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Bar-Gill & Ben-Shahar, *The Prisoners' (Plea Bargain) Dilemma*

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# THE PRISONERS' (PLEA BARGAIN) DILEMMA

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## ABSTRACT

How can a prosecutor, who has only limited resources, credibly threaten so many defendants with costly and risky trials and extract plea bargains involving harsh sentences? Had defendants refused to settle, many of them would not have been charged or would have escaped with lenient sanctions. But such collective stonewalling requires coordination among defendants, which is difficult if not impossible to attain. Moreover, the prosecutor, by strategically timing and targeting her plea offers, can create conflicts of interest among defendants, frustrating any attempt at coordination. The substantial bargaining power of the resource-constrained prosecutor is therefore the product of the collective action problem that plagues defendants. This conclusion suggests that, despite the common view to the contrary, the institution of plea bargains may not improve the well-being of defendants. Absent the plea bargain option, many defendants would not have been charged in the first place. Thus, we can no longer count on the fact that plea bargains are entered voluntarily to argue that they are desirable for all parties involved.

## 1. INTRODUCTION

### 1.1. Plea Bargaining and the Credibility Puzzle

The policy debate over plea bargaining has focused, in large part, on one question: Do plea bargains help defendants or hurt them? Proponents of plea bargaining argue that plea bargains are good for defendants. The defendant, so the argument goes, can always choose not to plea bargain and

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go to trial. If the defendant chooses to accept a plea bargain, then the plea bargain must be better for this defendant than going to trial. Plea bargains add another choice. And more choice is better than less (Easterbrook 1983; Scott & Stuntz 1992; Church 1979).<sup>2</sup> This is the standard Pareto argument that a contract entered into freely by two parties necessarily improves the situation of both parties. A plea bargain, after all, is a bargain—a contract. If we are concerned about the well-being of defendants, the Pareto argument seems to provide powerful support for the plea bargaining institution.<sup>3</sup>

2 Against this free-choice foundation for plea bargains, a prominent branch of the literature explores the coercive features of the plea bargaining process (Alschuler 1981, 687–88; Brunk 1979, 546–52; Kipnis 1979, 559–62; Schulhofer 1992, 1988–91). Under this critical view, defendants' choice is not free but rather a response to powerful constraints and threats from prosecutors. In the same way that a contract reached under duress is not beneficial to the coerced party, plea bargains cannot be generally viewed as Pareto improvements.

3 Both the Pareto argument and the coercion argument are based on an important assumption that we challenge in this paper—the assumption that, in the absence of plea bargain, the defendant would have to go to trial. This assumption is crucial for the Pareto argument: the availability of a plea bargain is viewed as providing one additional choice (often a better choice) beyond that which already exists—the trial. And the assumption is also crucial for the coercion argument: it is the prosecutor's threat to take the defendant to trial that gives rise to duress.

4 For trial to be a viable factor affecting defendants' choice to plea, prosecutors need to have credible threats to take to trial those defendants who choose not to plea. Indeed, the plea bargain literature ordinarily assumes that prosecutors have enough control over the criminal process to be able to make such credible (and often intimidating) trial threats, and that the seriousness of these threats has much to do with the plea outcomes.<sup>4</sup> Thinking of each

2 For a critique of the argument, see Stephen J. Schulhofer (1992, 1981–91), arguing that externalities and agency problems on both sides prevent plea bargains from being mutually beneficial.

3 Plea bargains might be objectionable on other, deontological grounds (even if they are good for defendants). See, e.g., Albert W. Alschuler (1981, 668–700) and William J. Stuntz (2004, 2564–65).

4 See, e.g., Stuntz (2004, 2559–60). Stuntz's thesis is discussed in greater detail in Section 2.1 below. See also William M. Landes (1971, 62–65), Frank Easterbrook (1982, 304–311), Gene M. Grossman and Michael L. Katz (1983), and Jennifer F. Reinganum (1988), where the authors implicitly assume that the prosecutor's threat is credible; moreover, in FN 5, Landes describes the externalities created when a plea bargain with one defendant frees up resources for other cases but acknowledges that these "secondary effects" are largely ignored in his analysis.

individual case in isolation, this assumption is sensible, almost obvious. In any individual case, against a single specific defendant, the prosecutor may have enough discretion and resources to be able to make such a threat in a credible manner, and to carry it out if the defendant does not budge. But—and this is the crucial starting point for our discussion—the prosecutor has to bargain against more than one defendant at any given time, more than she can possibly afford to take to trial. Therefore, thinking about each individual case in isolation misses some important element of the strategic interactions between prosecutors and defendants. Specifically, it overlooks the fact that the prosecutor cannot possibly take *all* defendants to trial.

The prosecutorial resource constraint is commonly noted in the literature as one plausible justification for the plea bargain institution (Stuntz 2004, 2554–5; Landes 1971, 64; Easterbrook 1983, 298). But recognizing the resource constraint does more than justify the plea bargain system as a cost-saving device. It also raises a fundamental paradox: if the prosecutor has enough resources to take only a few defendants to trial, how can her threats to take all defendants to trial induce them to plea? The resource constraint, in other words, can potentially undermine the credibility of the prosecutor's threat.<sup>5</sup> Stated metaphorically, if you have only enough ammunition to strike one or very few of your opponents, how can you succeed in having them all surrender?

Recognizing this credibility paradox has implications for both the Pareto and the coercion arguments. For the Pareto argument, it suggests that for most defendants plea bargains are not an additional option, but rather, because the trial option realistically exists for only a small fraction of defendants, *the plea bargain replaces a no-prosecution option*. Due to the prosecutors' resource constraint, these defendants would not have been prosecuted at all. A plea bargain, it turns out, is not an improvement for them.

For the coercion argument, recognizing the credibility paradox raises the following question: why do so many defendants accept harsh plea bargains if the alternative for most of them is the no-prosecution option? If the resource-constrained prosecutor does not have a credible threat to take these defendants to trial, why do they plead guilty and spare the prosecutor the need to take them to trial? Why, in other words, is it commonly perceived that prosecutors have credible threats to go to trial?

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5 Defendants are also subject to a budget constraint, and perhaps their budget is even tighter than the prosecutor's budget. As we argue below, however, the credibility puzzle does not depend on the defendants' budget constraints.

## 1.2. Defendants' Collective Action Problem

8 The key to understanding why prosecutors have credible trial threats is what we call the defendants' collective action problem. If defendants could bargain collectively—if they were to stonewall and as a group refuse to accept harsh plea bargains—they would all be better off. The prosecutor would take only a few defendants to trial or, more likely, would offer much more lenient plea bargains, reflecting the small trial risk that each defendant effectively faces.<sup>6</sup> But defendants do not bargain collectively. Each defendant bargains individually with the prosecutor. And the prosecutor can take advantage of this lack of coordination. With the power to decide who of the many defendants will stand trial, the prosecutor can make each defendant feel as if he is the one facing trial. Defendants are trapped in a collective action problem, and this collective action problem allows the prosecutor to leverage a limited budget into many harsh plea bargains.

9 To better understand the intuition underlying this claim, consider the following army metaphor. Defendants are like a battalion of unarmed soldiers facing a single opponent with a single bullet in his gun demanding that they all surrender. If these soldiers collectively decide to charge their opponent in unison, they would be able to overcome the threat. They might, it is true, suffer a casualty, but “ex ante” they would all be better off bearing this small risk than accepting the fate of those who surrender. Their problem, though, is that it is in the interest of any single soldier to duck, to defect from the front line, and to let others mount the charge. A smart opponent would cultivate this temptation of his enemies to defect one by one, by threatening to strike the first one who charges. It might be enough for this opponent to have a single bullet to prevent the uniform charge and to force the entire battalion of soldiers to surrender.

10 One of the goals of this paper is to show how the collective action problem that plagues defendants undermines the validity of the claim, based on the Pareto argument, that plea bargains help defendants. This, however, does not lead necessarily to any normative conclusion. The claim that defendants are better off in a world without plea bargains is a *ceteris paribus* demonstration. It assumes that prosecutorial budgets are the same with or without plea bargaining. Thus, with

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6 In 1937 Justice Henry T. Lummas (1937, 46) wrote: “If all...defendants should combine to refuse to plead guilty, and should dare to hold out, they could break down the administration of justice in any state in the Union.” This prediction is perhaps overly pessimistic. Plea bargaining bans in Alaska, El Paso, and Philadelphia did not lead to the collapse of the criminal justice system in these jurisdictions. See Teresa White Carns and John Kruse (1991) on the Alaska ban; Robert A. Weninger (1987) on the El Paso ban; and Schulhofer (1984) on the Philadelphia ban.

the same budget but without the plea bargain instrument, prosecutors would be able to try only a few cases and defendants as a group would be better off. It is plausible, however, that if plea bargains are banned, prosecutorial budgets would increase, to the detriment of defendants.

This paper provides a theoretical underpinning for the growing recognition that plea bargains generate one-sided outcomes, rather than balanced settlements—that even with minimal resources prosecutors have strong bargaining power. The normative implications of these results are, however, unclear. The ability to leverage minimal resources into substantial power is undesirable if prosecutorial power is often abused. The ability to leverage minimal resources into substantial power is desirable if crime rates are high and the government can dedicate only limited resources to deterrence.

