unable to gain a unanimous verdict from a jury consisting of some members from the weak group. Indeed, the theory of this paper suggests an important rationale for the requirement of unanimity among jurors in criminal trials. The need to obtain a unanimous verdict makes it more difficult for the prosecutor to selectively target politically marginal groups or individuals in the law enforcement process. The need to obtain a unanimous verdict from the jury also gives the jury the power to nullify statutes designed to expropriate wealth from politically marginal groups.

Our theory provides some insight into the original function of challenges to the jury’s composition, including the controversial problem of peremptory challenges. Blackstone said that challenges could be put to either the whole array of jurors or to individual jurors, and that

challenges to the array are at once an exception to the whole panel,
... and they may be made upon account of partiality or some default in the sheriff, or his under-officer who arrayed the panel...
Also, though there be no personal objection against the sheriff, yet if he arrays the panel at the nomination, or under the direction of either party, this is good cause of challenge to the array.

In other words, the fundamental common law rationale for permitting challenges to the whole jury is the suspicion, no doubt grounded on evidence, that the sheriff chose the jurors in order to maximize his chances of obtaining a
conviction. Challenges to the whole array were apparently permitted to prevent
the sheriff from implementing a selective enforcement policy.

Challenges to individual jurors could be based on cause, or could be
peremptory, in the sense of not being based on any of the accepted grounds. 167
Peremptory challenges were granted only to the defendant. 168 Although
peremptory challenges have come under attack more recently as a form of
invidious discrimination, the original purpose is somewhat easier to see in the
context of a rent-seeking model. 169 One could view the peremptory, in this
analysis, as giving the defendant a zone of unquestioned authority in the choice
of jurors, so long as he did not use it to an excessive degree. If a wily predatory
sheriff had managed to choose conviction-prone jurors in a way that would be
difficult to challenge on the accepted grounds, the defendant could always fall
back on his peremptory challenges. To the extent that this obstruction stood in
the way of any effort to selectively enforce the law, the sheriff would have a
much smaller incentive to try to control the composition of the jury. 170

167 See id., at 361 – 63.
168 See id., at 362.
Clause prohibits gender discrimination in the use of peremptory challenges); Batson v. Kentucky, 476 U.S.
79, 89 (1986) (holding the prosecutor’s peremptory challenges based solely on race were unconstitutional
under the Equal Protection Clause.)
170 In addition, when the right to a jury trial is available may be consistent with a rent-seeking
approach as well. Jury trials are available as of right for most criminal cases except those that carry trivial or
fairly small penalties. See Duncan v. Louisiana, 391 U.S. 145, 160 (1968) (holding that “there is a category of
petty crimes or offenses which is not subject to the 6th Amendment jury trial provisions”). This is consistent
with rent-seeking because trials that carry very small or trivial penalties may not be particularly attractive
means with which to extract wealth for prosecutors. See Friedman, supra note 13, at 268. For such small
sanctions the costs of the jury trial are probably not justified by any reduction in rent-seeking (which is
probably small in this context).

Further, alternative explanations for the right to a jury trial do not appear to provide as complete a
picture as they might if they considered concerns with rent-seeking. One potential explanation for the right
to a jury trial is that society values the expression of the popular will as reflected in a jury decision. See
Spaziano v. Florida, 468 U.S. 447, (1984) (Stevens, J. dissenting in part) (arguing that the right to have an
authentic representation of the community’s views on the determination that must precede a deprivation of
liberty supports the constitutional entitlement to a trial by jury). If this were the only purpose behind the
right to a jury trial we would expect all jury decisions to be unreviewable. However, this is not the case
because the law permits jury convictions to be appealed but not jury acquittals. See Kepner v. United States.,
195 U.S. 100 (1903). See also Steinglass, supra note 29, at 354 - 55 (1998).

A another potential explanation for the right to a jury trial is that it either reduces erroneous
decisions relative to bench trials or is less likely to falsely convict relative to bench trials. See HARRY KALVEN,
JR. & HANS ZEISEL, THE AMERICAN JURY 6 – 7 (1971). This argument is not particularly convincing because it is
a little difficult to believe that jury trials are likely to be more accurate (i.e., less error prone) than bench
trials. One doubts there is any empirical evidence to support this result and our legal system also seems to
suggest that jury trials may be more prone to errors than bench trials. See VALERIE P. HANS & NEIL VIDMAR,
JUDGING THE JURY 126 – 27 (1986) (stating that “[w]e are thus led to the conclusion that jurors may not always
be able to follow the law as it is intended to be.”). Much of the law of evidence seems to try to protect the
jury from misperceptions and bias, whereas we seem less concerned with these matters for bench trials. See,
e.g., Fed. R. Evid. 103(c), 403. This suggests bench trials are probably more accurate than jury trials overall
or at least not less accurate as a general matter.
If, as we have argued, constraining rent-seeking costs provides the core justification for procedural protections then it becomes important to consider how this justification squares with some details of legal doctrine. We consider this in the next Part.

**VII. APPLICATIONS OF POSITIVE THEORY**

We have focused on three major types of procedural protections: the reasonable doubt standard, the double jeopardy rule, and the right to a jury trial. We have also discussed “penalty restrictions,” such as rules against cruel and unusual punishment, ex post facto punishment, and bills of attainder. However, we have been concerned so far with explaining broad institutional features. In this Part we extend the argument by taking a more detailed look at the case law associated with pro-defendant protections. Since criminal procedure is a vast area of the law, we will provide only a sketch here. We claim that the argument of this paper provides a good positive theory of substantial parts of criminal procedure doctrine.

A. Double Jeopardy

As a general matter, Double Jeopardy reduces the prosecutor’s power to selectively enforce or abuse his discretion in a manner complementary to the reasonable doubt standard. Double Jeopardy complements the reasonable doubt rule by preventing the prosecutor from bringing successive prosecutions against the same defendant with the hope of eventually learning how to convict the defendant on weak evidence. In brief, our claim is that the essential purpose of Double Jeopardy doctrine is to prevent prosecutors from substituting toward successive prosecutions in order to avoid fundamental single-trial procedural constraints such as the reasonable doubt standard.

It may be, however, that we believe juries are less likely to falsely convict compared to bench trials. It is not entirely clear why we would believe this if we think bench trials are generally more accurate. Perhaps the argument is that judges are more biased against defendants than a jury of the defendant’s peers as judges tend to be in quite a different socio-economic strata as compared to most defendants. See HANS & VIDMAR, supra (noting that “[f]or criminal trials the pattern disagreement shows that the jury was usually more lenient toward the defendant than was the judge.”); Pnina Lahav, The Chicago Conspiracy Trial: Character and Judicial Discretion, 71 U. COLO. L. REV. 1327, 1340 (2000). There may be some empirical evidence supporting the differing rates of false convictions (or maybe tied to it). See generally KALVEN & ZEISEL, supra. Perhaps this is true, but when phrased this way it appears more consistent with concerns about rent-seeking. This is because this suggests that judges as a group may discriminate (i.e., use the criminal process against criminal defendants as a group. If so, then this justification squares well with a rent-seeking approach. Also even if jury trials result in fewer false convictions and more false acquittals than bench trials the issue is raised about whether the asymmetry is desirable for the same reason that the reasonable doubt standard may be too severe on traditional error cost grounds.

171 See Benton v. Maryland, 395 U.S. 784, 796 (1969) (noting that the rationale for double jeopardy includes the policy against allowing multiple prosecutions that will enhance the possibility that the innocent may be found guilty).
This proposition explains puzzles in Double Jeopardy doctrine as well as its overall structure.

The "puzzles" in Double Jeopardy doctrine have been set out with remarkable clarity by Akhil Amar. One of the key doctrinal tensions he notes is between the decisions in Blockburger v. United States and Diaz v. United States. Blockburger established the principle that, for Double Jeopardy purposes, a greater offense is treated as the same as each of its lesser-included offenses. Thus, under the Blockburger test it would be a violation of the Double Jeopardy rule to retry an individual for murder after that individual is acquitted on a charge of attempted murder (arising from the same set of facts). However, in Diaz the Court permitted an individual to be retried for murder, after having been convicted of attempted murder, in a case in which the victim died after the first trial from injuries received in the initial attack. Under a strict application of the Blockburger test, Diaz would have to be considered a mistake.

The tension between Blockburger and Diaz, and between Blockburger and several other decisions, appears to be a puzzle under the logical approach urged by Amar. However, under the substitution thesis implied by our framework, there is no tension between Blockburger and Diaz. Blockburger prohibits a particular substitution strategy: the use of a later trial on either a greater or lesser-included offense in order to take two shots at convicting a defendant on one particular set of facts. The "Diaz exception" (if one wishes to call it that) applies to the case in which there is clearly no evidence that the prosecutor has adopted such a strategy. Blockburger and Diaz are easily reconciled under the substitution principle.

