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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.

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INTRODUCTION

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 go to trial. If the defendant chose 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.¹

This is the standard Pareto argument that a contract entered 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.²

Against this free-choice foundation for plea bargains, a prominent branch of the literature explored the coercive features of the plea bargaining process.³ 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.

¹ Frank H. Easterbrook, *Criminal Procedure as a Market System*, 12 J. LEGAL STUD. 289, 309, 314 (1983); Robert E. Scott & William J. Stuntz, *Plea Bargaining as Contract*, 101 YALE L.J. 1909, 1913-18, 1949 (1992); Tomas W. Church, *In Defense of "Bargain Justice"*, 13 LAW. & SOC'Y REV. 509, 513-18 (1979). For a critique of the argument, see Stephen J Schulhofer, *Plea Bargaining as Disaster*, 101 YALE L.J. 1979, 1981-91 (1992) (arguing that externalities and agency problems on both sides prevent plea bargains from being mutually beneficial).

² Plea bargains might be objectionable on other, deontological grounds (even if they are good for defendants). See, e.g., Albert W. Alschuler, *The Changing Plea Bargaining Debate*, 69 CAL. L. REV. 652, 668-69, 678-79, 699-700 (1981); William J. Stuntz, *Plea Bargaining and Criminal Law's Disappearing Shadow*, 117 HARV. L. REV. 2548, 2564-65 (2004).

³ Alschuler, *supra* note 2, at 687-88; Conrad G. Brunk, *The Problem of Voluntariness and Coercion in the Negotiated Plea*, 13 LAW. & SOC'Y REV. 527, 546-552 (1979); Kenneth Kipnis, *Plea Bargaining: A Critic's Rejoinder*, 13 LAW. & SOC'Y REV. 555, 559-562 (1979); Schulhofer, *supra* note 1, at 1988-91 (1992) (discussing pressures that tend to drive defense attorneys to settle).

Both the Pareto argument and the coercion argument are based on an important assumption which we challenge in this Essay—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.

For trial to be a viable factor affecting defendants' choice to plea, prosecutors need to have credible threats to take to trial those defendants that 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 have much to do with the plea outcomes.⁴ Thinking of each 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 elements 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.⁵ But recognizing the resource constraint does more than justify the plea bargain system as a cost-saving device. It also raises a fundamental

⁴ See, e.g., Stuntz, *supra* note 2, at 2559-60. Stuntz's thesis is discussed in greater detail in Part I below. See also William M. Landes, *An Economic Analysis of the Courts*, 14 J. L. & ECON. 61, 62-65 (1971) (implicitly assuming that the prosecutor's threat is credible); Easterbrook, *supra* note 1, at 299, 304-07, 311 (1983) (same).

⁵ Stuntz, *supra* note 2, at 2554-55; Landes, *supra* note 4, at 64; Easterbrook, *supra* note 1, at 298-298 (1983).

paradox: if the prosecutor has enough resources to take only very 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 prosecutors' threat.⁶ 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, since 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?

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.⁷ But defendants do not bargain

⁶ 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 constraint. See *infra*.

⁷ In 1937 Justice Henry T. Lummus 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." HENRY T. LUMMUS, THE TRIAL

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 she 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.

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.

One of the goals of this Article 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 and without plea bargaining. Thus, with the same budget

JUDGE 46 (1937). 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 & Dr. John Kruse, *A Re-evaluation of Alaska's Plea Bargaining Ban*, 8 ALASKA L. REV. 27 (1991) (on the Alaska ban); Robert A. Weninger, *The Abolition of Plea Bargaining: A Case Study of El Paso County, Texas*, 35 UCLA L. REV. 265 (1987) (on the El Paso ban); and Stephen J. Schulhofer, *Is Plea Bargaining Inevitable?* 97 HARV. L. REV. 1037 (1984) (on the Philadelphia ban).

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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 Article 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.

This is not the first article to recognize that citizens face a collective action problem when facing a government agency. 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.”⁸

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

⁸ Richard A. Epstein, *Foreword: Unconstitutional Conditions, State Power, and the Limits of Consent*, 102 HARV. L. REV. 4, 22 (1988).

government to withhold some benefit—since the government does not face a resource constraint in carrying out its threat.⁹ In the plea bargains context credibility is directly tied to prosecutorial resources. A main contribution of this Article is to explain how a resource-strapped prosecutor can extract many harsh guilty pleas.¹⁰

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 Essay 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 Essay 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. But it also identifies a basic difference in how the framework ought to be applied in the criminal context. This difference—the one-against-many aspect that we develop in this Essay—requires more than a straight application of the of the civil litigation

⁹ Epstein, *supra* note 8, at 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, *Credible Coercion*, 83 TEX. L. REV. 717 (2005).

¹⁰ In the plea bargain context, Rachel Barkow 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. Rachel E. Barkow, *Separation of Powers and the Criminal Law*, 58 STAN. L. REV. 989, 1033-1034 (2006). See also Stuntz, *supra* note 2, at 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 situation would improve.)

model. It requires an account of strategic bargaining that incorporates the distinct features of criminal procedure.¹¹

Finally, the theoretical framework developed in this Article 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. It 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 suites by many plaintiffs (who cannot easily coordinate through a class action or similar mechanisms).

The remainder of this Article is organized as follows. Part I describes the credibility puzzle and, in doing so, explores the limits of the analogy between plea bargains and civil settlements. Part II argues that defendants' collective action problem solves the credibility puzzle. Part III suggests that the collective action problem is difficult, if not impossible, to overcome, as fundamental principles and practices of the criminal process and of lawyers' ethics undermine the ability of defendants to coordinate bargaining strategies. Part IV briefly considers two extensions—(1) non-criminal law enforcement, and (2) one-against-many civil cases. Part V concludes.

I. SETTLEMENTS, PLEAS, AND THE PROBLEM OF CREDIBILITY

A. The Civil/Criminal Asymmetry

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

¹¹ 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.

reach a settlement, and they can tailor the magnitude of the settlement to correspond to the merits of the case. This is the “shadow of the law” hypothesis—that a settlement reflects the outcome which, in the absence of a settlement, would be reached at trial.