### 1.3. Related Literature

This is not the first article to recognize that citizens might face a collective action problem in their interactions with government agencies. It is a classic problem, and it is manifested in a variety of settings. Perhaps closest to the plea bargain context is the collective action problem arising when individuals bargain away constitutional rights. Richard Epstein illuminated this dilemma:

Each person acting alone may think it is in his interest to waive some constitutional right, even though a group, if it could act collectively, would reach the opposite conclusion. By barring some waivers of constitutional rights, the doctrine of unconstitutional conditions allows disorganized citizens to escape from what would otherwise be a socially destructive prisoner's dilemma game. (Epstein 1988, 22)

Plea bargains, however, are not considered to be unconstitutional waivers of trial rights, and thus the collective action underlying the plea-bargainer's dilemma is not solved by the doctrine of unconstitutional conditions. Moreover, in other contexts, individuals who waive constitutional rights do so in the face of *credible* threats by the government to withhold some benefit—because the government does not face a resource constraint in carrying out its threat.<sup>7</sup> In the plea bargains context, the

7 Epstein (1988, 28) does identify the crucial role of credibility: "When the government is told that it cannot bargain with individuals, the empirical question arises whether government will deny them a useful benefit altogether, or grant them the benefit without the obnoxious condition." On unconstitutional conditions and the question of credibility of the government's threats, see also Bar-Gill & Ben-Shahar (2005).

credibility of the prosecutors' threat is not obvious given the problem of limited prosecutorial resources.<sup>8</sup>

14 Our analysis is also related to the literature, especially the law and economics literature, on litigation and settlement in civil cases. In fact, we view this paper as laying a methodological bridge between the economic analysis of civil settlement and the plea bargaining scholarship. To many economists, the two areas are only superficially distinguishable, both dealing with bargaining in the shadow of trial. But to many criminal law scholars, the differences between plea bargaining and civil settlements are substantial and cannot be lumped together in a unified model. This paper is consistent with both traditions. It demonstrates that the basic framework developed in law and economics to analyze the strategy of civil settlements is useful and relevant also in the criminal context, helping illuminate some of the subtle dynamics of plea bargaining. Specifically, the problem of the credibility of threats to litigate has received significant attention in law and economics literature.<sup>9</sup>

15 But the determinants and consequences of credibility (or lack thereof) are different in the civil and criminal contexts. In the civil context, the central question is why defendants agree to pay settlements when suits have negative expected value to plaintiffs and thus plaintiffs' threats to litigate them appear noncredible. In the criminal context, the problem of prosecutorial credibility has a different source. Because the outcome of a criminal trial is not measured in pecuniary terms, prosecutors' credibility-of-threats condition is not satisfied merely by having strong cases. The resource constraint, not the value of the suit, is the problem. Also, unlike in the standard civil litigation/settlement model, the strategic interaction in the criminal context is characterized by the one-against-many aspect that we develop

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8 In the plea bargain context, Rachel Barkow (2006, 1033–34) has recently noted that while plea bargaining may be beneficial to the individual defendant, it is harmful to defendants as a group. According to Barkow, when plea bargains become the norm, judges provide less of a check on abuses of defendants' rights and legislatures draft criminal statutes broadly and with high mandatory penalties to give prosecutors the leverage they need to induce guilty pleas. See also Stuntz (2004, 2557–62). This adverse effect of plea bargaining on defendants as a group is not attributed to a collective action problem that plagues defendants. (Barkow does not argue that if defendants could coordinate, their situations would improve.)

9 See, e.g., Lucian A. Bebchuk (1998).

in this paper, and this requires more than a straight application of the civil litigation model.<sup>10</sup>

The paper illustrates a phenomenon that, in its general form, received attention in the economics literature—the problem of contracting with externalities. It arises when a single principal contracts individually with *N* agents, and each individual contract affects the well-being of all other agents (Segal 1999). One of the main lessons in this literature is the success of divide-and-conquer strategies, whereby the principal can extract better terms from the agents than in the absence of such externalities (Segal 2003).<sup>11</sup> Plea bargains are contracts with externalities: each defendant who accepts a plea frees prosecutorial resources to pursue other defendants. What makes the plea bargain situation unique, and worth exploring in detail in this paper, is the difficulty of overcoming the collective action problem and the failure of the general coordination devices that were proposed in other contexts.

Finally, the theoretical framework developed in this paper applies more broadly whenever a resource-constrained enforcement agency can negotiate settlement. For example, the SEC's ability to negotiate settlements with securities offenders allows it to exploit the lack of coordination among violators. Thus the SEC can leverage its limited resources into more effective enforcement. The framework also applies to civil litigation cases that share the one-against-many feature of plea bargains. For example, it applies to the case of a single defendant, e.g., a large insurance company, facing multiple law suits by many plaintiffs (who cannot easily coordinate through a class action or similar mechanism).

The remainder of this paper is organized as follows. Section 2 describes the credibility puzzle and, in doing so, explores the limits of the analogy between plea bargains and civil settlements. Section 3 argues that defendants' collective action problem solves the credibility puzzle. Section 4 suggests that the collective action problem is difficult, if not impossible, to overcome because fundamental principles and practices of the criminal process and of lawyers' ethics undermine the ability of defendants to coordinate bargaining

10 This is not to say that there are no civil cases that share this one-against-many feature. The point is only that traditional economic analysis of litigation and settlement in the civil context has focused on the one plaintiff/one defendant model. After this paper was accepted for publication, we came across a new working paper (Che & Spier 2007) that develops a similar understanding of the problem of one-against-many but applies it to civil litigation. See also *infra* Section 5.2.

11 Che & Spier (2007, note 12) analyze the effect of divide-and-conquer strategies in civil suits in which one defendant faces multiple plaintiffs.

strategies. Section 5 briefly considers two extensions: (1) noncriminal law enforcement, and (2) one-against-many civil cases. Section 6 concludes.

## 2. SETTLEMENTS, PLEAS, AND THE PROBLEM OF CREDIBILITY

### 2.1. The Problem of Credibility

19 A long and distinguished line of law and economics articles has explored when parties to a legal dispute prefer to reach settlements. A settlement, this literature explains, makes the litigants better off because they collectively save the cost of litigation and eliminate the risk involved in a trial outcome. As long as the parties' perceptions about the potential outcome at trial do not diverge too greatly, they are likely to reach a settlement, and they can tailor the magnitude of the settlement to correspond to the merits of the case.

20 Early models of the settlement-versus-litigation problem studied the reasons settlements occur and the factors affecting the magnitude of the settlement. But these early models have all assumed that, in the absence of a settlement, litigation would ensue (Landes 1971, note 4; Gould 1973, 285–86; Posner 1973, 417–420). This assumption was quickly abandoned, and a more nuanced understanding of the strategic bargaining process replaced it. One of the main factors that became the focus of analysis was the question of the credibility of the threat to sue—whether the plaintiff will in fact proceed to trial absent a settlement. Can a plaintiff extract a settlement even when she does not have a credible threat to pursue litigation all the way to judgment?

21 The initial observation of this line of inquiry, staged in a civil context, was the following. In the absence of a credible threat to try the case all the way to judgment, the plaintiff would be unable to secure a settlement. Specifically, when the plaintiff's costs of pursuing trial exceed the judgment she expects to win, it must be that in the absence of a settlement she would be better off dropping the suit. Recognizing this, the defendant would be unwilling to settle. Sure, the defendant prefers settlement to trial, and if trial were inevitable, he would gladly settle. But if he believes that there would be no trial, namely, that in the absence of settlement the plaintiff would drop the suit—that the plaintiff's threat to go to trial is not credible—the defendant would not agree to settle for any positive amount (Bebchuk 1998, 551–52). Having a credible threat to sue is a *necessary condition* for settlement.

22 The same question can arise in the criminal context: can the prosecutor secure a plea bargain only when she has a credible threat to prosecute the

case all the way to judgment? This question has not received comprehensive treatment in the plea bargain literature. To be sure, prosecutors' credibility is mentioned as a component of the dynamics that lead to plea bargains. But commentators often *assume* that prosecutors have credible threats. For example, in arguing for his thesis that prosecutors have broad discretion to dictate the charges and the plea bargains, Stuntz states:

[P]lea bargains outside the law's shadow depend on prosecutors' ability to make credible threats of severe post-trial sentences. Sentencing guidelines make it easy to issue those threats.<sup>12</sup> (Stuntz 2004, 2560)

This idea, that prosecutors' power to select the sentence accords credibility to their threat to prosecute, conflicts with another observation often made by commentators—that prosecutors face a significant resource constraint. As Stuntz (2004, 2554–55) (and many others) recognize, “due to docket pressure prosecutors lack the time to pursue even some winnable cases.... Prosecutors in most jurisdictions have more cases than they have time to handle them.”<sup>13</sup> If, in many cases, the prosecutors cannot afford to go to trial, how is it that their threat to prosecute is credible? Why does it matter that prosecutors can select the sentence if, due to “extreme docket pressure,” they cannot make good on their threat to pursue the case all the way to the verdict and sentence? Why, then, do prosecutors succeed in extracting favorable plea bargains from a majority of defendants when their threats to sue these defendants is undermined by severe budget constraints?