Our claim that the overall structure of Double Jeopardy doctrine is consistent with the model of this paper is supported by three aspects of the doctrine: the asymmetry of appeal rights, the treatment of mistrials, and the application of Double Jeopardy to civil suits by government agencies.

Consider, first, the treatment of appeal rights. In Kepner v. U.S., the Supreme Court held that appeal rights are asymmetric, in the sense that the defense generally can appeal any conviction, but the prosecution's right to

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174 223 U.S. 442 (1912). As Amar notes, the principle of Diaz was affirmed later by the Supreme Court in Garret v. United States, 471 U.S. 773 (1985). See Amar, supra note 172, at 1813.
175 See Amar, supra note 172, at 1813.
176 The state was prepared to offset against the murder sentence time served under the attempted murder conviction. See id.
177 See Kepner v. United States, 195 U.S. 100, 105 (1904).
appeal acquittals is severely limited. On its face, this rule seems like it might reduce the number of false convictions and increase the number of false acquittals relative to symmetric appeal rights because it denies the prosecution the ability to correct false acquittals at the trial level, while also denying the prosecution the ability to turn correct acquittals into false convictions through the appeals and retrial process. However, on closer inspection, this is not necessarily the case. Not only are the above mentioned effects possible, but so are some countervailing effects. For example, by giving the prosecution only one shot at obtaining a conviction we provide the prosecution with an incentive to increase spending in the initial trial. This may lead, all else equal, to an increase in the number of convictions (and perhaps false convictions) in the initial trial relative to symmetric appeal rights. Thus, the effects of asymmetric appeal rights on false convictions are ambiguous as a theoretical matter. Similar arguments suggest that false acquittal effects are likely to be small and ambiguous.

In light of this, it seems doubtful that traditional error-cost arguments are a sufficient basis for asymmetric appeal rights. However, if we add concerns with rent-seeking and self-interested prosecutors then a stronger rationale for asymmetric appeal rights emerges. The asymmetric appeal rights rule of Kepper has the effect of making the jury’s initial determination of acquittal final. By denying prosecutors the option to have a jury’s acquittal determination reviewed by an appellate court, the Kepper asymmetry rule enhances the power of the jury relative to that of the prosecutor. Given the unanimity requirement and the jury’s composition after the defendant’s challenges, the Kepper rule increases the difficulty facing any prosecutor who mounts a selective enforcement campaign.

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178 See Sanabria v. United States, 437 U.S. 54, 64 (1978) (holding that even if legal rulings on the exclusion of evidence leading to acquittals were erroneous the prosecution could not appeal); Fong Foo v. United States, 369 U.S. 141, 143 (1962) (holding that the prosecution could not appeal an acquittal where the judge, who lacked the authority to do so, directed a verdict of acquittal before the prosecutor has rested his case); Carroll v. United States, 354 U.S. 394, 400 (1956); United States v. Ball, 163 U.S. 662 (1896) (holding that a defendant may not be prosecuted more than once for an offense); Stith, supra note 29, at 13, 18.

179 See Khanna, supra note 29, at 360 – 63.

180 See id., at 360 – 68.

181 See id., at 374 – 83.

182 See id.

183 Note that given that there are few acquittals (both in symmetric and asymmetric appeal rights jurisdictions) and that in those countries where the prosecutor is allowed to appeal they do so infrequently, one suspects that the false convictions reducing or increasing effects are likely to be small because few resources are being saved by prohibiting the few prosecutorial appeals that might arise under symmetric appeal rights. See id., at 33 n. 120, 39 – 40.

184 See id., at 47 – 48.

185 See id., at 68 – 70.

Justice Holmes's dissent in Kepner is instructive largely because it focused on the wrong theory for asymmetric appeal rights. Holmes argued that the majority’s decision in Kepner made no sense if understood as a rule preventing retrials, because some retrials would occur following a successful defense appeal of a conviction. However, this is an incomplete and inadequate rationale for the decision in Kepner. The theory we advance provides a superior rationale: the Double Jeopardy rule is not designed for the sole purpose of controlling or preventing retrials; its purpose is to prevent prosecutors from successfully implementing a selective or targeted enforcement policy. This is a greater concern when prosecutors appeal as compared to when defendants appeal. A regime in which prosecutors could appeal acquittals ad infinitum would be much more vulnerable to selective enforcement pressures than one where they could not.

The treatment of mistrials is another area of Double Jeopardy doctrine that appears to evince some concern with prosecutorial abuse. The kind of abuse we are concerned with here is that the prosecution may think, at some point in the initial trial, that a conviction is not likely and may then try to have a mistrial declared by the court to try to get another shot at the defendant. If we permitted the prosecution to do this and bring another trial then the prosecution would have tremendous potential to abuse the process by having mistrials declared whenever the prosecution thought it might not win the initial trial. This would increase the incentive to engage in selective enforcement and induce rent-seeking behavior.

The law appears to reflect these concerns in the way in which it addresses whether another trial will be permitted following a mistrial. One could characterize the law’s approach to this problem as one that depends greatly on the defense’s attitude towards a mistrial. Thus, if the defense seeks or does not oppose a motion for a mistrial then the prosecution will normally be permitted to bring another suit. This is consistent with our approach because if the defense is seeking a mistrial the chances are that the prosecution is not likely to be using the mistrial process to seek another trial to go after the defendant relative to

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189 See Steinglass, supra note 29, at 359.
191 This concern is very similar to that discussed in the context of asymmetric appeal rights. At the same time if we never permitted the prosecution to bring another trial after a mistrial we would give the defendant a great deal of strategic power to inject matters that might lead to a mistrial when a conviction appears likely. See generally Vikramaditya S. Khanna, The Mystery of Mistrials (Draft 2002).
where the prosecution initiates the mistrial over defense objections. An exception to this is observed where the defense seeks a mistrial based on something the prosecution did that appears deliberately calculated by the prosecution to induce the defense to seek a mistrial. This is also consistent with the rent-seeking approach because in such cases the prospect for abuse via a second trial is high relative to where the prosecutor did not induce the defense’s motion for a mistrial.

On the other hand, when the defense opposes a mistrial motion the courts have adopted a more cautious stance to permitting another trial - the prosecution must prove a “manifest necessity” for the next trial. This is consistent with our approach because the prospects for prosecutorial abuse of the mistrial process are greater when the prosecution seeks a mistrial over defense objections, as compared to when the defense seeks or supports a mistrial. In addition, the factors that go to showing whether “manifest necessity” is present appear to be designed to ascertain whether the prosecutor was trying to abuse the criminal process - e.g., by getting a mistrial in order to avoid a loss in the initial trial. For example, a hung jury leading to a mistrial does not present the same specter of potential abuse as does the injection of prejudicial error by the prosecutor to obtain a mistrial. In the former case the prosecution is often granted another trial while the latter case will normally not result in another trial.

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193 See Schulhofer, supra note 190, at 468-69.
194 See Arizona v. Washington, 434 U.S. 497, 508 (1978); See also Amar & Marcus, supra note 26, at 53. See United States v. Dinitz, 424 U.S. 600, 611 (1976) (stating that “[t]he Double Jeopardy law] bar retrials where ‘bad-faith’ conduct by judge or prosecutor threatens the harassment of an accused by successive prosecutions [or] a more favorable opportunity to convict the defendant;[W]here a defendant’s mistrial motion is necessitated by judicial or prosecutorial impropriety designed to avoid an acquittal, reprosecution might well be barred”); United States v. Jorn, 400 U.S. 470, 485 (1971) (stating that “[t]hus, where circumstances develop not attributable to prosecutorial or judicial overreaching, a motion by the defendant for mistrial is ordinarily assumed to remove any barrier to reprosecution, even if the defendant’s motion is necessitated by prosecutorial or judicial error”).
195 See Commonwealth v. Starks, 416 A.2d 498, 500 (1980) (arguing that prosecutorial overreaching “... signals the breakdown of the integrity of the judicial proceeding, and represents the type of prosecutorial tactic which the double jeopardy clause was designed to protect against.”).
196 This exception to the bar on the application of double jeopardy where a defendant seeks a mistrial is a very narrow one. See Green v. United States, 451 U.S. 929, 931 (1981)(Marshall, J., dissenting) (stating that “I suspect that a defendant seeking to prevent a retrial will seldom be able to prove the Government’s actual motivation.”). Few courts have found intentional prosecutorial inducement. In Commonwealth v. Warfield, the Supreme Court of Pennsylvania found the requisite proof of prosecutorial intent in order to justify an application of double jeopardy. See Commonwealth v. Warfield, 227 A.2d 177 (Pa. 1967)(defendant was indicted for murder and voluntary manslaughter and the trial judge suppressed the defendant’s confession, yet the District Attorney revealed in his opening statement that the defendant had made a confession to the police. After the defendant moved for a mistrial the District Attorney admitted that he sought to induce the defendant to seek a mistrial).
198 See Schulhofer, supra note 190, at 468-69. See also Dressler, supra note 3, at §32.02.
199 See Schulhofer, supra note 190, at 468-69.
200 See Steinglass, supra note 29, at 361.
Further, when the reason for the mistrial was a move by the defense, without prosecutorial provocation, then the scope for prosecutorial abuse is also low and another trial is usually granted. These factors are all consistent with an approach that seeks to constrain rent-seeking.

