COOPERATION'S COST

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ABSTRACT

This Article explores the costs and benefits of criminal cooperation, the widespread practice by which prosecutors offer criminal defendants the opportunity to receive reduced sentences in exchange for their assistance in apprehending other criminals. On one hand, cooperation increases the likelihood that criminals will be detected and prosecuted successfully. This is the "Detection Effect" of cooperation, and it has long been cited as the policy's primary justification.

On the other hand, cooperation also reduces the expected sanction for offenders who believe they can cooperate if caught. This is the "Sanction Effect" of cooperation, and it may grow substantially if the government enlists too many cooperators, enables them to be sentenced too generously, or causes them to become overly optimistic about their chances of receiving a cooperation agreement.

When the government allows the Sanction Effect to grow too large, it undermines one of its key tools for improving deterrence. Indeed, when the Sanction Effect outweighs the Detection Effect, cooperation reduces deterrence, and the government unwittingly encourages more crime. Since cooperation is itself administratively costly, the policy perversely causes society to pay for additional crime.

This Article reorients the cooperation debate around the fundamental question of whether cooperation deters wrongdoing. Drawing on economics and behavioral psychology, it provides a framework for better understanding how and when cooperation works. Government actors who laud and rely on cooperation must address the fundamental question of

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whether it actually deters wrongdoing. To do otherwise is to leave society vulnerable to cooperation's greatest cost.

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INTRODUCTION

Cooperation is a pervasive component of criminal prosecutions.¹ Criminal defendants and their attorneys routinely offer information and assistance in the prosecution of other criminals in exchange for leniency at sentencing.² Criminal laws that cover a broad range of conduct and long sentences that apply upon conviction have combined to create substantial incentives for criminal defendants to trade their assistance in exchange for leniency. Given cooperation's popularity as a criminal law enforcement tool,³ as well as its increasing importance in regulatory settings,⁴ this Article reconsiders the long-held presumption that cooperation deters criminal conduct.⁵

This analysis has implications not only for criminal law, where cooperation is most prevalent, but for other areas of government regulation, where public actors have steadily increased their reliance on the promise of leniency to induce the flow of information and assistance

^{1. &}quot;[A] large part of the job of being a prosecutor is identifying and interviewing potential cooperating witnesses, evaluating their credibility, and then seeking corroboration for their version of events." Steven M. Cohen, What is True? Perspectives of a Former Prosecutor, 23 CARDOZO L. REV. 817, 817 (2002). Nationally, 13.5% of the defendants sentenced in the federal criminal justice system in 2008 were cooperators. See U.S. SENTENCING COMM'N, SOURCEBOOK OF FEDERAL SENTENCING STATISTICS, at tbl.N (2008), http://ftp.ussc.gov/ANNRPT/2008/SBTOC.htm [hereinafter 2008 SOURCEBOOK]. However, in numerous judicial districts, the number of cooperating defendants was well above 20%. See id. at tbl.26.

^{2. &}quot;'Cooperation' is a term of art for the process by which a federal criminal defendant gains the possibility of sentence mitigation by providing assistance in the prosecution or investigation of others." Ian Weinstein, *Regulating the Market for Snitches*, 47 BUFF. L. REV. 563, 563 n.1 (1999). This Article addresses solely those forms of cooperation whereby the government pays the defendant through leniency at sentencing. It does not address those instances in which the government trades a reduced charge ("charge bargaining") or agrees to portray false facts to the court ("fact bargaining") in exchange for assistance in prosecuting others. For more on these two concepts, see Russell D. Covey, *Fixed Justice: Reforming Plea Bargaining with Plea-Based Ceilings*, 82 TUL. L. REV. 1237, 1260–64 (2008) (explaining the intractability of charge bargaining in federal practice), and Kate Stith, *The Arc of the Pendulum: Judges, Prosecutors, and the Exercise of Discretion*, 117 YALE L.J. 1420 (2008) (describing attempts to eliminate fact bargaining).

^{3. &}quot;[I]n the view of Congress and the Sentencing Commission, assisting law enforcement is often critical to detecting and deterring crime, and punishing offenders." United States v. Milo, 506 F.3d 71, 77 (1st Cir. 2007).