For a while, the insights emerging from these articles seemed to be valid for civil and criminal procedure alike. In the same way that a civil settlement is jointly desirable to civil litigants, a plea bargain is jointly desirable to parties to a criminal proceeding. The plea bargain saves for the prosecution the resources required to administer the trial and removes for the defendant the risk of a high penalty. Accordingly, the settlement-versus-litigation literature, while ordinarily staged in a civil context and applicable primarily to private law disputes, informed also the academic view of the plea bargain process.¹²

This symmetry between the civil settlement and the criminal plea bargain came under attack more recently.¹³ Plea bargains, it is argued, are not reached in the shadow of a trial and do not reflect the punitive policies that are enacted under the criminal statutes. Rather, they are skewed against defendants because of a variety of factors that have to do both with defendants' inaptitude and prosecutors' strategy. On the defendant side, it was noted that most criminal defendants cannot bargain effectively due to lack of information, poor representation, irrational psychological biases, and extreme risk aversion.¹⁴ On the prosecutor side, plea bargains do not fit the model of bargaining in the shadow of the law because criminal law and criminal procedure accord prosecutors the prerogative to choose charges and potential sentences, often for the sole purpose of leveraging her plea bargaining position. Thus the plea outcome reflects the prosecutor's preferences and dictates rather than substantive law.¹⁵

These observations suggest that the standard economic model of rational bargaining does not describe well the plea bargain scenario. In the

¹² See Stuntz *supra* note 2, at 2550-53, 2563-64; Stephanos Bibas, *Plea Bargaining Outside the Shadow of Trial*, 117 HARV. L. REV. 2463, 2464-66 (2004).

¹³ Bibas, *supra* note 12, at 2466-67; , Stuntz, *supra* note 2, at 2560-61.

¹⁴ Bibas, *supra* note 12, at 2481-82, 2494-2504, 2507-12.

¹⁵ Stuntz *supra* note 2, at 2564-65, 2567, Barkow , *supra* note 10, at 1024-28, 1048-49.

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standard model, each party has a reservation value, which is exogenously determined (say, by legal entitlements), beyond which she will not compromise, and which she can always fall back to and obtain in the absence of an agreement. A successful bargain would allow each party to capture a higher payoff. How much of the bargaining surplus each party can capture depends on her bargaining power, and the theory predicts what tactics would help her increase her share. This model does a poor job in explaining plea bargaining, it is now argued, because parties do not have exogenously defined reservation values—those can be manipulated by the prosecution. Parties also do not bargain rationally, due to psychological biases, oversight, and ignorance. And the plea outcomes are different than predicted by the abstract bargaining theory because they depend neither on the pure entitlements nor on the ordinary factors that affect bargaining power, but rather on a host of quirks, irrationalities, and prosecutors' whims.¹⁶

The observation that the dynamics of bargaining are substantially different in the criminal context is intriguing. But whether these observations indeed identify a fundamental asymmetry between civil and criminal prosecution is questionable. The civil plaintiff, like the criminal prosecutor, can often choose among different causes of action and different remedies. And even if the prosecutor enjoys more discretion, still the parties in both the criminal and civil context bargain within the bounds set by law (including the law that defines the extent of the parties' discretion). And true, criminal defendants are poorly represented, make irrational decisions and display extreme risk aversion. But civil defendants too suffer from agency problems with their attorneys and a host of irrational biases.¹⁷ Our goal in this paper, though,

¹⁶ See, e.g., Stuntz, *supra* note 2, at 2554, 2558 (“Plea bargains do not always, maybe not even usually, involve haggling over a surplus as in negotiated settlement in civil cases” ; “Prosecutors are often in a position to dictate outcomes, and almost always have more to say about those outcome than do defense attorneys.”)

¹⁷ For discussion of the agency problems, see Schulhofer, *supra* note 1, at 1987-91. For discussion of defendants' irrationality, see Bibas, *supra* note 12, at 2498-2504. In the civil context, agency problems have been studied by, e.g., Daniel L. Rubinfeld & Suzanne Scotchmer, *Contingency Fees for Attorneys: An Economic Analysis*, 24 RAND J. ECON. 343 (1993); James D. Dana & Kathryn E. Spier, *Expertise and Contingency Fees: The Role of Asymmetric Information in Attorney Compensation*, 9 J. L. ECON. & ORG. 349 (1993); Lucian A. Bebchuk and Andrew Guzman, *How Would You Like to*

is not to dispute the asymmetry proposition. Rather, we highlight a strategic aspect of the bargaining process and suggest that this is where a fundamental asymmetry between civil and criminal litigation lies. It is the issue of *the credibility of threat to sue*.

B. The Problem of Credibility

Early models of the settlement-versus-litigation problem avoided the credibility problem.¹⁸ These models demonstrated that whenever both parties can be made better off by settlement—usually due to the collective saving of litigation costs—they would agree on a settlement. Where exactly the settlement would lie depends on bargaining power, but early models have all assumed that, in the absence of a settlement, litigation would ensue. Thus, if for example a plaintiff expects to win \$100 in trial at a cost of \$60, she would settle for anything over \$40. And if the defendant expects to lose \$50 and incur a cost of \$25 in trial defense, he would settle for anything under \$75. A settlement bargain would be struck anywhere between \$40 and \$75.