Finally, consider the on-going debate about whether Double Jeopardy protections should apply to nominally "civil" suits brought by government agencies that otherwise appear "punitive". The courts have generally not permitted Double Jeopardy protections to apply to nominally "civil" suits, however, if it can be shown that the "civil" suit is in reality a form of "punishment" then Double Jeopardy protections may apply. The courts seem to rely on the following factors to determine if a "civil" suit is in reality "punishment":

1. whether the sanction involves an affirmative disability or restraint;
2. whether it has historically been regarded as a punishment;
3. whether it comes into play only on a finding of scienter;
4. whether its operation will promote the traditional aims of punishment-retribution and deterrence;
5. whether the behavior to which it applies is already a crime;
6. whether an alternative purpose to which it may rationally be connected is assignable to it; and
7. whether it appears excessive in relation to the alternative purpose assigned to it.

Many of these factors appear to be correlated with concerns about rent-seeking. For example, consider the concern with the magnitude of the sanction (7). As the civil sanction increases in magnitude, the prosecutor's ability to extract wealth increases. The other factors may also represent concerns with rent-seeking, as they seem to be designed to prevent enforcement agents from substituting civil for criminal prosecution as a means of avoiding the Double Jeopardy rule.

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200 See Schulhofer, supra note 190, at 487.
201 See Dressler, supra note 3, at 607.
202 See Schulhofer, supra note 190, at 454 (noting that "...reprosecution may be barred even though no adjudication results from the first proceeding. The doctrine thus provides more meaningful protection against the danger of governmental harassment and the burden of repeated trials...."). Schulhofer also makes the point that "A number of courts have barred retrial even when mistrial was triggered by absence of the defendant, impermissible cross-examination, or persistently objectionable behavior by defense counsel." See Schulhofer, supra note 190, at 484.
203 See generally Cheh, infra note 294. See also Mann, infra note 294, at 1869-73.
206 See Friedman, supra note 13, at 268.
207 Some of the other factors (e.g., scienter, historically regarded as punishment) may work as proxies for the kind of stigma associated with the particular civil wrong. See Cheh, infra note 294, at 1352-54.
Moreover, our analysis not only provides grounds to explain current case law, but also provides grounds for examining proposals to reform Double Jeopardy. Consider, for example, the UK government’s proposal to abolish Double Jeopardy and the right to a jury trial for serious crimes. This move appears motivated by fears generated by large increases in the UK crime rate in recent years. The analysis of this paper suggests that abolishing Double Jeopardy will make selective law enforcement easier and could thereby worsen deterrence. This is not to say that some reforms may not be desirable, but rather that the proposals in the UK go too far.

B. Ex Post Facto Clause

The ex post facto clause bars retroactive application of certain changes in the criminal law. The standard justifications for this rule are that it provides notice to defendants about what is illegal and the sanction for it, as well as constraining the government from passing arbitrary or vindictive legislation against a particular defendant. The prohibition is only concerned with matters

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208 We are not claiming that every aspect of Double Jeopardy case law (which is not generally considered a model of clarity and consistency) matches up with a rent-seeking theory. See Albernaz v. United States, 450 U.S. 333, 343 (1981) (noting that the Double Jeopardy decisional law is "a veritable Sargasso Sea which could not fail to challenge the most intrepid judicial navigator"). However, we do think that important parts of Double Jeopardy display a concern with rent-seeking, and that the rent-seeking theory does a better job than the alternatives as a general positive theory. Second, simply because Double Jeopardy may address concerns of prosecutorial abuse does not necessarily mean that it is the best place to address those concerns. Many of these concerns, especially the mistrial context, might be better addressed under other parts of the Constitution (e.g., Due Process), but we do not make any comment on that issue. See Amar, supra note 172, at 1809.


210 See id.


212 See WAYNE R. LAFAVE & AUSTIN W. SCOTT, JR., CRIMINAL LAW 97 - 100 (2d. ed).
that amount to "punishment" and applies more frequently in the context of legislative decisions as compared to judicial decisions.

Traditionally the ex post facto rule applies in the four contexts set out in Calder v. Bull. These are: (1) when the legislature creates a new criminal law it may not be applied retroactively to behavior that was not criminal at the time it occurred; (2) when the legislature removes elements from the definition of a crime or otherwise increases the severity of a crime (making it a more serious crime than when it occurred) these changes may not be applied retroactively; (3) when the legislature increases the punishment for a particular crime then this change may not be applied retroactively; and (4) when the legislature changes the rules of evidence or changes the requirements for testimony relative to what they were when the act occurred then the changes may not be applied retroactively. Contexts (2) and (3) are often considered as one.

Context (1) is seldom brought into question in modern times but it still represents the quintessential instance of the ex post facto prohibition. It represents an obvious instance of where the government and the prosecutor are abusing their discretion and targeting a particular defendant probably in response to some perceived political, or other, gain they may receive. This fits easily within our approach to procedural protections, constraining the costs associated with abuse of discretion.

Contexts (2) and (3) seem to still arise in some form in modern times. They also represent instances, like Context (1), where the concern with
prosecutors abusing their discretion and engaging in selective enforcement is significant. 221

A related issue is what happens when the government passes a law that changes something related to parole requirements or privileges. 222 In this context the courts have adopted something of a sliding scale approach. In certain cases the changes, when applied retroactively, may violate the ex post facto clause, whereas in others the changes may not violate the clause even when applied retroactively. 223 We think the rent-seeking theory provides the best explanation for these cases.

In California Dept. of Corrections v. Morales 224 the California State government changed the rule (contained in a statute) on reconsideration hearings for prisoners who had their first attempt at obtaining parole rejected. 225 The old rules provided for annual reconsideration for such inmates and the new rules provided for the parole board to defer hearings for up to 3 years if the board “finds that it is not reasonable to expect that parole would be granted... during the following two years and states the basis for its findings”. 226 In other words the new rule changed the statutory scheme and granted additional power and discretion to the parole board. The Court held that this rule, when applied retroactively, did not violate ex post facto because there was only a remote likelihood of obtaining parole in those cases where the new rule applied. 227 Thus, there was only a speculative possibility of really extending the prison term
through this new rule.\footnote{See id. at 509, 514. The Parole board was required to provide reasons for its decisions too. See Morales, supra note 224, at 511.} Moreover, there was little room for new abuses of discretion because the Parole board probably would have denied parole anyway, so that delaying the hearings was not likely to significantly increase the defendant’s risk of spending a longer period of time in prison.\footnote{See id. at 512.}

The result in Morales is consistent with a rent-seeking model of the ex post facto rule. Given the small risk that the change in Morales could have resulted from successful targeting, the rent-seeking concerns behind the ex post facto clause did not seem to be triggered. Although there appeared to be an increase in discretion and in the expected sanction, it was well constrained because the board could only defer hearings for those prisoners that had no reasonable chance of parole. If a prisoner had little chance of parole anyway then the scope for the new rule to encourage selective enforcement was limited, and the concerns with rent-seeking were muted.\footnote{The US Supreme Court has recently upheld the Morales decision in Garner v. Jones, 120 S.Ct. 1362 (2000). The facts in Garner are similar to Morales in that the parole board was able to delay hearings on parole as a result of a regulatory amendment (not a statutory change as in Morales). See Garner, supra, at 1366 - 69. The Court remanded and required a finding on whether there was a “significant risk” under Morales. See id., at 1370. There are some differences between Garner and Morales. In Garner the regulatory amendment applied to a broader class of prisoners than in Morales and in Garner the amendment did not, arguably, change the parole board’s discretion – both before and after the amendment the parole board had complete discretion to grant parole by statute. See id., at 1369 – 71. The change only helped guide that discretion. See id., at 1369. In Morales, the statutory change did increase board discretion. See Morales, supra note 224, at 507. This difference may be a reason not to apply the ex post facto prohibition here (as there may not appear to be an increase in discretion on the facts of Garner). This seems the implicit approach of Justice Scalia in his concurrence. See Garner, supra, at 1371 (Scalia, J. concurring).}

Context (4) involves instances where changes in the standard of proof and rules of evidence are applied retroactively.\footnote{See Walker v. State, 433 So. 2d 469 (Ala. 1983); Plachy v. State, 239 S.W. 979 (1922); Thompson v. Missouri, 171 U.S. 380 (1898); Lafave & Scott, supra note 212, at 97 – 101.} One of the older English cases establishing this point involved a case in which the defendant had convinced a co-conspirator in treason to flee the country.\footnote{See id. at 270.} The English Parliament responded by reducing the number of witnesses needed to convict for treason, which the court held to violate the ex post facto prohibition.\footnote{See id. at 270.} This case fits neatly into our approach as it involves an instance where the legislature changes the law in order to target a particular defendant.