^{4.} See discussion infra Part I.

^{5.} This Article focuses on cooperation by individual persons, and not corporate business entities. The deterrent value of cooperating with corporate entities has been well explored by Jennifer Arlen and Reinier Kraakman in *Controlling Corporate Misconduct: An Analysis of Corporate Liability Regimes*, 72 N.Y.U. L. REV. 687 (1997) (arguing for a regime that mitigates liability for a corporate entity that attempts to prevent and report crimes to the government), and by Jennifer Arlen in *The Potentially Perverse Effects of Corporate Criminal Liability*, 23 J. LEGAL STUD. 833, 836 (1994) (explaining that a strict vicarious liability regime perversely increases the probability of punishment for crimes that corporate entities detect but fail to deter).

from individuals.⁶ Moreover, it moves the cooperation discussion forward in a more productive way. Currently, the proponents and detractors of cooperation talk past one another. Supporters argue that it benefits society by increasing the government's ability to detect and prosecute crime. Detractors contend that it is unfair to defendants (usually, those who have failed to secure an agreement) and provides the government with excess discretion and power. Cooperation's critics therefore seek procedural reforms, such as taping cooperating defendants' statements before they testify, or limiting prosecutors' discretion to choose or decline cooperation once a defendant has volunteered to assist the government. These reforms may make cooperation more costly (to the government) and more legitimate (in the eyes of noncooperating defendants), but they do nothing to help us address the core question of whether cooperation deters crime.

Drawing on economics and, to a lesser extent, behavioral psychology, the Article examines cooperation's value by unpacking the motivations of the government agents who supply cooperation agreements and the defendants who demand them.⁷ The neoclassical theory of deterrence holds that the rational person refrains from engaging in wrongdoing when the expected costs of such wrongdoing—the sanction modified by the probability that it will be imposed—exceed its expected benefits.⁸ Cooperation deters wrongdoing by increasing the government's ability to locate, identify, and prosecute those who flout the law.⁹ This is the "Detection Effect" of cooperation; by trading leniency for information and assistance, the government increases its ability to identify and prosecute wrongdoers, and by increasing the expected cost of criminal conduct, the government's use of cooperation arguably deters crimes. This is the

^{6.} See discussion infra Part I.

^{7. &}quot;Cooperation bargaining occurs when the defendant has information to trade, and the gain from bargaining includes this information, which could be used in other trials." Eric Rasmusen, Mezzanatto and the Economics of Self-Incrimination, 19 CARDOZO L. REV. 1541, 1552 (1998).

^{8.} Gary S. Becker, *Crime and Punishment: An Economic Approach*, 76 J. POL. ECON. 169, 176–79 (1968). Individuals also may refrain from wrongdoing for reasons unrelated to formal sanctions. *See, e.g.*, Richard H. McAdams & Janice Nadler, *Coordinating in the Shadow of the Law: Two Contextualized Tests of the Focal Point Theory of Legal Compliance*, 42 LAW & SOC'Y REV. 865, 866 (2008) (citing social science literature advancing legitimacy-based theories of legal compliance).

^{9. &}quot;Indisputably, cooperators play a vital role in the Government's law enforcement efforts. Their assistance provides the Government with a powerful means to solve crimes and thereby to promote justice for the offenders, their victims and the larger society." United States v. Losovsky, 571 F. Supp. 2d 545, 546 (S.D.N.Y. 2008). For more detailed claims of cooperation's historical value in detecting and prosecuting organized crime, see John C. Jeffries, Jr. & John Gleeson, *The Federalization of Organized Crime: Advantages of Federal Prosecution*, 46 HASTINGS L.J. 1095, 1103–09 (1995).

primary, if not exclusive, justification upon which cooperation's supporters often rely.

Apart from the Detection Effect, however, cooperation provokes an entirely different response from potential wrongdoers: cooperation reduces the sanctions of those who successfully cooperate and receive leniency at sentencing. Accordingly, it encourages criminals to expect reduced penalties to the extent they believe they are likely to become cooperators and receive discounts for their valuable services. This is the "Sanction Effect" of cooperation, and it has received little to no sustained analysis in the literature examining cooperation.