But the study of civil settlement advanced beyond that early stage of analyzing the bargaining range and began to explore the strategic interaction between the litigants. One strategic question is where exactly in the bargaining range would the settlement lie. Another strategic aspect is the question of the credibility of a plaintiff's threat to sue. If settlement negotiations fail, under what conditions would litigation nevertheless occur? When does the plaintiff truly intend to bring suit and when is she merely bluffing? Does the settlement process and outcome depend on whether litigation would indeed occur? Can a plaintiff extract a

Pay for That? The Strategic Effects of Fee Arrangements on Settlement Terms, 1 HARV. NEGOTIATION L. REV. 53 (1996); and A. Mitchell Polinsky & Daniel Rubinfeld, *Aligning the Interests of Lawyers and Clients*, 5 AMER. L. ECON. REV. 165 (2003). The effects of imperfect rationality have been studied in the civil context by, e.g., George Lowenstein, Samuel Issacharoff, Colin Camerer, and Linda Babcock, *Self-Serving Assessments of Fairness and Pre-Trial Bargaining*, 22 J. LEGAL STUD. 135 (1993); and Robert H. Mnookin, *Why Negotiations Fail: An Exploration of Barriers to the Resolution of Conflict*, 8 OHIO STATE J. ON DISPUTE RESOLUTION 235 (1993).

¹⁸ Landes, *supra* note 4, at 64-65 (implicitly assuming that the prosecutor's threat is credible); John P. Gould, *The Economics of Legal Conflicts*, 2 J. LEGAL STUD. 279, 285-86 (1973); Richard A. Posner, *An Economic Approach to Legal Procedure and Judicial Administration*, 2 J. LEGAL STUD. 399, 417-420 (1973).

settlement even when she does not have a credible threat to pursue litigation all the way to trial?

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.¹⁹

Consider the preceding example, but with the following change: the plaintiff now expects to gain \$50 at trial (the cost of trial to the plaintiff remains \$60). The plaintiff would surely accept any positive settlement. The defendant still expects to lose \$75 at trial, including litigation costs. According to the preceding analysis a settlement bargain would be struck anywhere between \$0 and \$75. But this analysis ignores the credibility question: absent a settlement would the plaintiff proceed to trial? In this modified example the answer is no. Since the threat to sue is not credible, the defendant has no reason to agree to any positive settlement.

The lesson from this branch of civil settlement literature is that the credibility of the threat is a basic condition that determines whether a settlement would potentially take place. Having a credible threat to sue is a *necessary condition* for settlement. Do the same structure and the same condition apply in criminal cases? Can the prosecutor secure a plea bargain only when she has a credible threat to prosecute the case all the way to judgment?

¹⁹ Lucian Arye Bebchuk, *Suits with Negative Expected Value*, in 3 THE NEW PALGRAVE DICTIONARY OF ECONOMICS AND THE LAW 551-552 (Peter Newman, ed., 1998).

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. The credibility condition, which has been investigated closely in the civil settlement context, is often taken for granted in the criminal plea bargain context. 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.”²⁰

The crux of Stuntz’ 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. Since 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.²¹

This idea, that prosecutors’ power to select the sentence accords credibility to their threat to prosecute, conflicts with another observation often made by many commentators, that prosecutors face a significant resource constraint. As Stuntz (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.”²² 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 of 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 large majority of defendants

²⁰ Stuntz, *supra* note 2, at 2560.

²¹ See also Landes, *supra* note 4, at 64-65 (implicitly assuming that the prosecutor's threat is credible); Easterbrook, *supra* note 1, at 299, 304-07 (same).

²² Stuntz, *supra* note 2, at 2554-55; Landes, *supra* note 4, at 64, 74; Easterbrook, *supra* note 1, at 295-96; Church, *supra* note 1, at 522.

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 dependant on the resource constraint. The prosecutor cannot hire a contingency fee attorney and “contract out” the cases, nor can she overcome her resource constraint by borrowing.²³

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 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

²³ 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.

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.

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 non-credible threat to prosecute and agree to plea bargains? Why, in other words, do they not call the prosecutor's bluff? We face a puzzling contradiction between the prevalent observation that prosecutors have a severe resource constraint, and the equally prevalent claim that the same prosecutors have credible threats to inflict harsh sentences through trials. The next section explores whether credibility-of-threat theories developed in the civil litigation literature can resolve this puzzle.

C. Existing Explanations

The literature on litigation and settlement in the civil context provides several explanations why seemingly non-credible threats—ones that are too costly to carry out—can become effectively credible and succeed in extracting settlements.²⁴ Let us briefly discuss some of these explanations and explore whether they are viable in the criminal context as well.

1. Defendants' "upfront" costs

Non-credible threats gain partial credibility through asymmetries in the parties' cost structure.²⁵ 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.

²⁴ For an excellent and accessible survey, see Bebchuk, *supra* note 19, at 551-554.

²⁵ The civil analog here is David Rosenberg & Steven Shavell, *A Model in which Suits are Brought for Their Nuisance Value*, 5 INT'L REV. L. & ECON. 3-13 (1985).

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 not feasible for the prosecutor, a defendant who did not make bail will take a plea bargain with a sentence that does not exceed her expected pre-trial 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 pre-trial costs that the prosecutor can impose on the defendant.

While this explanation 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 pre-trial detention is not too onerous, thus limiting the pre-trial costs that 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 pre-trial 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.”²⁶ Other commentators highlight the great control that prosecutors have in affecting the magnitude of the plea sentence—suggesting that plea outcomes reflect the charges, not merely some costs defendant can be made to bear upfront.²⁷ Thus, the credibility of threats to prosecute must rest on a more robust foundation.

2. Defendants' uncertainty

Another explanation that gained prominence in the civil litigation literature for the success of non-credible 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

²⁶ Stuntz, *supra* note 2, at 2560-61.

²⁷ Stuntz, *supra* note 2, at 2558.

bluffing, it is often the prudent strategy to settle.²⁸ Does this explanation help resolve the credibility-of-threats-to-prosecute puzzle?

Criminal defendants, like civil defendants, may be uncertain about factors that affect the potential trial outcome. They may not know all the evidence that the prosecutor has or is likely to acquire and the charges she might pursue. They 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 that there is likelihood that the threat to sue is not credible.²⁹

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 may 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.³⁰ Like everyone else, defendants surely understand that the prosecutor cannot afford to take more than very few pending cases to trial.