More recent case law has adopted a more nuanced approach. For example, the new case law distinguishes between rules that affect witness competency and rules that change the quantum of evidence needed to convict.
defendants. In Carmell v. Texas, the US Supreme Court held that a change in the law regarding when uncorroborated testimony of sexual assault complainants would be admitted violates the ex post facto clause if applied retroactively. Prior to the change in the law, Texas required that the testimony of sexual assault complainants be corroborated unless the complainant was under the age of 14. After the defendant's alleged wrongdoing the law changed so that uncorroborated testimony of any complainant below 18 years of age would be acceptable. There appeared to be no evidence that this change occurred in response to any particular defendant before the courts at the time. The prosecution, however, attempted to use this law here because during the relevant time the complainant was between the ages of 14 and 18. The court held that retroactively using this law violated the ex post facto prohibition because it reduced the quantum of evidence necessary to convict the defendant, which the majority compared to being as oppressive as changing the requirements for the offense.

The dissent argued that the majority's decision ran counter to Hopt v. Territory of Utah, where the Supreme Court held that a change in the law that permitted the prosecution to present the evidence of witnesses convicted of felonies was not a violation of ex post facto even if applied retroactively. The dissent viewed the Hopt case as being indistinguishable from the case at hand and would not have barred the retroactive use of the law. The majority addressed this issue by saying that the Hopt decision was about witness-competency statutes, whereas the Carmell case was about the quantum of evidence needed to convict the defendant. Indeed, the Hopt decision itself made a distinction between the facts in that case and cases where the quantum of evidence required for conviction had changed.

Can such a distinction be justified? We think the distinction has some force under the rent-seeking model. If our concern is with the ability of the prosecutor to use certain changes in the law of evidence to increase the chance of abuse of the criminal process then the Hopt and Carmell contexts present differing risks of abuse.

235 See id. at 1643.
236 See id. at 1624.
237 See id. at 1625.
238 See Carmell, supra note 234, at 1651 (Ginsburg, J., dissenting).
239 See Carmell, supra note 234, at 1625.
240 See id. at 1633.
241 See Hopt v. Territory of Utah, 110 U.S. 574 (1884).
242 See id. at 589.
243 See Carmell, supra note 234, (Ginsburg, J., dissenting) at 1643, 1653, 1655.
244 See id., at 1639.
245 See Hopt, supra note 241, at 590.
In \textit{Hopt} the prosecution is being permitted to use testimony of those who have committed felonies.\textsuperscript{246} Given that a witness’s prior record may be used in court to challenge a witness’s testimony it is not clear how permitting felons to testify greatly increases prosecutorial discretion.\textsuperscript{247} Clearly this evidence may be important, but the jury or the judge may already view a felon’s testimony with some skepticism so, although there is some room for abuse, it seems unlikely that there would be great room for prosecutorial abuse across most cases relative to the \textit{Carmell} context.\textsuperscript{248}

In the \textit{Carmell} context (a sexual assault), obtaining the testimony of the complainant is probably quite important to the case. Increasing the prosecutor’s discretion with regard to this type of testimony (which may generally have greater credence and importance to a jury or judge than the testimony of a non-complainant felon) gives the prosecutor and other parties considerably greater room to use the system to their advantage.\textsuperscript{249} Thus, the change in \textit{Carmell} may make it significantly easier to convict (or credibly threaten to convict) a defendant, whereas the change in \textit{Hopt} may only increase this risk a bit because the testimony of felons may not generally carry great weight in many cases.\textsuperscript{250} In other words, the potential for abuse is greater (and hence the costs associated with rent-seeking higher) in the \textit{Carmell} context compared to the \textit{Hopt} context.\textsuperscript{251}

\textbf{C. Some Other Measures That Constrain Rent-Seeking}

There are many other doctrines, in addition to those discussed so far, that constrain rent-seeking in the criminal law enforcement process. In this Part we address two of them briefly, void-for-vagueness doctrine and entrapment.

\textsuperscript{246} See id. at 587.
\textsuperscript{247} See id. at 588.
\textsuperscript{248} One could, of course, posit instances where such abuse may occur (e.g., the prosecution offering a felon, who is currently in jail, a reduced sanction in some manner for fabricating testimony), but one suspects that the risk is either not great or that the testimony would not be generally believed. See Joshua M. Levinson & Brian Lambert, Twenty-Ninth Annual Review of Criminal Procedure, 88 Geo. L.J. 1175 (2000) (discussing government’s disclosure obligations). Note that the \textit{Hopt} decision concerned a law that related to permitting all felons’ testimony (even those not in jail and hence not subject to as much prosecutorial arm-twisting) so that the threat of prosecutor’s using their power against this general group to extract false testimony is not entirely persuasive. See \textit{Hopt}, supra note 241, at 588. The facts of \textit{Hopt} involved a felon in prison at the time, but the rule was not limited to those instances. See id. at 589.
\textsuperscript{249} See \textit{Carmell}, supra note 234, at 1640.
\textsuperscript{250} See id.
\textsuperscript{251} Note that we have only argued that the potential for abuse is greater in \textit{Carmell} than \textit{Hopt} not necessarily that \textit{Hopt} was correctly decided – for that to be the case we would need to believe that the potential for abuse in \textit{Hopt} was below the threshold, whatever it might be, that is needed to trigger ex post facto prohibitions. We make no comment on that at this stage except to argue that there is a difference in abuse potentials between the cases. Also we make no comment on where the threshold for triggering ex post facto prohibitions should/ might be.
1. **Void-for-vagueness**

The void-for-vagueness doctrine serves as a constraint on legislators and law enforcement agents that curtails their discretion. The early cases struck down laws that were deemed vague, in the sense that they granted law enforcement agents broad discretion in deciding what is legal and what is not. Such discretion gives enforcement agents wide power to extract wealth through the criminal law enforcement process. This raises the specter of large rent-seeking costs.

More recently a new twist to the issue of vague statutes has arisen: what happens when the group against which selective enforcement may be used agrees to it or supports it? This is the situation that gave rise to the Supreme Court's decision in *Chicago v. Morales*. The case developed after Chicago passed an ordinance that prevented "criminal street gang members from loitering with one another or with other persons in any public place." The definition of loitering was quite broad – "[remaining] in any one place with no apparent purpose" and police were required to ascertain whether some (at least one of two) persons who were "loitering" were gang members. If so, the

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252 See Connally v. General Constr. Co., 269 U.S. 385 (1926) (stating on the facts that "[t]he term 'current rate of wages' referred to minimum, maximum, and intermediate amounts, thus the term was too vague for appellee to know to which amount the statute referred. In addition, the term 'locality' had no precise meaning. Thus, the statute did not allow employers to know what the minimum wage was, and was therefore unconstitutionally vague"); Miller v. Schone, 276 U.S. 272 (1928) (noting that "the statute is void for vagueness and uncertainty. It contains no criterion whatever by which to determine who are the freeholders of the locality to whom is confided the power of invoking the axe of the Entomologist. Again, what is the 'locality' intended by the statute? No technical meaning attaches to the term").

253 See Michael K. Browne, Current Public Law and Policy Issues: Loitering Laws: Does Being “Tough On Crime” Justify the City of Minneapolis’ Use Of a Vague and Broadly Constructed Ordinance, Which Criminalizes Out Thoughts in Violation of the First Amendment?, 20 Hamline J. Pub. L. & Pol. 147, 148 (1998) (arguing that "an officer's hunch becomes the basis for the suspected activity, and charges are brought against 'undesirable' individuals without probable cause that a criminal act has been performed. Somehow, officers and prosecutors systematically determine that minorities are the 'undesirables' and they perpetuate unconstitutional arrests based upon this faulty ordinance"); Erik Luna, Transparent Policing, 85 Iowa L. Rev. 1107, 1132 (2000) (noting that "as a matter of history and practical necessity, police and prosecutors are vested with broad latitude in their application of the penal code—to detain, interrogate, and arrest suspects, for instance, or to charge and prosecute defendants in the criminal process. Sometimes these discretionary powers are openly admitted, conspicuously employed, and, thereby, exposed to popular review.").

254 See Lars Noah, Administrative Arm-Twisting In the Shadow of Congressional Delegations of Authority, 1997 Wis. L. Rev. 873, 903 (1997) (arguing that “criminal defendants routinely plead guilty, typically in exchange for a reduction in charges or some concession by prosecutors in making sentencing recommendations. An accused may agree to plead guilty to a lesser-included offense or a smaller set of offenses charged in an indictment if the prosecutor agrees not to pursue other charges in the indictment. Indeed, defendants may avoid prosecution altogether by agreeing to participate in a pretrial ‘diversion’ program, such as drug rehabilitation for certain types of offenders.").