This is the credibility puzzle, and this is also where criminal plea bargaining differs from civil settlement bargaining. The factors that undermine plaintiffs' credibility in civil cases are low stakes, weak merits, defendants' thin pockets, and costly litigation. But if a suit has positive expected value, a resource constraint does not diminish the plaintiff's credibility—fee arrangements with the attorney, or even a simple loan from a bank, usually overcome this problem. In the criminal context, however, prosecutors' credibility is perhaps affected less by the merit factors but it is significantly dependent on the resource constraint.

12 The crux of Stuntz's argument is that prosecutors have much freedom to select the charge and the sentence that a defendant would face if the case went to trial. Because prosecutors are in a position to dictate the outcomes—since they are only loosely constrained by substantive criminal law—their threat to issue a particular charge is credible. Landes (1971, 64–65) and Easterbrook (1983, 304–07) implicitly assume that the prosecutor's threat is credible.

13 See Landes (1971, 64–74); Easterbrook (1983, 295–96); Church (1979, 522).

The prosecutor cannot hire a contingency fee attorney and “contract out” cases, nor can she overcome her resource constraint by borrowing.<sup>14</sup>

25 This credibility puzzle is heightened by another basic asymmetry between civil and criminal cases. In civil cases, plaintiffs usually care about the monetary bottom line. They compare the cost of litigation with the pecuniary return. A plaintiff’s threat to sue is credible only if trial has a positive expected value—if the return exceeds the cost. Thus, if a civil plaintiff were able to dictate monetary outcomes in the same way that a criminal prosecutor is said to dictate criminal charges and sentences, the civil plaintiff would not face much of a credibility problem. She would simply sue for a high enough recovery (exceeding her litigation costs), would easily find a contingency fee lawyer to represent her, and would secure a settlement. The power to dictate trial outcomes would ensure that the case has a positive expected value and by and large solve the credibility problem in civil cases. Not so, however, in criminal cases. Here, the power to dictate outcomes does not resolve the credibility problem for the prosecutor. If the prosecutor’s threat is not credible, it is because she does not have the resources to pursue this case, however meritorious it might be. No matter how great the value of the conviction or the sentence is to the prosecutor, and how much it exceeds the cost of trial, when her prosecution capacity is fully exhausted, the prosecutor’s threat to take to trial another case is not credible. Having more or less control over the outcome of the case does not resolve the resource constraint that underlies the credibility problem.

26 Why, then, is it commonly believed that prosecutors can credibly threaten to prosecute and secure favorable plea bargains with more defendants than they can feasibly take to trial? If the prosecutor cannot proceed to trial against more than a few defendants, why do so many defendants surrender to the seemingly noncredible threat to prosecute and agree to plea bargains? Why, in other words, do they not call the prosecutor’s bluff?

## 2.2. Existing Explanations

27 The literature on litigation and settlement in the civil context provides several explanations why seemingly noncredible threats—ones that are

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14 A limited exception is qui tam actions brought by private individuals on behalf of the United States. See *The False Claims Act*, 31 U.S.C. § 3729 et seq. For a history of qui tam actions, see *Vermont Agency of Natural Resources v. United States ex. rel. Stevens*, 529 U.S. 756, footnote 1 (2000). Qui tam actions are limited to specific subject matters. More importantly, they are initiated by the private individual, not by the government.

too costly to carry out—can become effectively credible and succeed in extracting settlements.<sup>15</sup> Let us briefly discuss some of these explanations and explore whether they are viable in the criminal context as well.

### 2.2.1. Defendants' "Upfront" Costs

Noncredible threats gain partial credibility through asymmetries in the parties' cost structure.<sup>16</sup> Consider a prosecutor who exhausted her budget and cannot take another case to trial. Further assume that this fact is known to the defendant. Even under these circumstances the prosecutor may be able to extract a plea bargain. The defendant will choose to take a plea, if the prosecutor can impose significant costs on the defendant before the resource-laden stages of the prosecution commence.

To take a concrete example, consider a defendant who did not make bail and is held under arrest. This defendant is incurring significant costs. Moreover, imposing such costs on the defendant is costless (or nearly so) to the prosecutor. Accordingly, even when a trial is known to be unfeasible for the prosecutor, a defendant who did not make bail will take a plea bargain with a sentence that does not exceed his expected pretrial jail time. It is the threat to impose a significant upfront cost on the defendant that is credible, not the threat to pursue the case all the way through trial. Accordingly, the plea sentence in these situations will reflect not the expected sanction at trial but rather the expected pretrial costs that the prosecutor can impose on the defendant.

Although this explains some of the success of resource-constrained prosecutors in extracting plea bargains, it probably cannot account for the breadth of the plea bargaining phenomenon. The defendant's right to a speedy trial ensures that the pretrial detention is not too onerous, thus limiting the pretrial costs the prosecutor can impose on the defendant. Moreover, there seems to be a consensus among commentators that plea sentences reflect more than just the cost to defendants of pretrial incarceration. Some commentators laud the plea bargain institution for reflecting the actual sentence that would be awarded in trial—for being the "shadow of the law" (Stuntz 2004, 2560–61). Other commentators highlight the great control prosecutors have in affecting the magnitude of the plea sentence—suggesting that plea outcomes reflect the charges, not merely some costs,

15 For an excellent and accessible survey, see Bebchuk (1998, 551–54).

16 The civil analog here is David Rosenberg & Steven Shavell (1985, 3–13).

the defendant can be made to bear upfront (Stuntz 2004, 2558). Thus, the credibility of threats to prosecute must rest on a more robust foundation.

### 2.2.2. Defendants' Uncertainty

31 Another explanation that gained prominence in the civil litigation literature for the success of noncredible threats in extracting settlements focuses on defendants' uncertainty. In the civil context, if a defendant does not know whether the plaintiff is credibly threatening or merely bluffing, it is often the prudent strategy to settle.<sup>17</sup> Does this explanation help resolve the credibility-of-threats-to-prosecute puzzle?

32 Criminal defendants, like civil defendants, might be uncertain about factors that affect the potential trial outcome. They may not know all the evidence the prosecutor has or is likely to acquire and the charges she might pursue. They also cannot accurately estimate the sentence they are likely to receive. Thus, defendants are often uncertain about factors that determine both the probability of conviction and the magnitude of the sentence. In the civil context, the defendant's uncertainty about the trial outcome implies uncertainty about the credibility of the prosecutor's threat to sue. Accordingly, such uncertainty induces rational defendants to agree to settlements, even when they recognize the likelihood that the threat to sue is not credible.<sup>18</sup>

33 It is less clear, though, that uncertainty about factors that affect the outcome at trial would have the same plea-inducing effect in the criminal context, and it is therefore questionable whether the uncertainty factor resolves the credibility puzzle. True, criminal defendants might be uncertain about the merits of the prosecutor's case and the outcome of trial. But the problem of credibility in threats to prosecute, recall, arises not from weak merits, but rather from the absence of prosecutorial resources to pursue most meritorious cases. This factor—the resource constraint—is widely known and recognized by defendants.<sup>19</sup> Like everyone else, defendants surely understand that the prosecutor cannot afford to take more than a few pending cases to trial.

17 The classic demonstration of how asymmetric information can lead to the settlement of NEV suits can be found in Bebchuk (1988, 437–49). See also Avery Katz (1990, 3–27).

18 See Bebchuk (1998, 552); Bebchuk (1988, 442–447); Katz (1990, 9); Barry Nalebuff (1987, 201–02).

19 Even when the prosecutor's *budget* is known with certainty, there may be some uncertainty about her *de facto resources*: An assistant working at the court can be asked to stay longer, etc. Still, this uncertainty is not large enough to fully explain the credibility puzzle.

True, defendants do not know when exactly the prosecutor would run out of resources and whether a trial in their individual case is within the budget. There is uncertainty about how exactly the prosecution's budget is allocated. But surely, if the resource constraint is as severe as it is often portrayed to be,<sup>20</sup> defendants ought to know that the probability that their case would fall within the trial budget is very low. Such low risk, even if augmented by some psychological bias, is unlikely to drive defendants to plea. Even with uncertainty about all other factors, defendants know enough about the resource constraint to refuse to surrender to noncredible threats to prosecute.<sup>21</sup>

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### 2.3. Defendants' Budget Constraint

The credibility puzzle focuses on the prosecutor's resource constraint. What about the defendants' side? Defendants, too, face a tight resource constraint, perhaps even tighter than the prosecutor's. They are normally represented by an overworked and underfinanced public defender's office and have no practical means to mount a reasonable defense at trial. It might be conjectured, then, that it is the defendants' resource constraints that explain why prosecutors succeed in extracting harsh plea bargains. The defendants simply cannot afford to say "no" to a plea bargain and to conduct a trial.

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This conjecture probably stems from the intuitive premise that the prosecutors have greater bargaining power the more resource-strapped the opposing defendants are. Thus, along the same intuition, when defendants have even less resources than the prosecutor, the superior bargaining power would naturally translate into harsh plea bargains. This conjecture, however,

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20 See Stuntz (2004, 2554–55); Landes (1971, 64–74); Easterbrook (1983, 295–96); Church (1979, 522).