²⁸ The classic demonstration of how asymmetric information can lead to the settlement of NEV suits is in Lucian Arye Bebchuk, *Suing Solely to Extract a Settlement Offer*, 17 J. LEGAL STUD. 437, 437-449 (1988). See also Avery Katz, *The Effect of Frivolous Lawsuits on the Settlement of Litigation*, 10 INT'L REV. L. & ECON. 3-27 (1990).

²⁹ See Bebchuk, *supra* note 19, at 552; Bebchuk, *supra* note 28, at 442-447; Katz, *supra* note 28, at 9; Barry Nalebuff, *Credible Pretrial Negotiation*, 17 RAND J. ECON. 198, 201-202 (1987).

³⁰ 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 budget is allocated. But surely, if the resource constraint is as severe as it is often portrayed to be,³¹ 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 non-credible threats to prosecute.³²

D. 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 constraint that explains 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.

³¹ See *supra* note 22.

³² The civil litigation and settlement literature provides other compelling theories that explain the credibility of threats to sue. See Bebchuk, *supra* note 19, at 551-554. 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, over time, with many rounds of bargaining potentially occurring along the way. See Lucian Arye Bebchuk, *A New Theory Concerning the Credibility and Success of Threats to Sue*, 25 J. LEGAL STUD. 1, 6-9, 15-19 (1996). 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., Bebchuk and Guzman, *supra* note 17; Robert H. Mnookin and D. Cronson, *Scaling the Stonewall: Retaining Lawyers to Bolster Credibility*, 1 HARV. NEGOT. L. REV. 65 (1996). But since prosecutors cannot "contract out" cases (as noted in Section B above), these fee-contract solution do not apply in the plea bargains 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* Part II (before Section A).

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, 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, defendants' budget constraint cannot by itself resolve the puzzle.

To further understand this point, assume that all defendants act as one in the interest of defendants as a group. Defendants' optimal strategy will be to reject harsh plea offers and force the prosecutor to take cases to trial. Given defendants' budget constraint, 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.

This claim, that defendants' resource constraint is 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.³³ 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 defendants' budget constraint. Part II, which we now

³³ 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 I.C.1 *supra*.

turn to, presents the main thesis of this article: defendants' collective action problem, we argue, explains why prosecutors can make credible threats to prosecute.

II. DEFENDANTS' COLLECTIVE ACTION PROBLEM

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 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 section 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, there are several distinct aspects of the one-against-many feature that 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. While 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, since it is the resource constraint (and not just the small one-shot stakes) that hurt the credibility of her threats.³⁴

³⁴ 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 that the lawyer expects to reap from building or maintaining a tough reputation. See Amy Farmer and Paul Pecorino, *A Reputation for Being a Nuisance: Frivolous Lawsuits and Fee Shifting in a Repeated Play Game*, 18 INT'L

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.”³⁵ 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 ‘I will not sell the goods at a lower price,’ which he has an incentive to carry out because the monopoly price maximizes profit. Even if the monopolist were to negotiate with each buyer individually, price cuts would undermine its market-wide ability to maintain maximum profits. But a monopolist who does not have the resources to make good on his threat against all counterparties cannot dictate the 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 may 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.

Thus, despite recognizing the one-against-many feature, the puzzle remains: how can a resource-constrained prosecutor credibly threaten multiple defendants to take them to trial? In this section, which is the core of the article, 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 exploit the defendants’ collective action problem. The analysis shows that the prosecutor has

REV. L. & ECON. 147, 147-157 (1998). 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* Section II.D for a discussion of the alternative assumption that the prosecutor can “borrow” against next year’s budget.

³⁵ See, e.g., Easterbrook, *supra* note 1, at 320; Jeffrey Standen, *Plea Bargaining in the Shadow of the Guidelines*, 81 CAL. L. REV. 1471, 1477-1488 (1993).

credible threats as long as defendants cannot coordinate their bargaining strategies and are restricted to bargain individually with the prosecutor.

A. Basic Model

Consider a prosecutor who has a budget that enables her to conduct a full blown trial only against one defendant per period. Imagine that the prosecutor is charging N defendants per period, with identical costs of trial and identical value, to the prosecutor, from trial. Specifically, the expected sentence at trial, which for ease of exposition we shall refer to as the trial sentence, is identical for all N defendants. Assume also, for simplicity (and this assumption will be relaxed below) that the cost of a plea bargain with each of these defendants is 0. The objective functions of all parties are defined in terms of expected sentences. The prosecutor wishes to maximize the sum of expected sentences across all N defendants, and each defendant wishes to minimize her expected sentence.

It is assumed, initially, that parties have perfect information. For one, this assumption implies that the parties share the same prediction as to the trial outcome and thus share the assessment of the expected sanction. Moreover, the assumption of perfect information implies that defendants recognize the prosecutor's resource constraint—they know that the prosecutor can take at most one defendant to trial. Thus for example, defendants know that if all of them were to turn down the plea bargains, only 1 out of N would be tried, and the other $N - 1$ would walk away free. This assumption therefore rules out a possible explanation for why defendants agree to harsh plea bargains—an explanation based on defendants' uncertainty.³⁶

At $T = 0$ each defendant announces her strategy – a threshold sentence, \bar{s} , such that plea offers with lower (or equal) sentences will be accepted and plea offers with higher sentences will be rejected. At $T = 1$, after learning the defendants' threshold sentences, the prosecutor makes N plea offers, one to each of the N defendants.³⁷ Defendants can now be divided to two mutually exclusive groups: the Plea Bargain (PB) group –

³⁶ See Bebchuk, *supra* note 28, at 442-447; Katz, *supra* note 28, at 8-10.

³⁷ The assumption that the prosecutor knows the defendants' thresholds before making the plea offers will be relaxed below.

defendants in this group received plea offers with sentences equal to or lower than their threshold sentence and accepted the plea offer; and the No Plea Bargain (NPB) group – defendants in this group received plea offers with sentences higher than their threshold sentence and rejected the plea offer.