256 I.d. at 45 – 46.

257 I.d. at 47 & n.2.

258 I.d. at 47 & n.2.
police could order them to leave the area.\textsuperscript{259} The ordinance, arguably, had the support of the community in which it was most likely to be enforced, the high-crime urban neighborhoods of Chicago.\textsuperscript{260} It was argued that these neighborhoods supported the ordinance in order to gain greater safety within their communities.\textsuperscript{261} In spite of the ostensible community support, the Supreme Court held the ordinance unenforceable on vagueness grounds.\textsuperscript{262} The Court’s reasons included that the ordinance defined “loitering” and other matters in such a broad way that they were impossible to obey.\textsuperscript{263}

In light of the broad grant of discretion to the police under Chicago’s anti-gang ordinance it is obviously possible that the police could engage in selective enforcement.\textsuperscript{264} The community may have consented to this risk in order to enhance its security.\textsuperscript{265} The general question raised by Morales is whether a community should be allowed to make this trade off.

Some scholars have argued for an exception to the void-for-vagueness doctrine on the ground that selective enforcement or targeting is extremely unlikely in the Morales context.\textsuperscript{266} Specifically, the use of an anti-gang ordinance to oppress a particular group, or transfer wealth from one group to another, is extremely unlikely in the Morales setting for two reasons. First, the ordinance, arguably, had a high degree of community support even within the neighborhoods most likely to be burdened by its enforcement.\textsuperscript{267} Second, the costs of selective enforcement probably would have been internalized within the relevant communities.\textsuperscript{268} Put another way, this case is unlike the example of selective law enforcement in the Jim-Crow South, which involved the use (or non-use) of force by a politically dominant group to oppress a politically marginal group. The communities that supported the anti-gang ordinance made an apparently conscious decision to trade off protection from police harassment in order to reduce the crime rate in their neighborhoods. The general implication

\textsuperscript{259}Id. at 47.
\textsuperscript{260}See Morales, supra note 255, at 74 (Scalia, J., dissenting) (noting that “[m]any residents of the inner city felt that they were prisoners in their own homes...Chicagoans decided that to eliminate the problem it was worth restricting some of the freedom they once enjoyed.”).
\textsuperscript{262}See Morales, supra note 255, at 51.
\textsuperscript{263}See id., at 56 – 59.
\textsuperscript{264}See id., at 58 – 59.
\textsuperscript{265}See id., at 74 (Scalia, J., dissenting) (stating that “[t]he minor limitation upon the free state of nature that is the prophylactic arrangement imposed upon all Chicagoans seemed to them (and it seems to me) a small price to pay for liberation of their streets”).
\textsuperscript{266}See Meares & Kahan, supra note 261.
\textsuperscript{267}See id.; Morales, supra note 255, at 74 (Scalia, J., dissenting) (stating that “[t]he minor limitation upon the free state of nature that is the prophylactic arrangement imposed upon all Chicagoans seemed to them (and it seems to me) a small price to pay for liberation of their streets”).
\textsuperscript{268}This seems implicit in Justice Scalia’s approach. See Morales, supra note 255, at 74. For greater discussion see Brooks, infra note 270.
of this argument is that constitutional restraints on criminal law enforcement should be relaxed in settings where the risk of selective enforcement is minimal. For simplicity, we will refer to this as the internalization critique.

The framework of this paper provides an alternative to the internalization critique, as well as a justification for the Court’s decision in *Morales*. The internalization critique misses an important feature of pro-defendant procedural protections. Not only do they dampen temptation for selective enforcement, or inter-group wealth expropriation, they also cut down the prospects for what we have termed “simple corruption.” That is, procedural protections also have the function of reducing the opportunities for an individual enforcement agent to enrich himself by using his position to bully individuals who can be threatened with arbitrary arrest and punishment. This is potentially just as harmful as inter-group wealth extraction, because as long as it is possible for individuals to enrich themselves through the enforcement process, people will devote resources to acquiring positions as enforcement agents. Each position along the chain of enforcement (from the officer on the street to his immediate superiors, to prosecutors, to parole officers) could become a source of monopoly profits for the individuals who occupy them. 269 When this occurs on a large scale, consistency and impartiality in enforcement are unlikely to be observed. 270

2. Entrapment

The fact that the entrapment defense is a relatively new common law doctrine probably has a lot to do with the expanding scope of criminal prohibitions. 271 The defense does not exist for common law crimes, such as

269 This is essentially the argument made in the context of a vertically fragmented enforcement scheme. See supra text accompanying notes 103 – 105.

270 In addition to this argument it should be noted that the factual predicates of the case – that the minority dominated community supported this measure and hence was willing to trade off civil rights for enhanced safety – is a fairly contentious matter. First, there is significant debate over whether the community did actually support these measures. See Richard R.W. Brooks, Fear and Fairness in the City: Criminal Enforcement and Perceptions of Fairness in Minority Communities, 73 S. Cal. L. Rev. 1219 (2000). The support seems to be equivocal. See id., at 1233 – 35. Second, even if the community did support this measure it does not tell us too much about how much the community is willing to trade rights for safety. See id., at 1262 (noting that “…if poor blacks are more supportive of the American legal system because they are less aware of the existence of race-based unfairness…, then a desire or willingness on their part to expand legal enforcement in poor urban communities is not a fully informed position for lawmakers to follow.”). All it says is (assuming the community did support the measure) that the community preferred this mix of safety and civil rights over the current one. It does not tell us that this option would have been preferred over others that were not offered to the community. Indeed, it is possible that other alternatives could have been preferred by the community to the ordinance or the current state of affairs. Community support therefore only tells us so much. See id. at 1271. Finally, even if the community did support this ordinance over all others that does little to address concerns with the prosecutors’ now enhanced power to extract wealth.

271 See Sorrells v. United States, 287 U.S. 435, 453 (1932) (Roberts, J., concurring) (noting that “[t]he increasing frequency of the assertion that defendant was trapped is doubtless due to the creation by statute
murder. 272 This is a sensible result because even those who commit murder as a result of inducement, cajolery, or solicitation are still likely to present a danger to society. 273 The defense is connected today largely with drug prosecutions and other victimless crimes. 274

Our theory provides a rationale for the entrapment defense and for its relatively recent appearance in the law. Entrapment’s recent appearance in connection with new prohibitions can be understood as a reaction to the rent-seeking hazards associated with expanding criminal prohibitions. The short list of common law crimes encompasses conduct that is uniformly considered undesirable. 275 It is possible, as we have argued, for enforcement agents to enforce them selectively, but there are many procedural protections in existence to constrain this incentive. Relatively new criminal prohibitions, on the other hand, often encompass conduct that is not uniformly considered undesirable, and may quite easily be made the basis for selective enforcement. 276 Consider, for example, the debates concerning the more severe punishments for crack cocaine, heavily used in minority neighborhoods, relative to powdered cocaine. 277 As a positive matter, then, we should expect to observe, and we have observed, the entrapment defense expanding in scope and gaining a stronger footing in criminal law doctrine as the scope of criminal prohibitions extends beyond basic common law crimes.

272 See LAFAYE & SCOTT, supra note 212, at 421 – 22; See also MODEL PENAL CODE §2.13 (noting that the defense of entrapment is unavailable when “causing or threatening bodily injury is an element of the offense”).

273 See MODEL PENAL CODE §2.13 Comment at 420 (1985) (noting that “one who can be persuaded to cause such injury presents a danger that the public cannot safely disregard”).


275 These common-law crimes are mala in se, or morally wrong acts. These crimes are distinguished from mala prohibita crimes, which are acts made criminal by statute, but are not of themselves considered criminal. See BLACK’S LAW DICTIONARY 956 (6th ed. 1990). One argument in support of excluding the entrapment defense from conduct uniformly considered criminal is that, “from a moral perspective, it is wrong to punish those... who lack an opportunity to know and adhere to the law due to government conduct.” John T. Parry, Culpability, Mistake and Official Interpretations of Law, 25 AM. J. CRIM. L. 1, 5 – 6 (1997).

276 See Sorrells, supra note 271, at 453 (Roberts, J., concurring) (noting that “efforts... to obtain arrests and convictions (of these crimes) have too often been marked by reprehensible methods.”). See also Sanford H. Kadish, Fifty Years of Criminal Law: An Opinionated Review, 87 CALIF. L. REV. 943, 970 (1999).

277 See United States v. Anderson, 82 F.3d 436 (D.C. Cir 1996); United States v. Sanchez, 81 F. 3d 9 (1st Cir. 1996) (holding that increased sentencing for possession of crack rather that powdered cocaine was not unconstitutionally void for vagueness). See also Stuntz, supra note 78; Michael R. Bromwich, Put a Stop to Savage Sentencing, WASH. POST, Nov. 22, 1999, at A23 (discussing the unfairness of the disparity in sentencing).
One rationale provided for the entrapment defense is that it enables courts to avoid becoming tainted by condoning inappropriate conduct, or "abhorrent transaction(s)."\textsuperscript{278} The rationales could be expanded to include the claim that it discourages police officers from engaging in inappropriate conduct because it effectively denies them the reward (in terms of prosecutions) for engaging in such conduct.\textsuperscript{279} This rationale has been criticized as inadequate on the ground that the purity of the courts, or of enforcement agents, has no particular value in itself.\textsuperscript{280} If some impurity enhances deterrence, why not allow it?