21 The civil litigation and settlement literature provides other compelling theories that explain the credibility of threats to sue. See Bebchuk (1998, 551–54). But none of these solutions explains the success of the budget-constrained prosecutor. One such solution explains how even a plaintiff with high litigation costs can extract a settlement when she incurs her litigation costs incrementally with many rounds of bargaining potentially occurring along the way. See Bebchuk (1996, 15–19). This divisibility-of-costs feature cannot explain the prosecutor's success across many cases with a budget that can fund only a few trials. Another important set of explanations focuses on the plaintiffs' fee arrangements with their attorneys. See, e.g., Lucian A. Bebchuk & Andrew T. Guzman (1996); Robert H. Mnookin & D. Croson (1996). But because prosecutors cannot "contract out" cases (as noted in Section 2.1 above), these fee-contract solutions do not apply in the plea bargain context. Yet another solution from the civil litigation and settlement literature involves the credibility-enhancing power of reputation. This solution also fails to account for the success of the budget-constrained prosecutor. See *infra* Section 3 (before Section 3.1).

is not valid. It is true that bargaining power depends on the relative cost of trial, but this relative cost calculus becomes relevant and might shape the outcome only when the prosecutor has a credible threat to go to trial. Only then would the defendant's cost of trial affect his tendency to surrender to the plea offer. If, however, the defendant knows that the prosecutor does not have a credible threat, the defendant recognizes that trial is not a viable concern and need not worry about his own cost of defense. Thus, as long as there is no independent explanation for why the prosecutor's threat is credible, a defendant's budget constraint cannot by itself resolve the puzzle.

37 To further understand this point, assume that all defendants act as one in the interest of defendants as a group. The defendants' optimal strategy will be to reject harsh plea offers and force the prosecutor to take cases to trial. Given defendants' budget constraints, they will not expect to mount an effective defense at trial. Rather they will simply plead "not guilty" and force the prosecutor to bear the heavy burden of proving guilt beyond a reasonable doubt in each case. The budget-constrained prosecutor will be able to conduct only a small number of trials and will thus drop most cases or, more likely, offer more favorable plea bargains.

38 This claim, that defendants' resource constraints are irrelevant to the credibility of prosecutors' threats, is driven by an institutional asymmetry between the prosecutor and the defense. The prosecutor must invest significant resources to secure a conviction even when the defense invests little, or nothing, to counter the attack.<sup>22</sup> But note that to demonstrate the claim we assumed that defendants act as one in pursuit of their common interest—clearly an unrealistic assumption. The solution to the credibility puzzle lies in the lack of coordination between defendants, not in the defendants' budget constraints. Section 3, which we now turn to, presents the main thesis of this paper: defendants' collective action problem, we argue, explains why prosecutors can make credible threats to prosecute.

### 3. DEFENDANTS' COLLECTIVE ACTION PROBLEM

39 The paradigmatic civil litigation involves a single plaintiff and a single defendant. The literature on civil litigation and settlement has focused on this paradigmatic case in its effort to explore the factors that render threats

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22 This argument fails if the prosecutor can cheaply impose significant upfront costs on the defendant. There is no reason to believe that the prosecutor has such power. See Section 2.2.1.

to sue credible. But the criminal litigation context is different. While each criminal case still involves a single prosecutor and a single defendant, the strategic structure of each interaction is affected by another feature: the prosecutor is a repeat player. That is, a single plaintiff, the prosecution, faces many disperse defendants. In this part we demonstrate that the one-against-many feature significantly affects the credibility calculus. Facing many separate and uncoordinated defendants bolsters the bargaining credibility of the prosecutor and overcomes even a severe resource constraint.

To be sure, several distinct aspects of the one-against-many feature can affect the credibility of the threats made by the prosecutor. One important aspect is reputation. Generally, a single repeat player who has to deal with many one-shot players over time has reputation concerns that increase the stakes for this party, bolstering her drive to insist on favorable terms in each individual bargain and thus rendering her threat more credible. Although the prosecutor surely has a reputation to worry about, it is not clear that this factor can help make her threats to prosecute more credible because it is the resource constraint (and not just the small one-shot stakes) that hurt the credibility of her threats.<sup>23</sup>

Another important aspect of the one-against-many feature has to do with bargaining power. The prosecutor has been analogized in the literature to a monopolist—the only seller in the market for plea bargains—whereas defendants are dispersed small “transactors.”<sup>24</sup> Like a monopolist, then, the prosecutor is deemed to have the leverage to extract favorable bargains. But again it is not clear that the monopoly analogy resolves the credibility puzzle. A monopolist makes a threat that “I will not sell the goods at a lower price,” which he has an incentive to carry out because the monopoly price maximizes profit. But a monopolist who does not have the resources to make good on his threat against all counterparties cannot dictate the

23 Reputation can bolster credibility in the civil context. In the civil context, a lawyer who is a repeat player can develop a reputation for pursuing NEV suits and use this reputation to extract settlements. The threat to take one NEV case to trial becomes credible despite the immediate loss from making good on this threat because of the future settlement gains the lawyer expects to reap from building or maintaining a tough reputation. See Amy Farmer & Paul Pecorino (1998, 147–57). The reputation model is based on the lawyer’s ability to suffer an immediate loss that would be recouped in later periods. A prosecutor, on the other hand, after exhausting her budget for the current period, simply cannot take another case to trial. While a private lawyer can easily invoke inter-temporal arbitrage, a prosecutor operating within the confines of a government budget process has a limited ability to borrow. See *infra* note 30 for a discussion of the alternative assumption that the prosecutor can “borrow” against next year’s budget.

24 See, e.g., Easterbrook (1983, 320); Jeffrey Standen (1993, 1477–88).

terms of the transaction. For example, a monopolist software vendor who does not have the resources to detect and sue unauthorized users of the software cannot effectively deter individuals from engaging in unauthorized use. The prosecutor might be a monopolist, but her threat—like that of the software monopolist—must be backed up by an enforcement capacity, which she generally lacks. Her monopoly in the plea market does not resolve the credibility puzzle.

42 Thus, despite recognizing the one-against-many feature, the puzzle remains: how can a resource-constrained prosecutor credibly threaten to take multiple defendants to trial? In this part, which is the core of the paper, we hope to resolve the puzzle by focusing on another aspect of the one-against-many feature. Instead of the reputation and monopoly aspects, we highlight a more subtle strategic advantage that the prosecutor has vis-à-vis the defendants on account of being one against many—the ability of the prosecutor to overcome her budget constraint by exploiting the defendants' collective action problem. The analysis shows that the prosecutor has credible threats, despite operating under a limited budget, as long as defendants cannot coordinate their bargaining strategies and are restricted to bargain individually with the prosecutor.

### 3.1. Model

43 The players in this model are a prosecutor,  $P$ , and the  $N$  defendants,  $D_1, \dots, D_N$  charged by the prosecutor. Each defendant  $D_i$  has an expected trial sentence,  $s_i^t$  which is the expected sentence that this defendant will receive at trial, if the prosecutor takes the case to trial. We assume that  $\forall i, j, s_i^t \neq s_j^t$ .<sup>25</sup> Without loss of generality, we order the  $N$  defendants in descending order, denoting the defendant with the highest expected trial sentence  $D_1$ , the defendant with the second-highest expected trial sentence  $D_2$ , etc. The players' objective functions are as follows: Each defendant wishes to minimize his expected sanction, and the prosecutor wishes to maximize the sum of expected sanctions.<sup>26</sup> The prosecutor is operating under a budget constraint.

25 With the host of factors that affect the expected trial sentence, this assumption seems realistic. Our main results continue to hold when one or more subsets of defendants share the same expected trial sentence.

26 The assumption about the defendants' objective functions is not controversial. The assumption about the prosecutor's objective function, while being the conventional assumption in the law and economics literature (see, e.g., Landes [1971]), is more controversial. See, e.g., E. L. Glaeser, D. P. Kessler & A. M. Piehl (2000). We argue below that our results hold under more realistic assumptions about the prosecutor's objective function.

For simplicity, we assume that she can afford to conduct only one full-blown trial. We assume that the costs of all trials are identical. We also assume (and this assumption will be relaxed below) that the cost of a plea bargain with each of these defendants is zero.

Consider, initially, the case in which parties have perfect information. Here, the parties share the same prediction as to the trial outcome and thus share the assessment of the expected sentence. Also, defendants recognize the prosecutor's resource constraint—they know the prosecutor can take at most one defendant to trial. They know that if all of them were to turn down the plea bargains, only one of them would be tried and the other  $N-1$  would walk away free. In this case, if the outcome in the model is such that defendants agree to harsh plea bargains, we know that this outcome is not due to defendants' uncertainty. 44

The timing of the game is as follows: At stage 1, P makes plea offers to each of the  $N$  defendants,  $S = (s_1, \dots, s_N)$ . These offers are publicly observed. At stage 2, the defendants decide simultaneously (and noncooperatively) whether to accept or reject their respective offers. We make the tie-breaking assumption that a defendant  $D_i$  faced with a plea offer with a sentence equal to his expected trial sentence will accept that offer. Thus, if this defendant  $D_i$  knew for sure that he would be brought to trial and receive a sentence of  $s_i^t$ , this defendant would also accept a plea offer of  $s_i = s_i^t$ . Defendants that accept plea offers immediately bear the sanction and exit the game. At stage 3, P selects one of the rejecting defendants for trial. 45

We can now state our main result: 46

*Proposition:*

In the unique equilibrium, P offers  $S = (s_1, \dots, s_N) = (s_1^t, \dots, s_N^t)$  and all plea offers are accepted.