If there is only one defendant in the NPB group, then at $T = 2$ the prosecutor will take this defendant to trial. If there are two or more defendants in the NPB group, then the prosecutor must decide which defendant to take to trial. Consider the following Selection Rule: take to trial the most stubborn defendant, i.e., the defendant with the lowest threshold \bar{s} in the NPB group; if two (or more) defendants share the same lowest threshold \bar{s} , then randomly choose one of these defendants for trial.

We now prove that this game has a unique equilibrium,³⁸ in which all defendants set a threshold sentence equal to the trial sentence, the prosecutor makes plea offers to all defendants with plea sentences equal exactly to each defendant's threshold, namely, the trial sentence, and all plea offers are accepted. First, no one has an incentive to deviate from this equilibrium. Given the high threshold sentences chosen by other defendants and the correspondingly high offers by the prosecutor, no single defendant would want to deviate and set a lower threshold sentence.³⁹ Such a deviation would place this defendant alone in the NPB group, guaranteeing a trial. Of course, the prosecutor has no reason to deviate from this equilibrium.

Is this the unique equilibrium? Is it possible that another equilibrium exists in which many defendants set a low (or zero) threshold, forcing the prosecutor (who, recall, is assumed to know their thresholds when

³⁸ To be precise, we prove that the game has a unique outcome, in terms of the plea offers that are made and accepted, not a unique equilibrium. Specifically, there may be other Selection Rules, in addition to the one we consider, that may lead to the same outcome. Of course, the unique outcome together with the specified Selection Rule is an equilibrium, since the prosecutor cannot do better by choosing a different Selection Rule.

³⁹ There is no incentive to deviate and set a higher threshold sentence, since such a deviation will not affect the outcome.

making the offers) to offer more lenient pleas? To see why the above equilibrium is unique, note that since the prosecutor can take only one defendant to trial, he will make plea offers that guarantee $N - 1$ plea bargains, namely, he will make sure that there are $N - 1$ defendants in the PB group. For the $N - 1$ defendants in the PB group, the prosecutor will offer plea sentences exactly equal to these defendants' threshold sentences. (He clearly has no reason to offer a more lenient plea.) To the remaining defendant, the prosecutor will offer a plea exceeding this defendant's threshold, and consequently will take this defendant to trial. How will the prosecutor select the defendant who will go to trial? To maximize the sum of expected sentences, the prosecutor will select for trial the most stubborn defendant, i.e., the defendant with the lowest threshold sentence. For this defendant the prosecutor's gain from trial, as compared to a plea bargain, is largest.⁴⁰

Anticipating the prosecutor's strategy, no defendant would want to set the lowest threshold and to be singled out for trial. Any defendant would want to increase her threshold and shift from the NPB group to the PB group. Moreover, an outcome in which more than one defendant set an identical lowest threshold—e.g., all N defendants set an identical threshold sentence below the trial sentence—is not an equilibrium: Each defendant in the lowest threshold category can benefit by increasing his threshold sentence by a little bit, thus taking himself out of the lowest threshold category and ensuring a zero probability of being selected for trial. Therefore, in equilibrium all defendants set a threshold sentence equal to the trial sentence. The prosecutor matches these high thresholds when making plea offers. And the result is N plea bargains, each equal to the trial sentence.

⁴⁰ If there are several defendants with the same lowest threshold, the prosecutor will randomly select one of these defendants for trial. The prosecutor will offer a plea sentence above the selected defendant's threshold. This defendant will thus be the only defendant in the NPB group and will be automatically selected for trial under the specified Selection Rule.

B. Robustness

1. Imperfect Information

a. The Prosecutor Does Not Know the Defendants' Threshold Sentences When Making the Plea Offers

The pro-prosecutor equilibrium derived in the basic model might seem to depend on the assumption that the prosecutor learns the defendant's threshold sentences before making her plea offers. After all, it was this knowledge that allowed the prosecutor to respond by offering most defendants plea bargains equal to their thresholds and to select the most stubborn defendant for trial. And it was this prosecutorial strategy that led defendants to set high threshold sentences. We now show that the same pro-prosecutor equilibrium obtains when the prosecutor learns the defendants' threshold sentences only after making her plea offers. As long as the prosecutor learns the defendants' threshold sentences before selecting the single case that will be taken to trial, the prosecutor's Selection Rule, as specified above, is sufficient to induce all defendants to set high threshold sentences.

Formally, we change the basic model so that the prosecutor learns the defendants' threshold sentences at $T = 2$ rather than at $T = 1$, and prove that in the unique outcome of this new game it is still the case that all defendants set a threshold sentence equal to the trial sentence, the prosecutor makes plea offers to all defendants with a plea sentence equal to the trial sentence, and all plea offers are accepted. As in the basic model, no one – not any defendant and not the prosecutor – has an incentive to deviate from this equilibrium.

To prove uniqueness, we first show that in equilibrium the prosecutor's offer must equal the sentence threshold for each and every defendant. If the prosecutor's offer to one or more defendants is lower than those defendants' thresholds, the prosecutor can do better by raising the offered plea sentences. And if the prosecutor's offer to one or more defendants is higher than those defendants' threshold, the defendants can do better by raising their threshold sentences. Specifically, if there is only one defendant for whom the offered plea sentence exceeds the

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threshold sentence, then this defendant can do better by raising her threshold to equal the prosecutor's offer. By doing so this defendant avoids being the only defendant in the NPB group. If there are several defendants for whom the offered plea sentences exceed the threshold sentences, then there are two scenarios: (1) Among this group of defendants there is one defendant with the lowest threshold, then this defendant, who will be selected for trial according to the prosecutor's Selection Rule, can do better by raising her threshold. (2) If among this group of defendants there are two or more defendants with the same lowest threshold, then one of these defendants can do better by slightly raising her threshold, and thus reducing her chance of being selected for trial from a positive probability to zero.

After showing that in equilibrium the prosecutor's offer must equal the sentence threshold for each and every defendant, we now prove that all the offers and thresholds must equal the trial sentence. To see this, consider an equilibrium candidate where there is a defendant with a sentence threshold and a corresponding plea offer that are below the trial sentence. This is not an equilibrium, because the prosecutor can do better by raising her plea offer, moving this defendant into the NPB group, and taking him to trial.