We think our framework provides a stronger rationale for the entrapment defense. The function of the entrapment defense is not simply to protect the purity of enforcement agents, but to dampen rent-seeking incentives at lower levels of the enforcement process. If enforcement agents are denied the fruit of entrapment efforts, the rewards from using the law enforcement process to target specific individuals or groups fall.

\textbf{VIII. Empirical Evidence}

In addition to providing a better rationale for pro-defendant criminal procedure doctrines, the rent-seeking framework of this paper is also corroborated by corruption evidence from several countries. We ran a regression of Transparency International's corruption index on several variables, including measures of key pro-defendant criminal procedural rules. The reasoning behind this exercise is that if pro-defendant criminal procedural rules reduce the incentives to use the criminal laws for inter-group wealth extraction and for personal enrichment, the degree of corruption should be lower in countries that have such procedural rules.

The key measures of pro-defendant rules used in the regression analysis are the existence of a rule prohibiting cruel and unusual punishment and the existence of a common law system. The common law system represents a greater degree of pro-defendant bias in its criminal procedures than civil law systems (e.g. the reasonable-doubt standard, certain aspects of Double Jeopardy, certain rules on Jury Trials). The results suggest that both types of pro-defendant protection are strongly negatively correlated with the degree of corruption. In other words, the presence of these protections is strongly correlated with low corruption.

\begin{footnotesize}
\textsuperscript{278} Sorrells, supra note 271, at 459 (Roberts, J., concurring).
\textsuperscript{279} See id., at 448.
\end{footnotesize}
Transparency International’s 1997 “Corruption Perceptions Index” provides a score ranging from 10 (least corrupt) to 1 (most corrupt) for roughly 80 countries. The index, which measures international perceptions of corruption (bribe-taking and bribe-paying), is based on a survey of business people and analysts. Our measure for the existence of a pro-defendant bias in criminal procedure is simply coding for whether the country has a common law system. In general, common law legal regimes appear to have a stronger pro-defendant bias than civil law regimes due in part to the presence of the reasonable-doubt standard, right to a jury trial, and certain aspects of Double Jeopardy amongst others. The cruel and unusual punishment measurement is reflected by two “dummy variables.” One variable, Crupun3, takes the value one if the country either does not have a rule prohibiting cruel and unusual punishment (e.g., Malaysia), or does not abide by the rule if it has one (e.g., Cameroon).

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281 Our corruption index data are from 1997. For information on the Corruption Perceptions Index, see <http://worldbank.org/html/prddr/trans/>. See also Johann Graf Lambsdorff, Background Paper to the 2000 Corruption Perceptions Index (September 2000).

282 See CRAIG M. BRADLEY, CRIMINAL PROCEDURE: A WORLDWIDE STUDY xv-xxii (1999), for a discussion of the major differences in criminal procedure between common law and civil law systems. In civil law, or inquisitorial, systems (found in a majority of continental European countries) a “theoretically neutral judicial officer conducts the criminal investigation and a judge...determines guilt or innocence.” Id. at xv. Common law systems (found in the United States, Great Britain and its former colonies) are based on a mistrust of the government, and “the defendant is endowed with a quiver of rights that he may launch against the government at various stages of the proceeding.” Id. at xvi. The reasonable-doubt standard is one of the defendant’s weapons against common law criminal systems. England, Wales, South Africa, and the United States all require that the defendant’s guilt be shown beyond a reasonable doubt. See id. at 122, 349. We tried to determine whether countries differ with respect to the double jeopardy rule. We found that every country in our sample either had a double jeopardy rule or had signed a treaty requiring compliance with such a rule. However, most countries did permit prosecutors to appeal an acquittal in the initial trial save a few. See Khanna, supra note 29, at 13 - 16. The difference with respect to prosecutorial rights of appeal generally tracks the common law-civil law dichotomy as most civil law countries permit the appeal and most common law countries either prohibit it or restrict it. See id.

283 In our sample, 31 countries fall in this category (i.e., have a rule prohibiting cruel punishment but practice it in spite of the rule). Four countries in our sample do not prohibit cruel and unusual punishment (Malaysia, Morocco, Senegal, and Ivory Coast). We have no fixed definition of cruel and unusual punishment. For those states that ban cruel and unusual punishment, we have taken evidence of torture and serious physical abuse as a strong sign of the existence of such punishment. For example, the State Department says the following of Cameroon: “The Penal Code proscribes torture, renders inadmissible in court evidence obtained thereby, and prohibits public servants from using undue force against any person; however, although President Biya also promulgated a new law in 1997 that bans torture by government officials, there were credible reports that security forces continued to torture, beat and otherwise abuse prisoners and detainees. In New Bell and other nonmaximum-security penal detention centers, beatings are common and prisoners reportedly are chained or flogged at times in their cells. However, the authorities often administer beatings not in prison facilities but in temporary detention areas in a police or gendarmerie facility. Two forms of physical abuse commonly reported to be inflicted on detainees include the “bastinade," in which the victim is beaten on the soles of the feet, and the "balancoire," in which the victim, with his hands tied behind his back, is hung from a rod and beaten, often on the genitals. Nonviolent political activists often have been subjected to such punitive physical abuse during brief detentions following roundups of participants in antigovernment demonstrations or opposition party political rallies.” See <http://www.state.gov/www/global/human_rights/1999_hrp_report/99hrp_toc.html>
other variable, Crupun2, takes the value one if the country has a rule prohibiting cruel and unusual punishment, but there are some concerns expressed about the state's compliance with its own rule (e.g., El Salvador).284

We also included in the regression a measure of the ratio of government spending to gross domestic product (GDP). The purpose of this measure, labeled Ratio, is to capture the relative number of opportunities for corruption in a country. Presumably as this ratio increases, the number of enforcement agents increases relative to the size of the economy. For example, a country that has one licensing agent for every business will presumably have a large ratio of government spending to GDP, and a correspondingly large number of opportunities for bribe-paying. It happens, however, that this argument is inadequate because a country may choose to pay its licensing agents nothing (allowing them to make up the shortfall in bribes) and then the ratio of government spending to GDP may be relatively small. Regardless, we have included the Ratio measure as it is likely to have a substantial effect, though the direction of the effect is unclear a priori.

A. A First Cut: Ordinary Least Squares Regression

The results in Table 1 are for an ordinary-least-squares regression of the Corruption Perceptions Index (labeled CPI) on Ratio and the pro-defendant procedure variables. The results indicate that corruption is significantly lower where a common law system is in place.285 Moreover, both measures of cruel punishment constraints indicate that the failure to prohibit such punishment is positively correlated with corruption. The results indicate that moving from a regime in which there is a prohibition of cruel and unusual punishment (that is complied with) to one in which there is no such prohibition (Crupun3) reduces the Corruption index (i.e., increases corruption) by 3 points. This is quite a

284 Countries in this category have been described by the U.S. State Department as applying punishment methods that vary from sleep deprivation to beatings. However, the State Department's report indicates that the abuses in these countries are either uncommon or not serious. For the State Department's analysis, see http://www.state.gov/www/global/human_rights/1999_hrp_report/99hrp_toc.html Thus, the difference between Crupun 2 and Crupun 3 is largely a matter of degree.

285 The results in Table 1 were largely replicated in a second regression that includes a variable measuring the ratio of public sector wages to financial sector wages. In the second regression, the COMMLAW and CRUPUN2 coefficients remained roughly the same. The CRUPUN3 variable dropped to statistical insignificance, but this may largely be a byproduct of the sharp drop in observations because of missing wage data. We had only 42 observations for the second regression. The new variable PAFIN, which measures the ratio of public sector to financial sector wages, came in highly significant with a coefficient of 3.395 (t-statistic = 2.3), suggesting that the ratio of public sector to financial sector wages is negatively associated with corruption.

We also ran the same regression with controls for education, religion, and economy type (socialist versus capitalist), and the coefficients on COMMLAW, CRUPUN2 and CRUPUN3 remain roughly the same. See the appendix.
substantial drop given that the maximum score is 10. The existence of a common law system raises the Corruption index (i.e., reduces corruption) by 1.5 points.