The Sanction Effect competes with the Detection Effect; the former increases incentives to commit crimes, while the latter decreases them. 10 When the individual perceives a greater Detection Effect than Sanction Effect, the expected costs of his criminal conduct increase; if those expected costs exceed his expected benefits, he will be deterred. 11 But what if the criminal perceives a stronger Sanction Effect than Detection Effect? In that case, the policy reduces deterrence. 12 This is because the policy effectively reduces the expected cost of engaging in wrongdoing. Add to the mix cooperation's administrative and transactional costs, and we may have a policy whereby we literally pay for more crime.

Cooperation thus is a complex process that places competing pressures on the costs and benefits of committing crime.¹³ Although traditional discussions of cooperation accept the premise that the Detection Effect overwhelms the Sanction Effect and then criticize cooperation's many collateral costs,¹⁴ their implicit assumption may not always be the case.

^{10.} As discussed in Part III, *infra*, criminals may be more influenced by increases in the probability of detection than increases in sanctions. *See generally* Samuel W. Buell, *The Upside of Overbreadth*, 83 N.Y.U. L. REV. 1491, 1507–08 (2008); John M. Darley, *On the Unlikely Prospect of Reducing Crime Rates by Increasing the Severity of Prison Sentences*, 13 J.L. & Pol'y 189, 193–95 (2005).

^{11.} Buell, *Overbreadth*, *supra* note 10, at 1508 ("The rational offender will choose not to violate the law if what she expects to gain from the violation is outweighed by her ex ante prediction of an ex post penalty and the chance it will be imposed, in addition to the amount of delay she expects to enjoy before its imposition.").

^{12.} This argument assumes that criminals are deterred at least somewhat by the threat of law enforcement and sanctions. For more on this debate, see ANDREW VON HIRSCH, ANTHONY E. BOTTOMS, ELIZABETH BURNEY & P-O. WIKSTRÖM, CRIMINAL DETERRENCE AND SENTENCE SEVERITY (Hart Publ'g Ltd. 1999); Michael Tonry, Learning from the Limitations of Deterrence Research, in 37 CRIME & JUSTICE: A REVIEW OF RESEARCH 279 (2008) (reviewing empirical literature).

^{13.} Obviously, some will question whether criminal acts are the product of rational decision making. See, e.g., Paul H. Robinson & John M. Darley, Does Criminal Law Deter? A Behavioral Science Investigation, 24 OXFORD J. LEGAL STUD. 173, 178–81 (2004).

^{14.} See, e.g., Covey, supra note 2, at 1266 (declaring cooperation "an essential tool of law

Moreover, if the Sanction Effect exceeds the Detection Effect, our attempts to remedy this problem may upset other components of an already fragile sentencing ecosystem. For all of these reasons, future analyses of cooperation must question its overall effect on deterrence.

This Article explores this problem in four parts. Part I lays out the backdrop for the Article's analysis. It briefly reviews the common criticisms of criminal cooperation and observes that despite these critiques, cooperation remains quite popular and may be migrating beyond its traditional criminal law context, most notably to the Securities and Exchange Commission (SEC), whose Enforcement Division chief notably announced the Division's plan to ramp up investigations by relying on cooperators. Part I then goes on to explain why organizational cooperation, whereby corporations cooperate with regulatory authorities in order to reduce fines and avoid criminal indictments, is significantly different from individual cooperation, which is the core focus of this Article.

The remainder of the Article then considers whether and when cooperation is most likely to deter or fail as a law enforcement tool. Using the federal criminal justice system as its case study, ¹⁶ Part II starts by exploring the Detection Effect of cooperation on individual wrongdoers. Part II attempts to lay out the reasons why the Detection Effect exists and identifies those characteristics of cooperation (the government's inability to use information effectively, the possibility that defendants may lie, the potential for government abuse) that place a downward drag on the Detection Effect.

Part III proceeds to consider the other side of cooperation, namely, the Sanction Effect. Presumably, any cooperation policy inherently reduces the sanction that defendants—at least those defendants who believe

enforcement"); see also infra Part I and notes 23-28.