Notice that in this model, the harsh plea bargains are not a result of "bargaining power" in the traditional sense, namely the ability of the prosecutor to make a take-it-or-leave-it offer. Even in the basic model, the defendants had the power to pre-commit to a threshold and thus effectively had a first move bargaining advantage. In the second model, it is all the more obvious that the outcome, where all the "surplus" is allocated to the prosecutor, is not a result of the prosecutor's to make take-it-or-leave-it plea offers. Here, both parties move simultaneously and neither enjoys a strategic advantage owing to the bargaining protocol. The prosecutor gets all of the "surplus" not because of the bargaining protocol, but rather because of his ability to select which case, in the NPB group, goes to trial.

b. The Prosecutor Does Not Know The Defendants' Threshold Sentences When Making Trial Decisions

What if the prosecutor never learns the defendants' threshold sentences with perfect certainty, not even at $T = 2$? In this case, the prosecutor cannot induce all defendants to set threshold sentences equal to the trial sentence. Still, we argue, the prosecutor is able to exploit defendants' collective action problem and extract harsh plea bargains that do not reflect the prosecutor's budget constraint.

When the prosecutor has only imperfect information about the defendants' threshold sentences,⁴¹ she faces the following trade-off: 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, 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 will produce plea offers with sentences below the defendant's reservation value.⁴² And this difference between the threshold sentence and the plea offer will be higher when the prosecutor's budget constraint is tighter, since 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.⁴³ Thus, imperfect information will lead the prosecutor to exercise more restraint, shifting the equilibrium plea sentences downward.

While the quantitative predictions of the model ought to be adjusted to account for this type of asymmetric information, the main qualitative lesson remains. The model showed how defendants' collective action problem leads to high plea sentences that do not reflect the prosecutor's budget constraint. Asymmetric information helps defendants but this

⁴¹ See Scott & Stuntz, *supra* note 1, at 1937-1946 (noting that prosecutors have no easy way to tell what plea a defendant will accept, given limited facts and a strong incentive for guilty defendants to give the same signals that innocent ones do).

⁴² Compare: Bebchuk, *Litigation and Settlement Under Imperfect Information*, 15 RAND J. ECON. 404, 406-409 (1984) (deriving similar results in a civil settlement context).

⁴³ See Gazal-Ayal, 27 CARDOZO L. REV. 2295, 2320-2321.

beneficial effect does not undo the detrimental effect of the collective action problem. An imperfectly informed prosecutor facing a single defendant would offer a lower plea sentence than a perfectly informed prosecutor. Similarly, an imperfectly informed prosecutor facing many defendants would offer lower plea sentences than a perfectly informed prosecutor. Our claim is that the perfect information benchmark in the multiple-defendants case is higher due to defendants' collective action problem. In other words, however advantageous the informational structure is for the defendants, they are discretely worse-off when the collective action problem allows the prosecutor to leverage limited resources into a credible threat to prosecute.

In the end, it is not clear how realistic the assumption of asymmetric information is. The defendant surely has better information than the prosecutor about whether he committed the offense or not. But the defendant also has a very 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.⁴⁴ In addition, the considerable influence that the prosecutor has over charges and trial sentences implies that the prosecutor, to a large extent, can determine the defendant's reservation price.⁴⁵ So while the defendants' threshold sentence is not perfectly observable to the prosecutor, it may well be substantially influenced by the broad charging and sentencing discretion that the prosecutor enjoys.

2. Costly Plea Bargains

Can the prosecutor 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 that the prosecutor can negotiate. Thus, our argument ought to be stated as follows: (1) The number of plea bargains that the prosecutor can secure is much higher

⁴⁴ See Schulhofer, *supra* note 1, at 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.

⁴⁵ See Stuntz, *supra* note 2, at 2560, 2562.

than the number of trials the prosecutor can afford to conduct, and (2) in all plea bargains that he 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.⁴⁶ 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 less resources for negotiating plea bargains.

III. CAN DEFENDANTS OVERCOME THE COLLECTIVE ACTION PROBLEM?

We argue that defendants' collective action problem is the core reason why 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

⁴⁶ If, however, the prosecutor can borrow against next period's budget, then 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.

interest and collective interest. Can defendants overcome their collective actions problem?

Hypothetically, if defendants were to unite and reject in coordinated fashion the prosecutor's plea offers, they would all be better off. Similarly, if defendants were to jointly commit not to divide among themselves and not to pursue self-interest in response to the type of strategies that prosecutors employ to unravel the pro-defendant equilibrium, they again would all be better off. In this section we examine several reasons why 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 defendants' collective action problem that explains the pro-prosecutor outcome of the plea bargain institution.

A. Coordination by Defendants Themselves

If only defendants could coordinate on the pro-defendant equilibrium, they could exploit the prosecutor's budget constraint and obtain more lenient plea bargains. In Section II.C., we explained why such coordination is difficult. Specifically, we argued that the prosecutor can use priority lists or other sequencing methods to align defendants' interests in conflict with each other and induce them to accept the harsher pleas. Still, if defendants understand the nature of the strategic interaction can they not overcome the prosecutor's strategy? Can defendants, as a group, decide to ignore the prosecutor's pressure tactics by committing to accept only lenient plea offers?

The problem is that for each defendant, once his turn arrives in the priority list, the rational choice is to accept the prosecutor's offer. This is the best option, because for this defendant it would be beneficial to accept the plea over facing a sure trial. If the defendant were to stick to the commitment it made as part of the defendants' collective stonewalling strategy, he will be worse off (while other defendants will be better off.) No defendant would want to act as a sacrificial goat of the collective.