Table 1: OLS regression of corruption index on procedural constraints

| Variable   | Coef. | Std. Err. | T     | P>|t| |
|------------|-------|-----------|-------|-----|
| CPI        | .039  | .022      | 1.800 | 0.076|
| RATIO      | -2.997| .513      | -5.840| 0.000|
| CRUPUN3    | 1.455 | .471      | 3.090 | 0.003|
| CRUPUN2    | -2.104| .604      | -3.482| 0.001|
| COMMLAW    | 4.986 | .730      | 6.832 | 0.000|
| CONS       |       |           |       |     |

Number of obs = 75
R-squared = 0.458
Adj R-squared = 0.427

The substantial impact of the two variables measuring cruel punishment constraints and the common law variable were replicated in expanded regression models (see Appendix) controlling for educational levels (percentage at primary level), religion (percent catholic, muslim), and economy type (socialist, mixed). Although the coefficient for Crupun3 fell in absolute value from 3 to 2, it remained statistically significant and increased in proportion to the common law variable.

Interestingly, the results suggest that the cruel and unusual punishment measures have a much larger impact on corruption than the common-law measure (which proxies for a stronger pro-defendant bias in criminal procedure). This has interesting implications for the recent literature on common law protections and economic growth. The results suggest that hard constraints on the state’s freedom to profit through punishment may be a more important restriction on corruption than the existence of common law rules. The results can also be taken as empirical verification of our claim in Part VI.B that procedural protections and penalty restrictions (e.g., the prohibition against cruel and unusual punishment) work as complements with penalty restrictions having the more powerful long run effect.

B. Problems and Extensions

The ordinary-least squares approach is arguably inappropriate for this study, and, if so, the regression results reported in Table 1 may be biased in the sense that they fail to capture the true relationship between the corruption index and the procedural constraints. The most important problem for this analysis is endogeneity. The ordinary-least-squares regression carried out in Table 1 assumes that the explanatory variables are exogenous or predetermined. In simple terms, the ordinary-least-squares approach assumes a one way causality in which the predetermined variables (e.g., procedural constraints) "cause" the dependent variable (in this case, the amount of corruption) and not the other way around. This assumption is violated if one of them is not predetermined with respect to the dependent variable. For example, if procedural restraints are adopted as a response to corruption, then they are clearly not predetermined with respect to corruption. The procedural restraint variables would then be endogenous rather than exogenous variables.

This argument presents a potentially serious issue in the case of the cruel and unusual punishment measure used in the Table 1 regression. Some of the countries in our sample may have adopted rules prohibiting cruel and unusual punishment in order to dampen corruption. A parliament, for example, might pass such a law in order to constrain rampant corruption in some executive branch office. This concern is probably not serious in the case of the common law measure. It is unlikely that any of the countries in our sample would have adopted the common law in response to corruption. Common law regimes have appeared as the result of colonization instead of problem-focused legislation.

The standard solution to an endogenous explanatory variable problem is to find an "instrumental" variable, i.e., a variable that is correlated with the (potentially) endogenous explanatory variable and that is not itself endogenous. Instrumental variables, or instruments, are often geographical or general population features that are unlikely to be sensitive to changes in the explanatory variable. An ideal instrument for this study would be some general population feature that is correlated with the presence of procedural restraints and yet unlikely to be caused by corruption.

Our solution to the instrument-choice problem is to follow the approach of Paulo Mauro in his article "Corruption and Growth." Mauro found that an

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288 See Greene, supra note 287, at 370 – 375 (discussing instrumental variable regressions).

index measuring the degree of ethnolinguistic fractionalization served as a good instrument for corruption. Mauro’s ethnolinguistic fractionalization instrument measures the probability that two persons drawn at random from a country’s population will not belong to the same ethnolinguistic group. Following Mauro’s lead, if the ethnolinguistic fractionalization measure serves as a good instrument for corruption and if corruption does cause some countries to adopt procedural restraints (e.g., banning cruel and unusual punishment), then the ethnolinguistic fractionalization instrument should also serve as a good instrument for a potentially endogenous procedural restraint measure. We therefore collapsed our cruel and unusual punishment indexes into one index (labeled Crupun) taking the values 1, 2, and 3, where the value 2 represents the level of punishment reflected in the Crupun2 index and the value 3 represents the level of punishment reflected in the Crupun3 index. Table 2 presents results of ordinary-least-squares and instrumental-variables regressions of the corruption index on Crupun and other variables shown in Table 1 (full regression results are provided in the appendix). We used the ethnolinguistic fractionalization index for the year 1961 as the instrument.

Table 2: Comparison of OLS and IV regressions of corruption index on procedural constraints

<table>
<thead>
<tr>
<th></th>
<th>OLS Regression</th>
<th>Instrumental Variables Regression</th>
</tr>
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<tbody>
<tr>
<td>Ratio2</td>
<td>.112</td>
<td>.037</td>
</tr>
<tr>
<td>Crupun</td>
<td>-1.177</td>
<td>.259</td>
</tr>
<tr>
<td>Commlaw</td>
<td>.882</td>
<td>.471</td>
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Source: Table A.4 of appendix

Source: Table A.3 of appendix

The new results show that the instrumental variables estimate of the coefficient for the cruel and unusual punishment index is negative, as in the original ordinary-least-squares regression. Moreover, the new Crupun coefficient estimate is even larger in absolute value relative to the common law coefficient estimate. The results in the bottom part of Table 2 suggest that the
corruption index falls roughly 4 points for every increase (from 1 to 2, or from 2 to 3) in the cruel and unusual punishment index.

These results are sufficient for our purposes. An important claim of this paper is that procedural restraints dampen corruption, and that appears to be confirmed by all of the regression results. Of course, to the extent endogeneity is a serious issue, which seems to be confirmed by the results in Table 2, the instrumental variables estimates should be viewed as the reliable ones. These more reliable results provide strong support for our theory. Moreover, the instrumental variable results are consistent in a deeper sense with the theory of this paper. The theory views procedural restraints as a price or tax that constrains the demand for corruption, and also as a product of or supply-side response to corruption. The instrumental variable results are consistent with and effectively reconcile supply and demand side theories of the relationship between procedural constraints and corruption.

The size of the “endogeneity bias” in the estimate of the Crupun coefficient is simply the difference between the ordinary-least-squares and the instrumental-variables estimate. Looking at Table 2 we know that the ordinary-least-squares estimate is -1.177 and the instrumental-variables estimate is -4.660, and thus the suggested endogeneity bias is 3.483. The positive sign for the bias term is consistent with what we would expect under the traditional instrumental-variables framework. Our theory treats procedural constraints as a “price” reducing the demand for corruption. The alternative part of the model treats past corruption as a signal or call that leads to the production of more procedural restraints – the equivalent of a supply relationship. In the standard demand-supply model, any estimate of the slope of the demand curve by ordinary-least-squares will be biased upward due to movements along the supply curve caused by exogenous disturbances (or shocks) to demand.\textsuperscript{291} We seem to have an equivalent result here. Exogenous disturbances (or unexplained movements) in the “demand” schedule for corruption generate an upward bias in the ordinary-least-squares estimate of the relationship between procedural restraints (as measured by Crupun) and the corruption level.

One possible criticism of our interpretation of the regression results is that the Crupun measure may simply be a reflection of the stability or effectiveness of government. An ineffective government is likely to be corrupt. If our cruel and unusual punishment index is simply a proxy for ineffectiveness, the correlation between the index and government corruption may not tell us much about the

\textsuperscript{291} See, e.g., MADDALA, supra note 287. See also G.S. MADDALA, INTRODUCTION TO ECONOMETRICS (2d ed. 1992); A. M. McGahan, Cooperation in Process and Capacities: Trade Associations in Brewing After Repeal, 38 J. LAW & ECON. 521, 531-532 (1995) (providing a mathematical analysis on the effect of exogenous factors in the demand-supply function).
relationship between criminal procedural constraints and corruption. Though we cannot be confident that this argument is wrong, there are two reasons to doubt it. First, as a conceptual matter, it is difficult to distinguish government ineffectiveness from corruption. We are inclined to think ineffectiveness results from corruption rather than the other way around. Second, in expanded regression models shown in the appendix we included several variables that could be interpreted as proxies for government effectiveness. Our basic results are replicated in the expanded regressions.

IX. CONCLUSION

The strong pro-defendant bias in criminal procedure is a stalwart of Anglo-American jurisprudence. This has seemed perplexing because it could encourage criminal wrongdoing, whereas one of the primary reasons for declaring something criminal is to try to reduce its incidence.292 Such an apparent contradiction has led to many attempts to justify this approach to the criminal process. Our paper provides a simple positive theory for a strong pro-defendant bias: to constrain the costs associated with self-interested behavior by prosecutors and government agents. The case law and some empirical evidence on international corruption are consistent with our theory.

We begin by sketching some of the more common criminal procedures and examining the traditional justifications given for them. In particular, we focus on the reasonable doubt standard of proof and the justification most commonly given for it - that we are more concerned with the sanctioning and deterrence costs associated with false convictions than with false acquittals. We find the traditional rationale makes implicit assumptions about the relative frequency and costs of false convictions and false acquittals that are inadequately justified by the empirical evidence.