*Proof:*

We first prove existence. At stage 3, P will select for trial the rejecting defendant with the highest expected trial sentence. It is, therefore, a dominant strategy for  $D_1$  to accept P's offer at stage 2, given that  $D_1$  accepts it is a dominant strategy for  $D_2$  to accept P's offer, etc. We have shown that P can induce her most favorable outcome by offering  $S = (s_1, \dots, s_N) = (s_1^t, \dots, s_N^t)$ . Uniqueness follows from the observation that P cannot do better, and in fact will do worse, with a different offer vector. Any offer  $s_i < s_i^t$  will surely be accepted, but it will reduce P's payoff. Any offer  $s_i > s_i^t$  will be rejected. This means that defendants  $D_1, \dots, D_N$  will reject their respective offers. Because

P can afford only one trial, an outcome with more than one rejection will lower P's payoff.<sup>27</sup>

47 *Discussion.* The prosecutor will make  $N$  plea offers to the  $N$  defendants—offers that would render each defendant just barely better off as compared to the trial option—and all  $N$  offers will be accepted.<sup>28</sup> How can the prosecutor extract  $N$  plea bargains when she has enough resources to try only one case? If defendants are aware of the prosecutor's limited resources, wouldn't two or more defendants reject the plea offer? Wouldn't the prosecutor be forced to drop all but one case? The prosecutor has a credible threat to prosecute only a single case. How can this limited credibility be leveraged into  $N$  plea bargains?

48 In our model, the answer relies on an unraveling that led  $D_1$  to accept the prosecutor's harsh offer, then  $D_2$ , and so on. The prosecutor's threat to take  $D_1$  to trial is credible, and, therefore,  $D_1$  accepts. Now that  $D_1$  is out of the picture, having accepted the prosecutor's plea offer, the prosecutor's threat to take  $D_2$  to trial becomes credible, and, therefore,  $D_2$  accepts. And so on. The prosecutor's clear, and publicly known, priorities—which in this model are based on the expected trial sanction—allow her to effectively make  $N$  credible trial threats with resources sufficient for only one trial.

49 Note that even though we assumed (unrealistically) that each defendant publicly observes the vector of plea offers made to all  $N$  defendants, this assumption is not necessary to attain the result. For the equilibrium to hold, a defendant needs to know the prosecutor's objective function, as defined in our model. That is, the defendant needs to know the priorities the prosecutor follows and his own place in this order. We will relax this assumption below, but for now it is worth noting that a clear, and publicly known, priority list will generate a pro-prosecutor outcome even if it is based on factors other than the severity of the sanction. As long as prosecutors are able to identify sequencing strategies and other divide-and-conquer strategies and make it publicly known that they subscribe to these orderings, they will be able to bargain with each defendant as if they have a credible threat to take this defendant to trial.

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27 The logic implies that P can offer  $s_N > s'_N$  without reducing her payoff. In this trivial sense, the equilibrium identified in the proposition is not unique.

28 Although reality is clearly not as extreme, there is a strong belief among commentators that budget-constrained prosecutors are able to extract many harsh plea bargains. See Stephanos Bibas (2004, 2517–18); Barkow (2006, 1024–28); Stuntz (2004, 2561–62).

Also note that the pro-prosecutor outcome does not depend on any technical assumption about the prosecutor's bargaining power. To see this, replace our assumption that P makes offers at stage 1 with the alternative assumption that the defendants make offers at stage 1. At stage 3, P will select for trial the defendant  $D_i$  for whom the difference  $s_i^t - s_i$  is the largest. Anticipating P's selection rule, all defendants will offer a plea sentence equal to the expected trial sentence:  $s_i = s_i^t$ . The prosecutor's power does not come from an assumption about bargaining protocol (in our model, the ability to make take-it-or-leave-it offers), but rather from an institutional feature of the criminal justice system—from the prosecutor's ability to determine which defendant will stand trial. 50

### 3.2. Extensions

#### 3.2.1. *Knowing the Priorities*

As mentioned previously, a prosecutorial priority list must be public knowledge for it to succeed in inducing all defendants to accept harsh plea bargains. But defendants, even after consulting knowledgeable defense attorneys, will not generally have perfect information about the prosecutor's priorities.<sup>29</sup> Sure, a defendant indicted for manslaughter would know that his case is located above any theft case on the priority list. But he might not know the prosecutor's priorities among the possibly numerous manslaughter cases. This defendant could anticipate that if he were to stonewall and reject the harsh plea offer, he might not be at the top of the priority list and might eventually escape with a lesser sanction. The murkier the priority list, the smaller the perceived likelihood of being singled out for trial and the more grounded the choice to stonewall. At the extreme, if defendants have no information about the priority list, the stonewalling strategy has the strongest allure. 51

But even though it is surely a reality that the priority list is not fully known, some murkiness would not break the pro-prosecutor equilibrium. 52

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29 Chief prosecutors, including the attorney general and U.S. attorneys at the federal level and state attorneys general and district attorneys at the state level, set priorities and often make these priorities public. See, e.g., United States Attorney's Office: Eastern District of New York. "Criminal Division." <http://www.usdoj.gov/usao/nye/divisions/crim/crim.html> (describing the office's priorities). These public statements, however, generally list only the office's top-priority offense categories and generally name rather broad categories of offenses (e.g., terrorism, organized crime, corporate fraud). They do not include a detailed ordering of offense categories. Defense attorneys, based on experience and communications with the prosecutor, will have a more complete and refined sense of the prosecutor's priorities.

Such murkiness would be inconsequential if the number of trials that the prosecutor can afford to conduct is large enough. When the priority list is murky, the stonewalling defendant perceives a reduced probability of being tried. But with an increased capacity to conduct trials, this reduction of probability effect is offset. Thus, the more resources the prosecutor has, the less publicly known the priority list needs to be. Put differently, the clarity of the priority list is a substitute for prosecutorial resources. For a severely resource-constrained prosecutor, the solution is to make his priorities crystal clear.

53 But what if prosecutorial resources are limited and the priority list is still murky? What if ten defendants are charged with manslaughter but the prosecutor can afford only a single trial and there is no clear priority among the ten? The prosecutor can still induce all manslaughter defendants, and all other defendants, to accept harsh pleas if the prosecutorial preferences dictating the internal priority within the manslaughter category are sufficiently weak. The prosecutor would then need to develop a reputation for pursuing, all the way to trial if necessary, any indicted defendant. Armed with such a reputation, the prosecutor would use a sequential strategy: indict the first manslaughter case that comes before her, even if other manslaughter cases in the pipeline are higher on the prosecutor's intra-category priority list, and this defendant would accept a harsh plea. The second manslaughter defendant to come before the prosecutor would similarly be indicted and plea. And so on. In place of a severity-based priority list, the prosecutor would follow a temporal priority list, pursuing cases according to the timing of the indictment. Because this strategy might at times conflict with the prosecutor's severity-based priorities, it can become credible only if the prosecutor's reputational concerns for sticking with an indictment are strong enough. And if this strategy is credible, it ends up not conflicting with the severity-based priorities: all defendants plea, and the prosecutor never has to sacrifice her true priorities.

### 3.2.2. Costly Plea Bargains

54 Can the prosecutor march all the way down the "priority list" and secure harsh plea bargains with *all* defendants? It was assumed thus far that plea bargains are costless and thus do not deplete the prosecutor's resources. But we know that they are not truly costless, and thus there is an upper limit to the number of pleas the prosecutor can negotiate. Therefore, our argument ought to be stated as follows: (1) The number of plea bargains the prosecutor can secure is much higher than the number of trials the prosecutor can afford to conduct;

and (2) in all plea bargains that she can afford to negotiate, the prosecutor can secure harsh sentences. Put differently, within our framework, the phrase “all defendants” has a specific meaning, referring to all defendants for whom there are enough prosecutorial resources to *plea*. This group is smaller than the set of all punishable offenders, but it is only smaller to the extent that plea bargains are costly to negotiate. This entire group accepts unfavorable pleas, despite the fact that only a small fraction of it can actually be taken to trial.

One qualification should be mentioned. The prosecutor cannot deplete her entire budget on pleas; she must keep enough unspent capacity in reserve to be able to take an unyielding defendant to trial, so that her threat remains credible. Namely, the very need to fuel the credibility of the threat makes it necessary to set aside some funds and thus to plea with fewer defendants.<sup>30</sup> The size of this “reserve fund” depends on how costly it is to conduct a trial against those defendants to whom the prosecutor offers a plea. It may well be that some defendants are costlier to try—so costly that the reserve fund would not suffice. The prosecutor, we now see, faces a trade-off: the greater the reserve fund, the more complex the cases she can credibly threaten to try and the greater her ability to secure bargains in these complex cases. The flip side, though, is that a greater reserve fund leaves fewer resources for negotiating plea bargains.