If all defendants were, somehow, able to unite and commit to the stonewalling strategy, the prosecutor would no longer be able to plough

through them by using a priority list. For the prosecutor, the priority list strategy would mean that only those at the top would be charged and punished through trials; there would not be enough resources to go after the rest of the defendants. The prosecutor would prefer to change her strategy and offer more lenient pleas to defendants. Thus, the stonewalling strategy of the defendants can—if successful—lead to a more desirable outcome for all of them. The problem, of course, is that defendants need to find a way to make a binding commitment to stonewall.

There are substantial impediments to making such a commitment. First, for such a multilateral commitment to work the committing parties must 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 collective commitment.

Second, even if a sufficiently large number of defendants know each other – from previous criminal activities or from time served in the same prison – making a binding commitment is very difficult. A binding commitment 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 commitment must be self-enforcing, since defendants cannot make it binding by entering a formal, enforceable, legal contract that penalizes a defendant for accepting a prosecutor's plea offer.⁴⁷ To be sure, commitments may be effectively binding even if no legal-contractual means are available to enforce them. They may become binding as a matter of honor (among thieves, so to speak), or they may 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 prosecutors, uniformly refusing to plea and successfully securing a favorable outcome. But even within small teams

⁴⁷ 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).

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.

The fear of retaliation can be another reason why an individual defendant will refrain from defecting from the stonewalling strategy. Defectors might be punished by other defendants through illegal means, i.e., by force. But unlike state witnesses whose cooperation with the prosecution is visible and risky and whose conduct poses 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 may often pass unnoticed, rendering it effectively unpunishable.

B. Coordination through Lawyers

As argued above 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?

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 pro-defendant equilibrium by accepting 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.⁴⁸ 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."⁴⁹

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.⁵⁰ 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."⁵¹

Moreover, sacrificing individual defendants for the greater good runs contrary to the rules of ethics that require loyalty to the individual client,

⁴⁸ See Al Alschuler, *The Defense Attorney's Role in Plea Bargaining*, 84 YALE L.J., 1179, 1249-51 (1975).

⁴⁹ *Id.* at 1250. Alschuler offers additional examples and illuminating analysis of the "strike" tactic and its effects. *Id.* at 1248-1255.

⁵⁰ 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." *Id.* at 1250.

⁵¹ *Id.* at 1249. Put differently, the prosecution can "break" the public defender strike.

not to defendants as a group.⁵² The ABA Standards 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."⁵³ 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.⁵⁴

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 above, 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.

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

⁵² Canon 7 of the ABA Model Code of Professional Responsibility states: "A lawyer should represent a client zealously within the bounds of the law." 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 Standards for Criminal Justice: Prosecution Function and Defense Function, Standard 4-6.2, Section d (3d ed. 1993). 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.

⁵³ Standards for Criminal Justice: Prosecution Function and Defense Function, Standard 4-6.2, Sections a, b (3d ed. 1993).

⁵⁴ See also Alschuler, *supra* note 54, at 1252.

form would be represented by lawyers in the "No Coordination" division of the public defender's office. Defendants who sign the form will be represented by lawyers in the "Coordination" division of the public defender's office. As explained above most defendants would be happy to sign, leaving a very small "No Coordination" division.

Unfortunately, this solution, while theoretically attractive, is impractical. Again, the problem is that even if lawyers can provide a commitment device, this device will not work if the substance of the commitment is not well-specified. And a commitment to reject plea bargains offered only to break the pro-defendant equilibrium is not well specified. As explained above, in a simple model with homogeneous defendants it may be easy to identify a plea offer that is designed to break the pro-defendant equilibrium. But in the real world multi-dimensional heterogeneity it is very difficult to distinguish between a plea offer that is lenient because of evidentiary problems on the 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 pro-defendant equilibrium. 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 if he is willing to sign the No-Plea form. Those that 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. Ex ante, if this No-Plea group is big enough, it would pay to join it.⁵⁵

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-

⁵⁵ A related mechanism would offer defendant's 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.

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Plea form can be utilized and can create a pool of non-bargaining defendants. But even this elegant solution is doomed to fail. Even a signed No-Plea obligation is always revisable. It is not a contract which 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 may choose to set aside the No-Plea vow and to accept the plea.⁵⁶

This practical difficulty is reinforced by an ethical dilemma. On their face the Rules of Professional Conduct would allow a defendant to instruct her attorney not to accept a plea offer and not to relay such an offer to her.⁵⁷ 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.⁵⁸

Consider a defense attorney representing a client who faces 20 years in prison if convicted. The prosecutor, trying to break the pro-defendant equilibrium, 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 pro-defendant equilibrium is preserved. The prosecutor 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

⁵⁶ 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.

⁵⁷ See ABA Model Rules of Professional Conduct, 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."

⁵⁸ 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.

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 conduct amounts to ineffective assistance of counsel in violation of the 6th amendment. And a court or a disciplinary tribunal might accept such an argument. The risk to the defense attorney can be substantial.⁵⁹

Finally, even if public defender somehow managed to unite defendants and organize them to overcome their collective action problem, it is not likely that this success will 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 will become impossible. The state, in other words, can influence the “contracts” between defendants and their attorneys to make sure that the collective action problem remains in place.

IV. EXTENSIONS

A. 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

⁵⁹ This risk, however, should not be exaggerated. Defendants have little incentive to file disciplinary complaints, since there is no possibility of compensation to the aggrieved defendant. And, lawyers and judges file very 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 sanction. The risk of ineffective assistance of counsel claims may 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.

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.

Our analysis thus applies beyond the criminal context. In particular, our analysis applies to administrative agencies. The enforcement roles of the Securities and Exchange Commission, the Federal Trade Commission, the Environmental Protection Agency, the Food and Drug Agency, the banking agencies (the Federal Reserve Board, the Office of the Comptroller of the Currency, the Office of Thrift Supervision, the Federal Deposit Insurance Corporation, and the National Credit Union Administration), and other agencies, are all potentially affected by the bargaining dynamics studied in this article.