In light of this, we argue that the strong pro-defendant bias can be more easily justified as a means to constrain costs associated with self-interested behavior by law enforcement agents as well as to address the traditional error cost arguments. Absent some constraint on their behavior, prosecutors and other agents might be tempted to use the criminal process to benefit themselves. This prospect is likely to induce groups in society to lobby prosecutors and other government officials for selective enforcement. When the lobbying costs are combined with the deleterious effects on deterrence such lobbying could have, we find that the costs of unfettered prosecutorial behavior could quite plausibly be large enough, in addition to the other concerns, to justify pro-defendant procedural protections.

292 See Marshall & Duff, supra note 2; Estrick, supra note 2; Hart, supra note 2. See also Coffee, supra note 2; Kadish, supra note 2; Packer, supra note 2.
After discussing why these constraints are likely to be useful, we assess whether the Reasonable Doubt Standard, Double Jeopardy, the Right to Jury Trial, and some other important institutional features of criminal procedure reflect these concerns. The broad contours as well as the doctrinal details of these areas are consistent with our analysis.

We also find indirect support for the rent-seeking model in corruption data from several countries. This suggests that approaching criminal procedure from the perspective of constraining self-interested prosecutors is likely to provide important insights into the current scope of criminal procedure as well as insights about whether certain doctrines should be extended or not. Indeed, the analysis developed here could be applied to a myriad of current topics, including the extension of criminal procedural protections to civil suits brought by government agencies and reform proposals in the UK to abolish Double Jeopardy and the right to a jury trial for serious crimes.

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293 See supra Part VII.D.
294 The government may often bring civil suits or administrative proceedings against parties and similar fears of rent-seeking may arise in those contexts. See Kenneth Mann, Punitive Civil Sanctions: The Middleground Between Criminal and Civil Law, 101 YALE L.J. 1795, 1797, 1862-63 (1992) (discussing the role of punitive civil sanctions). We do not, however, witness the same degree of pro-defendant protections in these areas. See id. at 1869-70. Our analysis does not examine whether these fields should have stronger pro-defendant procedures as that is a detailed and lengthy topic worthy of at least another paper. See generally id.; Mary M. Cheh, Constitutional limits on Using Civil Remedies To Achieve Criminal Law Objectives: Understanding and Transcending the Criminal-Civil Law Distinction, 42 HASTINGS L.J. 1325 (1997); Carol S. Steiker, Punishment and Procedure: Punishment Theory and the Criminal-Civil Procedural Divide, 67 GEO.WASH. L. REV. 1290, 1292 (1997). We would note at this point that there are some differences between government civil suits and criminal enforcement. First, the sanctions and stigma are often different in both contexts and this may play a role in determining how pro-defendant the procedures need to be in these different contexts. See Mann, supra, at 1809. Second, we may believe that the potential defendants in government civil cases (e.g., corporations) are able to lobby more effectively than the average defendant in the criminal context. This is because relatively few criminal defendants are wealthy enough to even litigate effectively, suggesting that the scope of their lobbying abilities are somewhat limited. See Stuntz, supra note 11, at 28 – 29. However, these are only preliminary thoughts – our current paper does not engage in the debate over whether government civil suits should be subject to heightened procedures. This is a matter left for future debate and analysis.

We already comment on the UK proposals in supra text accompanying notes 209 – 210.
Appendix

1. Tobit Regression Analysis

Below we report the results of expanded corruption index regressions. The new variables below are EDU1 = percentage of population (25 and older in 1991) that has something less than a primary education only. This includes those who have no education at all or have completed primary school but have gone no further. (Source: Statistical Abstract of the World, 3d. ed., Annmarie Muth, ed., Gale Research (1997); RELC = percentage of the population who are Catholic, RELM = percentage of the population who are Muslim or Islamic (Source: Statistical Abstract, and where necessary supplemented from http://www.adherents.com/). ETM = dummy equal to one if economy is classified as mixed socialist-capitalist, ETS = dummy equal to one if economy is classified as socialist (Source: http://www.cia.gov/cia/publications/factbook/indexgeo.html).

Since the dependant (CPI) cannot be greater than 10 or less than 1, we used the “Tobit” regression model. The coefficient estimates in the Tobit regression were virtually indistinguishable from the ordinary least squares coefficient estimates. This is not surprising, since almost all of our dependent variable observations were within the limits of 1 and 10.

<table>
<thead>
<tr>
<th>Table A.1: Tobit regressions</th>
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<tr>
<td>CPI</td>
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<tr>
<td>Ratio</td>
</tr>
<tr>
<td>CRUPUN3</td>
</tr>
<tr>
<td>CRUPUN2</td>
</tr>
<tr>
<td>COMMLAW</td>
</tr>
<tr>
<td>EDU1</td>
</tr>
<tr>
<td>RELC</td>
</tr>
<tr>
<td>RELM</td>
</tr>
<tr>
<td>ETM</td>
</tr>
<tr>
<td>ETS</td>
</tr>
<tr>
<td>CONS</td>
</tr>
<tr>
<td>Number</td>
</tr>
<tr>
<td>Pseudo R-squared</td>
</tr>
</tbody>
</table>

To facilitate comparisons among the different regression results reported in this section, the next table shows a tobit regression using a few new variables. We also replaced RATIO with RATIO2, which is the World Bank’s measure of the general government consumption as a percentage of GDP in 1997. The variable GNP/PCAP measure per capita GNP in 1995.
2. Instrumental Variables Regressions

We collapsed the two cruel and unusual punishment indexes (Crupun2 and Crupun3) into one (Crupun), which takes the value 1 (prohibition of cruel punishment), 2 (prohibition but imperfect compliance), or 3 (no prohibition). As reported in the text, Table A.3 uses Mauro’s ethno-linguistic fractionalization index from 1961 as an instrument for Crupun. Table A.4 presents ordinary-least-squares regressions for comparison.

Table A.2: Tobit regression

| CPI         | Coef. | St. Err. | T   | P>|t| |
|-------------|-------|----------|-----|-----|
| RATIO2      | .116  | .035     | 3.30| .002|
| GNPCAP      | .000  | .000     | 1.78| .080|
| CRUPUN3     | -2.309| .489     | -4.72| .000|
| CRUPUN2     | -1.689| .549     | -3.07| .005|
| COMMLAW     | .801  | .465     | 1.72| .090|
| RELC        | -.012 | .006     | -1.96| .055|
| RELM        | -.009 | .007     | -1.19| .239|
| ETM         | .028  | .435     | -0.06| .949|
| ETS         | -1.370| .584     | -2.34| .022|
| CONS        | 4.607 | .758     | 6.08| .000|
| Number      | 74    |          |     |     |
| Pseudo R-squared | .19  |          |     |     |
**Table A.3: Instrumental variables regressions**

<table>
<thead>
<tr>
<th></th>
<th>Coef.</th>
<th>t</th>
<th>Coef.</th>
<th>t</th>
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<tbody>
<tr>
<td>CPI</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RATIO2</td>
<td>.092</td>
<td>0.90</td>
<td>.010</td>
<td>0.10</td>
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<tr>
<td>GNPCAP</td>
<td>-.000</td>
<td>-0.43</td>
<td>-.000</td>
<td>-0.41</td>
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<tr>
<td>CRUPUN</td>
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<td>-4.660</td>
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<tr>
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<td>1.64</td>
<td>2.281</td>
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<td>RELC</td>
<td>.005</td>
<td>0.30</td>
<td>.003</td>
<td>0.16</td>
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<td>RELM</td>
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<td>1.21</td>
<td>.037</td>
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<td>ETM</td>
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<td>0.17</td>
<td>.274</td>
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<td>-.724</td>
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<td>CONS</td>
<td>10.987</td>
<td>3.56</td>
<td>12.768</td>
<td>2.61</td>
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</table>

Number: 53  66  
F statistic for regression: 2.37  2.67  
Prob > F: 0.0283  0.0146

**Table A.4: Ordinary least squares regressions**

<table>
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<tr>
<th></th>
<th>Coef.</th>
<th>t</th>
<th>Coef.</th>
<th>t</th>
</tr>
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<tbody>
<tr>
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</tr>
<tr>
<td>RATIO2</td>
<td>.108</td>
<td>2.23</td>
<td>.112</td>
<td>3.00</td>
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<tr>
<td>GNPCAP</td>
<td>.000</td>
<td>1.51</td>
<td>.000</td>
<td>1.70</td>
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<tr>
<td>CRUPUN</td>
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<td>-2.74</td>
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<td>-4.53</td>
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<tr>
<td>COMMLAW</td>
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<td>2.03</td>
<td>.882</td>
<td>1.80</td>
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<td>EDU1</td>
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<td>RELM</td>
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<td>-.007</td>
<td>-0.93</td>
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<td>0.18</td>
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<td>ETS</td>
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<td>CONS</td>
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<td>5.656</td>
<td>6.17</td>
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</table>

Number: 60  74  
R-squared: 0.61  0.58  
F statistic for regression: 8.72  11.36  
Prob > F: 0.0000  0.0000