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### 3.2.3. Imperfect Information

Our analysis should be further refined to account for imperfect information. Thus far we assumed that the expected trial sentence is common knowledge. This assumption implies that the prosecutor knows each defendant’s reservation price—i.e., the maximal plea sentence that the defendant would accept to avoid a trial. In reality, the prosecutor will have only imperfect information about defendants’ reservation prices.<sup>31</sup> This implies another trade-off for the prosecutor. A harsher plea offer means a higher sentence, if accepted by the defendant. But a harsher plea offer also means a smaller probability that the offer will be accepted by the defendant. The prosecutor will,

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30 If, however, the prosecutor can borrow against next period’s budget, she need not hold any resources in reserve, not even resources equal to the cost of one trial, and can increase the number of plea bargains accordingly. Note that the ability to borrow generates credibility, and actual borrowing does not have to take place.

31 See Scott and Stuntz (1992, 1937–1946), where the authors note that prosecutors have no easy way to tell which plea a defendant will accept, given limited facts and a strong incentive for guilty defendants to give the same signals that innocent ones do.

therefore, choose between a harsher plea offer with a lower probability of acceptance and a more lenient plea offer with a higher probability of acceptance. Generally, this trade-off produces plea offers with sentences below the defendant's reservation value.<sup>32</sup> And this difference between the reservation sentence and the plea offer is higher when the prosecutor's budget constraint is tighter because a prosecutor with a tight budget would be especially careful not to make a plea offer that would lead the defendant to opt for trial (especially because a rejection by one defendant increases the likelihood of rejection by other defendants).<sup>33</sup> The prosecutor's imperfect information leads her to exercise more restraint and therefore shifts the equilibrium plea bargains downward. But, importantly, the resulting equilibrium sentences are still be much higher than the sentences that defendants could obtain if they bargained collectively with the resource-constrained prosecutor.

57 Incorporating imperfect information adds an important dose of reality to our analysis. In particular, in the perfect information version of our model the plea rate is 100%, which is clearly unrealistic. With imperfect information, the prosecutor might inadvertently make a plea offer exceeding the defendant's reservation sentence, resulting in trial. Although the limits on the prosecutor's information should be considered, these limits should not be overstated. The defendant surely has better information than the prosecutor about whether he committed the offense. But the defendant also has a strong incentive to reveal to the prosecutor any and all evidence of his innocence. And, innocence itself, as opposed to evidence of innocence, has no impact on the outcome at trial, and thus should have no impact on plea bargaining.<sup>34</sup> In addition, the considerable influence the prosecutor has over charges and trial sentences implies that the prosecutor, to a large extent, can determine the defendant's reservation price.<sup>35</sup>

#### 4. CAN DEFENDANTS OVERCOME THE COLLECTIVE ACTION PROBLEM?

58 A prosecutor with a limited budget is able to extract many harsh plea bargains because she negotiates with each defendant individually, along

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32 Compare this to Bebchuk (1984, 406–09), deriving similar results in a civil settlement context.

33 See also Gazal-Ayal (2006, 2320–2321).

34 See Schulhofer (1992, 1984). In reality, however, an innocent defendant may reject a plea offer and insist on trial even when the evidence of his innocence is weak.

35 See Stuntz (2004, 2560, 2562).

a predetermined sequence. If defendants could bargain collectively, they would be able to get much better deals—deals that reflect the prosecutor’s budget constraint. Defendants’ collective action problem is the core reason a resource-constrained prosecutor can induce defendants to accept harsh plea bargains. But collective action problems can often be overcome. Other collectives have found ways to coordinate and overcome problems of similar structure, bridging between the self-interest and collective interest. Can defendants overcome their collective actions problem? In this section, we examine several reasons defendants cannot coordinate and cannot join forces and unite against the prosecutor. In doing so, we hope to provide a more robust foundation for the claim that it is the defendants’ collective action problem that explains the pro-prosecutor outcome of the plea bargain institution.

#### 4.1. Coordination by Defendants Themselves

If defendants could coordinate they would obtain plea bargains reflecting the prosecutor’s budget constraint. Specifically, if all defendants could commit to a stonewalling strategy—to reject any plea offer above a certain threshold—then they would all be better off. Such coordination, however, is especially difficult in the plea bargaining context. First, such multilateral coordination requires that all relevant parties be identified in advance. But most defendants do not know each other. Moreover, the prosecutor can begin plea bargaining with suspects even before they are charged, further reducing the possibility of a coordination. Second, even if a sufficiently large number of defendants know each other—from previous criminal activities or from time served in the same prison—coordination is difficult. Effective coordination requires much more than familiarity with the many committing parties. These parties must be able to communicate—to get together and agree on the commitment strategy. Substantive communication across many individuals is difficult.

Third, the coordinated commitment to stonewall must be self-enforcing because defendants cannot make it binding by entering a formal, enforceable, legal contract that penalizes a defendant for accepting a prosecutor’s plea offer.<sup>36</sup> To be sure, commitments may be effectively binding even if no legal-contractual means are available to enforce them. They can become binding

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36 *Restatement (Second) of Contracts* § 192 cmt. a (noting that promises that jeopardize an individual’s life or freedom severely enough are unenforceable on grounds of public policy).

as a matter of honor (among thieves, so to speak), or they can become binding for the fear of retaliation. As to honor, it is occasionally observed that small criminal teams manage to maintain a coordinated strategy vis-à-vis the prosecutor, uniformly refusing to plea and successfully securing a favorable outcome. But even within small teams breakdowns occur when prosecutors manage to alienate individual defendants from the collective, usually by offering them favorable plea bargains (or threatening to offer the favorable bargains to their counterparts). If honor cannot cement coordination even within small and cohesive criminal communities, it surely cannot be the basis for a binding commitment amongst the entire class of prosecuted criminals.

61 The fear of retaliation can be another reason an individual defendant will refrain from defecting from the stonewalling strategy. Defectors might be punished by other defendants through illegal means, such as by force. But unlike state witnesses whose cooperation with the prosecution is visible and risky and whose conduct poses a direct threat to an identified violent defendant, plea bargainers are often invisible, their defection harmful only in a more subtle and abstract fashion. Thus, defection by plea bargaining can often pass unnoticed, rendering it effectively unpunishable.

#### 4.2. Coordination Through Lawyers

62 As argued previously, it is difficult for defendants to coordinate among themselves. But perhaps coordination can be attained with the help of a third party, the defense attorney. Some defense attorneys, or a cohesive group of defense attorneys like the public defender's office, represent many defendants. If the public defender's office could enable coordination among the many defendants that it represents, it would be able to secure better plea bargains for its clients. Can the public defender's office facilitate coordination among defendants?

63 The public defender's office could help overcome some of the impediments to coordination. Specifically, the public defender's office can solve the problem that defendants do not know each other in advance. It can also facilitate communication among defendants. But the public defender's office cannot make a defendant's commitment to the stonewalling strategy binding. And, more fundamentally, the public defender's office cannot undo the basic strategic impediment to coordination. No conventional intervention by an attorney can change the fact that each individual defendant—when his turn arrives under the priority list—would find it desirable to deviate from the stonewalling strategy and accept the prosecutor's enticing offer.

The public defender's office can solve the collective action problem that plagues its clients only if each public defender forgoes her duty of loyalty to the individual client. There are examples where public defenders have done just this. Occasionally, faced by what they perceive to be intolerable behavior by the prosecution, public defenders have gone on "strike" and taken all cases, or all cases of a certain type, to trial—or at least threatened, explicitly or implicitly, to do so.<sup>37</sup> And, there is anecdotal evidence that such strikes or threats to strike indeed persuaded the prosecution to offer better deals to defendants. Professor Alschuler interviewed a New York public defender who described the following incident: "Some prosecutors in this city once concluded that forgery was a worse crime than robbery.... They discovered that forgery defendants would not plead guilty to felony charges, and they quickly came back to their senses" (Alschuler 1975, 1250).<sup>38</sup>

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To wield such influence on the prosecution, public defenders must be willing to put the good of defendants as a group above the good of their individual client.<sup>39</sup> Sacrificing individual defendants for the greater good is, however, a problematic strategy—one that cannot be sustained indefinitely, and perhaps not at all. A Manhattan prosecutor, interviewed by Alschuler, argued that "[i]n a Legal Aid strike, a few defendants might go to trial and hold things up, but the stiff sentences that they received would quickly persuade the Legal Aid Office to reconsider its position."<sup>40</sup>

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Moreover, sacrificing individual defendants for the greater good runs contrary to the rules of ethics that require loyalty to the individual client, not to defendants as a group (Alschuler 1975, 1249).<sup>41</sup> The ABA Standards

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37 See Alschuler (1975, 1249–51). See also Margareth Etienne (2005, 1236–40).

38 Alschuler offers additional examples and illuminating analysis of the "strike" tactic and its effects. *Ibid.*, 1248–1255.

39 As Alschuler explains: "A defender office may decide to seek the greatest good for the greatest number and, in effect, to sacrifice today's client for tomorrow's. It is as though all members [of the defendant group] were engaged in collective bargaining." *Ibid.*, 1250.