Consider the Securities and Exchange Commission (SEC). The SEC enforces the securities laws. It identifies violation of these laws and initiates regulatory, civil, or criminal proceedings against the violating companies.⁶⁰ In administrative proceedings, settlement is governed by the SEC's Rules of Practice.⁶¹ In civil or criminal proceedings before the federal courts, settlement (or plea bargain) is governed by the rules of civil or criminal procedure. The SEC, like any other government agency, operates under a limited budget. This budget could not support full-blown trials or administrative proceedings against all the companies who reach a settlement with the SEC.

Do these settlements represent the very lenient end of the spectrum, reflecting the low probability of trial? Anecdotal evidence suggests that it does not. A recent example is the enforcement actions taken by the SEC against companies that engaged in options-backdating. In the end of 2006 the SEC was investigating over 100 matters relating to potential

⁶⁰ See SEC, Litigation Releases (<http://www.sec.gov/litigation/litreleases.shtml>); SEC, Administrative Proceedings (<http://www.sec.gov/litigation/admin.shtml>). Criminal cases are referred to the Department of Justice.

⁶¹ See SEC, Rules of Practice and Rules on Fair Fund and Disgorgement Plans (January 2006; corrected March (2006), 17 CFR 201.100, et seq., Rule 240 (Settlement) (available at <http://www.sec.gov/about/rulesprac2006.pdf>).

abuses of employee stock options.⁶² It seems unlikely that the SEC could take all these cases to trial or even to administrative adjudication. 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.⁶³ Still threats of enforcement actions convinced many top executives to enter harsh settlements.⁶⁴

To be sure, there are unique features to securities law that 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

⁶² See Linda Chatman Thomsen, "Options Backdating: The Enforcement Perspective," October 30, 2006 Speech (available at <http://www.sec.gov/news/speech/2006/spch103006lct.htm>).

⁶³ Id. See also the Senate testimony by the SEC Chairman: Christopher Cox, "Testimony Concerning Options Backdating," Before the U.S. Senate Committee on Banking, Housing and Urban Affairs, September 6, 2006 (available at <http://www.sec.gov/news/testimony/2006/ts090606cc.htm>) ("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.")

⁶⁴ E.g., a settlement with Ryan Ashley Brant, former CEO and Chairman of the Board of Take-Two Interactive Software, Inc., included \$6,261,606 in civil penalties, disgorgement, and prejudgment interest as well as a permanent bar against serving as an officer or director of a public company, and, in a related criminal action brought by the New York County District Attorney's Office, Brant plead guilty and agreed to pay \$1 million in lieu of fines and forfeiture (see SEC Press Release, February 14, 2007, available at <http://www.sec.gov/news/press/2007/2007-20.htm>); a settlement with William Sorin, Former General Counsel of Comverse Technology, Inc., included over \$3 million in civil penalties, disgorgement, and prejudgment interest, a permanent bar against serving as an officer or director of a public company (see SEC Press Release, January 10, 2007, available at <http://www.sec.gov/news/press/2007/2007-4.htm>), and a prison sentence of one year and a day, *Ex-Comverse Lawyer Going to Jail in Options Backdating Plan*, N.Y. TIMES, May 11, 2007, available at <http://www.nytimes.com/2007/05/11/technology/11comverse.html> [hereinafter *Times Article*]; a settlement with David Kreinberg, former CFO of Comverse Technology, Inc., included nearly \$2.4 million in disgorgement and interest as well as a permanent bar against serving as an officer or director of a public company, and, in a related criminal action brought by the US Attorney, Kreinberg faces up to 15 years in jail, mandatory restitution and a possible criminal fine. As of May 11, he still awaited sentencing on the criminal charges (see SEC Press Release, October 24, 2006, available at <http://www.sec.gov/news/press/2006/2006-180.htm>; Thomsen, *supra* note 70; *Times Article, supra*).

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, there are categories of offenses, such as insider trading and fraud that 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.

B. One-Against-Many Civil Cases

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 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 are: A large insurance company defending against numerous independent claims; and an owner of copyrighted materials that are mass infringed, pursuing damages claim 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 single 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 judgments?

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 sub set 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 non-credible threat to pursue all cases into a set of credible “small” threats to pursue the next item on the list.

The music industry’s recent strategy of filing infringements 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.⁶⁵

⁶⁵ See, e.g., Steve Johnson, “*Songlifting*”: *So, Who Are the Villians?*, CHI. TRIB., May 18, 2007, at C1; Elizabeth Weiss Green, *RIAA Warns Students for Third Time*, USNEWS.COM (available at <http://www.usnews.com/blogs/paper-trail/2007/04/12/riaa->

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—it 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.⁶⁶

V. 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. Since this is true for each individual defendant, and since plea bargains are surely desirable for the prosecutor that proposed it, 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

[warns-students-for-third-time.html](#)). See also *Copyright at the University of Michigan: File Sharing* (available at <http://www.copyright.umich.edu/file-sharing.html>), and *Copyright at the University of Michigan: File Sharing FAQ* (available at <http://www.copyright.umich.edu/file-sharing-faq.html>), for examples of how university policies change in light of such suits.

⁶⁶ Assaf Hamdani & Alon Klement, *The Class Defense*, 93 CAL. L. REV. 685, 709-713 (2005).

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.

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, while plea bargaining benefits the individual defendant, it is not at all clear that it benefits defendants as a group.

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.

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

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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, in order to obtain just plea sentences, statutory sentences must be set at a level above what is deemed just by the legislature.⁶⁷ 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.

⁶⁷ Rachel E. Barkow, *Federalism and the Politics of Sentencing*, 105 COLUM. L. REV. 1276, 1282-83 (2005); Barkow, *supra* note 10, at 1033-34; Stuntz, *supra* note 2, at 2558; *see also* SENATE JUDICIARY--CRIMINAL JUSTICE, FISCAL NOTE & LOCAL IMPACT STATEMENT, S. 260-126, (Ohio 2005) ("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)."); SENATE COMMITTEE ON PUBLIC SAFETY, BILL ANALYSIS, S. 1551, 2005-06 reg. sess., at cmt. 10 (July 12, 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.")