^{15.} See infra notes 32–33 and accompanying text..

^{16.} The federal system is particularly useful because federal prosecutors and defendants formalize their deals through "Section 5K1.1" substantial assistance letters, which prosecutors file prior to sentencing. The letter's moniker is derived from Section 5K1.1 of the United States Sentencing Guidelines, which provides, in relevant part: "[u]pon motion of the government stating that the defendant has provided substantial assistance in the investigation or prosecution of another person who has committed an offense, the court may depart from the guidelines." U.S. SENTENCING GUIDELINES MANUAL § 5K1.1 (2009). Although the United States Sentencing Guidelines are no longer mandatory, United States v. Booker, 543 U.S. 220, 245 (2005), the Section 5K1.1 letter remains one of the primary mechanisms by which criminal defendants obtain reduced sentences, particularly in the narcotics context, where more than half of all federal drug offenses are subject to mandatory minimum sentences. See Paul G. Cassell, Too Severe?: A Defense of the Federal Sentencing Guidelines (and a Critique of Federal Mandatory Minimums), 56 STAN. L. REV. 1017, 1046 (2004) (observing that mandatory minimums are applicable to approximately 60% of federal drug offenses).

cooperation is a plausible outcome—expect to receive. Part III, however, attempts to identify those phenomena that might inflate the Sanction Effect beyond efficient levels. They include (a) extending agreements to too many defendants, (b) paying them too generously, and (c) either causing or failing to debias the defendants' optimism regarding the likelihood of their cooperation and leniency they might receive at sentencing. Through all of these, government actors may undermine cooperation's value as a crime-fighting mechanism.

Part IV then considers the interplay between Detection and Sanction Effects. This Part begins by addressing the common perception that the Detection Effect will likely outweigh the Sanction Effect since defendants are substantially more attuned to changes in the probability of getting caught than changes in a given sanction. Despite this behavioral truism, Sanction Effects may be particularly pernicious in the cooperation context when defendants perceive a probable sentence of *no* incarceration instead of a mere reduction in incarceration when they cooperate. Accordingly, it may not be the case that the Detection Effect is always stronger than the Sanction Effect.

In any event, even when the Detection Effect outweighs the Sanction Effect, we still should be concerned that our cooperation policy is less effective than we presume it to be. Even worse, when the Sanction Effect exceeds or matches the Detection Effect, society clearly loses, either by encouraging more crime or by implementing a costly policy that fails to reduce crime.

Finally, as Part IV explains, when government actors attempt to cure this imbalance, additional costs arise. For example, one way to cure the Sanction Effect is to raise the baseline sanction for an underlying crime. This, however, creates greater differences in how we treat cooperators and noncooperators at sentencing and therefore increases incentives for defendants to lie in order to secure cooperation agreements. Those falsehoods, in turn, reduce the government's ability to detect true wrongdoers. In other words, an attempt to cure the Sanction Effect may simultaneously harm cooperation's Detection Effect. Thus, cooperation's pathologies, even when acknowledged, are difficult to cure.

Part V concludes by considering the policy implications of the foregoing analysis and calling for more research. Even where cooperation has been relatively "formalized" in the federal criminal justice system, our knowledge of cooperation is informed by the limited data released by the

Sentencing Commission, the anecdotal observations of federal judges, and several qualitative analyses published over the previous two decades. The analysis contained in this Article seeks to encourage a new round of qualitative and quantitative research of both defendants and law enforcement actors.

Finally, the theoretical account of cooperation contained within the Article raises two additional points. First, given the incentives for prosecutors and law enforcement agents to "overcooperate," federal officials should consider implementing cooperation policy from the more centralized Department of Justice, instead of permitting individual United States Attorney's Offices (much less individual prosecutors) to craft and implement their own cooperation policies. Second, the Article offers a timely warning to those regulators intent on expanding or adopting cooperation techniques outside the federal criminal context: look before you leap. Cooperation is doomed to fall short of its enforcement goals when government actors fail to consider the interaction between Detection and Sanction Effects.