40 Put differently, the prosecution can "break" the public defender strike.

41 See *Williams v. Reed*, 29 F. Cas. 1386, 1390 (D. Me. 1824); Etienne (2005, 1253). According to the ABA Standards, "[d]efense counsel should not seek concessions favorable to one client by any agreement which is detrimental to the legitimate interests of a client in another case." See American Bar Association (1993, Standard 4–6.2, Section d). On the other hand, if securing a more favorable plea bargain through coordination among defendants is a "legitimate interests of a client in another case," then Standard 4–6.2(d) could help sustain the pro-defendant equilibrium. It is doubtful, however, that "legitimate interests" would receive such a broad interpretation.

require that “[d]efense counsel...keep the accused advised of developments arising out of plea discussions...conducted with the prosecutor,” and that “[d]efense counsel...promptly communicate and explain to the accused all significant plea proposals made by the prosecutor.”<sup>42</sup> And after the prosecutor’s plea offer is explained to the defendant and the defendant rationally decides to accept, the defense attorney must abide by her client’s wishes and communicate this acceptance to the prosecutor.<sup>43</sup>

67 Does a defense attorney’s ethical obligation to her client necessarily mean that she cannot help her client out of the collective action problem? The code of ethics prevents the attorney from sacrificing her client for the good of defendants as a class. It does not prevent the attorney from promoting her client’s well-being. And, as noted previously, the individual client, if asked *ex ante*, would want the attorney to reject a plea offer that is intended to break the pro-defendant equilibrium, under condition, of course, that all other attorneys are similarly instructed to reject such offers. Put differently, *ex ante* defendants want to tie their own hands. The attorneys in the public defender’s office can provide the rope.

68 Imagine that in addition to the customary power of attorney that each defendant must sign, defendants represented by the public defender’s office are asked to sign another form—a form instructing the attorney to reject any plea offer designed to break the pro-defendant equilibrium without bringing such offer to the defendant. Defendants should be given the option not to sign this form. Defendants who wish not to sign the form are represented by lawyers in the “No Coordination” division of the public defender’s office. Defendants who sign the form are represented by lawyers in the “Coordination” division of the public defender’s office. As explained previously, most defendants would be happy to sign, leaving a very small “No Coordination” division.

69 Unfortunately, this solution, though theoretically attractive, is impractical. Even if lawyers can provide a commitment device, this device will not work if the substance of the commitment is not well-specified. Which plea offers can a defendant accept and which offers must he reject as part of the collective stonewalling strategy? With different defendants charged with different crimes under different circumstances, it is difficult to distinguish between a plea offer that is lenient because of evidentiary problems on the

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42 American Bar Association (1993, Standard 4–6.2, Sections a, b).

43 See American Bar Association (2007, Rule 1.2(a)). See also Alschuler (1975, 1252).

prosecutor's side or mitigating circumstances on the defendant's side and a plea offer that is lenient because it is intended to break the stonewalling strategy. Defense attorneys would be reluctant to accept responsibility for making such a distinction, and defendants would be reluctant to cede discretion to their attorneys.

Perhaps the way to overcome this practical problem is to offer defendants the option to make a more crude arrangement: a No-Plea commitment. The defense counsel would ask each defendant whether he is willing to sign the No-Plea form. Those who sign would confront the prosecutor with the binary choice of either pursuing the case to trial or dropping the charges. If many defendants sign such a form, the prosecutor would have to drop the charges in the great majority of cases.<sup>44</sup> This mechanism is easier to implement. The No-Plea form does not require subtle definitions to be understood and carried out. In fact, it does not even require joint representation by a public defender. Even if defendants are each represented by a different attorney, a uniform No-Plea form can be utilized and can create a pool of nonbargaining defendants. But even this elegant solution is doomed to fail.

The problem is that, although most defendants in the No-Plea group would be better-off, as charges against them will be dropped, those defendants at the top of the prosecutor's priority list will not be better-off because they will be taken to trial. Accordingly, these defendants will refuse to sign the No-Plea form. But after the top-priority defendants opt-out, joining the No-Plea group becomes a losing prospect for the second-priority defendants—and they will opt-out. The now-familiar unraveling effect prevents the formation of a No-Plea group. This unraveling could be prevented if side payments were possible. The low-priority defendants would compensate the top-priority defendants who would be selected for trial. Indeed, side payments play an important role in facilitating coordination. Specifically, they have been proposed, as a theoretical matter, in the civil settlement context.<sup>45</sup> In the criminal context, however, sentences are often measured in years of incarceration, not dollars, and low-priority defendants often lack the resources necessary to

44 A related mechanism would offer defendants the option to sign a contract saying that they will not plea bargain if more than a threshold percentage, say 75%, of defendants also sign the agreement.

45 See Che & Spier (2007, 11).

compensate the top-priority defendants, even if freedom can be bought. The inability to support coordination with side payments is another element distinguishing the civil and criminal contexts. And it presents another impediment to coordination in the criminal context.

72 Another problem with the No-Plea commitment is the difficulty to enforce it *ex post*. Even a signed No-Plea obligation is always revisable. It is not a contract that can be enforced. In the same way that other defendant strategies unravel in the presence of temptations offered by the prosecutor, the No-Plea strategy is vulnerable. If a sufficiently attractive plea is offered to one defendant, he might choose to set aside the No-Plea vow and accept the plea.<sup>46</sup> This practical difficulty is reinforced by an ethical dilemma. On their face, the Rules of Professional Conduct would allow a defendant to instruct his attorney not to accept a plea offer and not to relay such an offer to him.<sup>47</sup> But, in practice, the obligation imposed by the rules of ethics is not clear. While an arrangement delegating settlement authority to the lawyer is common and clearly permissible in the civil context, the situation is more complicated in the criminal context.<sup>48</sup>

73 Consider a defense attorney representing a client who faces 20 years in prison if convicted. The prosecutor, trying to break the stonewalling strategy, offers a very generous plea bargain, e.g., with no prison time. The attorney, following her client's instructions, rejects the offer and does not communicate it to her client. The coordinated stonewalling is preserved. The prosecutor then decides to use her limited budget to take this specific case to trial and secures a conviction and a 20-year sentence. The defendant then learns that a no-prison-time plea bargain was offered. The defendant may well file a disciplinary complaint against the attorney and would probably challenge the conviction in post-conviction proceedings, arguing that the attorney's

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46 In certain cases, this practical difficulty can be overcome if the defense attorney, following the written instructions of her client, refuses to relay any plea offer to the client. It seems unlikely, however, that the prosecutor will not find a way to convey the plea offer to the defendant, especially since *ex post* the defendant has a strong incentive to hear the prosecutor's offer.

47 See American Bar Association (2007), Rule 1.4, Comment [2]: "...a lawyer who receives from opposing counsel an offer of settlement in a civil controversy or a proffered plea bargain in a criminal case must promptly inform the client of its substance unless the client has previously indicated that the proposal will be acceptable or unacceptable or has authorized the lawyer to accept or to reject the offer."

48 As opposed to the decision to settle a civil suit, the decision to plead guilty cannot be delegated to an attorney. This reflects a fundamental difference between the civil and criminal contexts—a difference that limits the ability of the defense attorney to facilitate coordination among defendants.

conduct amounts to ineffective assistance of council in violation of the Sixth Amendment. And a court or a disciplinary tribunal might accept such an argument. The risk to the defense attorney can be substantial.<sup>49</sup>

Finally, even if public defenders somehow managed to unite defendants and organize them to overcome their collective action problem, it is not likely that this success would be long-lived. The public defender's office is set up and funded by the state. If it is too successful—if it forces the hand of prosecutors or organizes effective plea bargain strikes—the state can replace this system with a different one. For example, the state can contract out the representation of defendants to individual outside attorneys. By scattering representation across dispersed providers, coordination becomes impossible. The state, in other words, can influence the “contracts” between defendants and their attorneys to ensure that the collective action problem remains in place.

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## 5. EXTENSIONS

### 5.1. Non-Criminal Law Enforcement

We have argued that plea bargains, by exploiting defendants' collective action problem, allow prosecutors to leverage a limited budget into many convictions. The same is true in other contexts where a single enforcer faces multiple violators and can choose to prioritize some of the cases. If this priority list is widely recognized, the enforcer can “march down the list” and settle a case at a low cost rather than spend significant resources in a full-blown adjudication process. The ability to settle triggers the collective action problem and significantly expands the reach of a limited enforcement budget.

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Our analysis thus applies beyond the criminal context. In particular, it applies to administrative agencies such as the SEC, FTC, and FDA. For example, when the SEC enforces securities laws, it cannot afford to take to

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49 This risk, however, should not be exaggerated. Defendants have little incentive to file disciplinary complaints because there is no possibility of compensation to the aggrieved defendant. And, lawyers and judges file few complaints against other lawyers. Moreover, the disciplinary boards consist mainly of lawyers who tend to identify with the accused attorney and impose little to no sanctions. The risk of ineffective assistance of counsel claims can also be quite low. The Supreme Court indicated in *Strickland v. Washington*, 466 U.S. 668 (1984) and its progeny that, if the challenged action by the defense attorney was part of a strategic or tactical decision on the part of the attorney, a great deal of deference will be shown to that decision and the attorney's performance will not be deemed constitutionally deficient.

trial all the wrongdoers whom it charges with violations and with whom it eventually settles. And yet anecdotal evidence suggests that these settlements are not so lenient as to represent the low probability of trial. A recent example is the enforcement actions taken by the SEC against companies that engaged in options-backdating. At the end of 2006, the SEC was investigating over 100 matters relating to potential abuses of employee stock options.<sup>50</sup> It seemed unlikely that the SEC could take all these cases to trial or even to administrative adjudication.<sup>51</sup> Still threats of enforcement actions convinced many top executives to enter harsh settlements.

77 To be sure, the unique features to securities law can explain the rush to settle (e.g., the fear that a criminal judgment would operate as a catalyst for the soon-to-follow civil class action suit). But it is also plausible that the collective action dynamics we highlight affect the size of the consented penalty. For that to be the case, though, the SEC's priority list in going after violators has to be widely recognized. And yet, unlike the criminal prosecutor, the SEC enforces offenses that are not as easily ordered on a priority list. What constitutes the order of priority might change due to the political climate and public reactions to scandals. Still, there are reasons to believe that even here the defendants have a fairly good prediction of the agency's priorities. Defense attorneys are likely to act as accurate predictors of the current priorities of the agency because many of them were previously agency lawyers who continue to maintain close-knit ties with the agency. Moreover, some categories of offenses, such as insider trading and fraud, are widely known to hover around the top of the list. Thus, to the extent that the agency's enforcement priorities are clearly communicated to companies, the collective action problem in settlement emerges.

## 5.2. One-Against-Many Civil Cases

78 The collective action problem of the plea bargaining defendants in criminal law has a similar strategic structure to another common litigation scenario: the one-against-many litigation phenomenon in civil cases. We

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50 See Linda Chatman Thomsen (2006).

51 In fact, the director of the SEC's Division of Enforcement, Linda Chatman Thomsen, stated that her division does not expect to take enforcement actions against all the companies under investigation. *Id.* See also Christopher Cox (2006): "You should not expect that all of these investigations will result in enforcement proceedings. At the same time, we have to expect other enforcement actions will be forthcoming in the future."

are not referring here to suits in which a single entity faces off against a consortium of many (as in, say, class actions or suits joining multiple injurers as defendants). These are cases in which any collective action problem of the scattered parties is overcome by joining forces in litigation into one unified front. Effectively, at least at the litigation stage, these are cases of one-against-one. Rather, what we have in mind here are situations in which one party has *independent and non-joinable* disputes with a multitude of counterparties, each operating separately, each potentially reaching a different trial outcome, and each subject to separate settlement bargaining. Examples for these one-against-many disputes include large insurance company defending against numerous independent claims and an owner of copyrighted materials that are mass infringed pursuing damages claims against the scattered infringers.

In these civil disputes, even if the “one” is a large party who has significant litigation resources and meritorious claims (or defenses) against the “many,” it might not be able to afford litigating its claims all the way through the many trials, even though each of these trials would result in a favorable judgment. This party must settle the cases. The question, then, is: can this party secure favorable settlements? Does the absence of a credible threat to take every opponent to trial undermine its bargaining power over the terms of the settlement? How can parties in such a position, lacking the resources to take all cases to trial, nevertheless secure favorable settlements? 79

One can now readily recognize the strategic similarity between these scenarios and the plea bargaining context. Specifically, like the prosecutor in criminal law, the civil party who faces many opponents cannot credibly threaten to take all of them, or even a substantial subset of them, to trial. Even the mighty insurance companies (as defendants) or the music industry who owns infringed copyrighted materials (as a plaintiff) cannot litigate more than a small fraction of the disputes, and any threat to pursue more cases through litigation would be recognized as a bluff. A party in this situation can only hope to vindicate its legal position through settlements. And yet, despite the constraints this party faces in pursuing all cases simultaneously, it can employ priority lists and sequencing strategies similar to those available to prosecutors, to “divide and conquer” its counterparts. Being able to pinpoint its effort and pursue small subsets of disputes at a time, this party transforms the noncredible threat to pursue 80

all cases into a set of credible “small” threats to pursue the next item on the list.<sup>52</sup>

81 The music industry’s recent strategy of filing infringement suits against file-sharing users illustrates this approach. Even the mighty RIAA cannot afford to sue all infringers—there are many millions of them. Absent a credible threat to sue, the RIAA seemed to be helpless in deterring copyright infringements. It then turned to a strategy of threatening to sue (and in fact filing complaints against) relatively small subsets of infringers, in separate waves. Recognizing the credibility of the RIAA’s threat to pursue these less numerous claims all the way to judgment, many defendants surrendered and settled. The fear of more waves of suits to come (and in fact coming) is now significantly more substantial, serving the interest of the RIAA in deterring infringements.<sup>53</sup>

82 The RIAA’s strategy is acknowledged by users and infringers, as well as persons supporting the file-sharing movement, to be intimidating. What makes it so intimidating is that those who are sued do not have an interest in mounting any meaningful defense and prefer to surrender to any settlement demanded by the RIAA. Like the criminal defendant, if you are picked to be tried, you might as well settle and avoid much greater risk. And like criminal defendants as a “class,” if only the copyright defendants were able to stonewall—if they could collectively commit to litigate their defenses all the way through trial—the RIAA’s litigation strategy would fail. True, those few defendants who stand at the frontline bear a greater cost. But by depleting the RIAA’s litigation resources, they effectively shield the remaining infringers from suit. Ex ante, infringers are better off if a few thousand of them incur a greater cost whereas the remaining millions are unscathed. Copyright defendants, however, find it difficult to come together and stonewall as a group. Thus, the plaintiff’s divide-and-conquer strategy can succeed, manipulating the defendants’ collective action problem. It is this problem that leads some commentators to propose a mechanism of “class defense,” whereby defendants can coordinate to form a uniform front (Hamdani & Klement 2005, 709–13).

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52 Che & Spier (2007, note 9) study a formal model in which one defendant faces many plaintiffs and, by using a divide-and-conquer strategy, forces plaintiffs to settle their cases for less than they are worth.

53 See, e.g., Steve Johnson (2007); Elizabeth Weiss Green (2007). See also University of Michigan (2007a) and University of Michigan (2007b) for examples of how university policies change in light of such suits.

## 6. CONCLUSION

For the individual defendant, a plea bargain represents increased choice. He can still choose to go to trial, but he now has the added option to plea. Barring imperfect information and bounded rationality, such increased choice benefits the individual defendant. Because this is true for each defendant, and because plea bargains are surely desirable for the prosecutor who proposed them, there seem to be no losers. It is this logic that underlies much of the support that the plea bargain institution received. We argued in this paper that this logic is flawed. In essence, we argued that the availability of plea bargains might well be the factor that makes the trial option viable in the first place. Without plea bargains, many defendants would not face the risk of trial—they might not be charged at all. Defendants are charged, and are threatened with trials, only because the prosecutor expects to plea; they would not have been charged otherwise.

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We began by noting that it is puzzling why prosecutors' trial threats are taken seriously and why they successfully lead to plea bargains. These threats are likely credible vis-à-vis any individual defendant, but it is unlikely that the resource-constrained prosecutor can credibly threaten to take all defendants to trial. The prosecutor is able to extract harsh plea bargains from many defendants, we suggested, because defendants cannot coordinate their resistance to the prosecutor's strategy. The credibility of the prosecutor's threat is based on the defendants' collective action problem. Thus, even though plea bargaining benefits the individual defendant, it is not at all clear that it benefits defendants as a group.

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Our analysis qualifies the traditional law and economics argument in favor of plea bargains—the one that rests on the logic of everyone-is-made-better-off. It does *not* provide an affirmative argument against plea bargains. That is, we cannot say that the plea bargaining institution is clearly bad for defendants. The main reason is that the prosecutor's resource constraint is endogenous. The magnitude of the prosecutor's budget depends on the acceptance of the plea bargaining institution. In a world without plea bargains, it is unlikely that suspects will be allowed to escape charges altogether. It is more likely that prosecutorial resources will be increased or that trials will become less costly. Accordingly, it may well be that defendants as a group would not benefit from the abolition of plea bargains.

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86 Our analysis has additional implications for the debate over plea bargaining. For example, some commentators have argued that plea bargaining is responsible for the increase in statutory sentences. According to these commentators, legislatures have increased statutory sentences to enhance the bargaining power of the resource-constrained prosecutor. Higher statutory sentences are viewed by legislatures as a way to compensate for the prosecutor's limited budget. The belief is that the resource-constrained prosecutor will offer plea sentences that are significantly lower than the statutory sentences. Accordingly, to obtain just plea sentences, statutory sentences must be set at a level above what is deemed just by the legislature (Barkow 2005, 1282–83; Barkow 2006, 1033–34; Stuntz 2004, 2558).<sup>54</sup> Our analysis suggests that the difference between statutory sentences and plea sentences, to the extent that this difference is caused by the prosecutor's budget constraint, is smaller than implied by the current plea bargains debate. This qualifies the argument for raising statutory sentences.

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54 See also General Assembly of Ohio (2006): "It is possible that the threat of a significantly longer prison term may affect individual criminal cases by expediting some through the bargaining process (potentially saving adjudication, prosecution, and indigent defense expenditures)"; California State Senate (2005): "This bill continues an approximately 25-year trend in California criminal law of increased sentences and other changes that have increased the power of prosecutors. The steady increase in penalties...has greatly enhanced prosecutors' leverage in plea bargaining. Prosecutors can initially seek maximum penalties and then accept a plea to a lesser charge....[A] defendant facing a life-term sentence is much more likely to plead guilty, generally to a lesser offense than originally charged[.]...In this way, prosecutors may be able to avoid trials in cases where they have difficulty proving the charges beyond a reasonable doubt."

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