I. COOPERATION'S CONTEXT

This Part briefly reviews the cooperation literature that has developed to date and introduces the context in which the remainder of the Article situates its analysis: the federal criminal justice system. As explained below, federal criminal law provides a particularly helpful window for analyzing and testing cooperation's theoretical costs and benefits.

^{18.} The empirical studies of cooperation include: LINDA DRAZGA MAXFIELD & JOHN H. KRAMER, UNITED STATES SENTENCING COMMISSION, SUBSTANTIAL ASSISTANCE: AN EMPIRICAL YARDSTICK GAUGING EQUITY IN CURRENT FEDERAL POLICY AND PRACTICE (1998), available at http://www.ussc.gov/publicat/5kreport.pdf; Ellen Yaroshefsky, Cooperation with Federal Prosecutors: Experiences of Truth Telling and Embellishment, 68 FORDHAM L. REV. 917 (1999) (studying cooperation through interviews with former prosecutors). Other studies focus on federal sentencing generally, but include an analysis of cooperation. See Margareth Etienne, The Declining Utility of the Right to Counsel in Federal Criminal Courts: An Empirical Study on the Diminished Role of Defense Attorney Advocacy Under the Sentencing Guidelines, 92 CALIF. L. REV. 425, 464-68 (2004) (including interviews with defense counsel); Ilene H. Nagel & Stephen I. Schulhofer, A Tale of Three Cities: An Empirical Study of Charging and Bargaining Practices Under the Federal Sentencing Guidelines, 66 S. CAL. L. REV. 501, 509 (1992); Stephen J. Schulhofer & Ilene H. Nagel, Plea Negotiations Under the Federal Sentencing Guidelines: Guideline Circumvention and Its Dynamics in the Post-Mistretta Period, 91 Nw. U. L. REV. 1284 (1997); Jeffrey T. Ulmer, The Localized Uses of Federal Sentencing Guidelines in Four U.S. District Courts: Evidence of Processual Order, 28 SYMBOLIC INTERACTION 255 (2005).

^{19.} Over a decade ago, Dan Kahan advanced similar arguments with regard to the exercise of prosecutorial discretion. *See* Dan M. Kahan, *Is* Chevron *Relevant to Federal Criminal Law?*, 110 HARV. L. REV. 469, 497 (1996).

Cooperation ordinarily is analyzed as a variant of plea bargaining policy. Although cooperation has long been the subject of scholarly analysis, amuch of what has been written either focuses on procedural justice or distributive fairness concerns. In other words, much like the plea bargaining literature in which cooperation is often lumped, the cooperation critique focuses on how the government's practices harm defendants, either by denying them due process or by distributing punishment in a manner that is inconsistent with some retributive ideal. As a result, cooperation's proponents and critics talk past one another. Its defenders laud its crime-fighting abilities, and its critics attack its effect on defendants and those suspected of wrongdoing.

With regard to cooperation's overall effect on society, some have argued that it undermines the government's legitimacy, particularly when cooperators receive overly generous sentences in exchange for their

^{20.} Compare Jeffries & Gleeson, supra note 9, at 1119–20 (lauding cooperation's law enforcement capabilities), with Weinstein, supra note 2, at 587–88 (arguing that it forces defendants to surrender important rights). For classic debates on the general benefits and drawbacks of plea bargaining, see Albert W. Alschuler, Implementing the Criminal Defendant's Right to Trial: Alternatives to the Plea Bargaining System, 50 U. CHI. L. REV. 931, 932–34 (1983); Frank H. Easterbrook, Criminal Procedure as a Market System, 12 J. LEGAL STUD. 289, 308–17 (1983); Stephen J. Schulhofer, Plea Bargaining as Disaster, 101 YALE L.J. 1979, 1995–98 (1992); Robert E. Scott & William J. Stuntz, Plea Bargaining as Contract, 101 YALE L.J. 1909 (1992). For more recent fare, see Stephanos Bibas, Plea Bargaining Outside the Shadow of Trial, 117 HARV. L. REV. 2463 (2004); Josh Bowers, Punishing the Innocent, 156 U. PA. L. REV. 1117 (2008); William J. Stuntz, Plea Bargaining and Criminal Law's Disappearing Shadow, 117 HARV. L. REV. 2548 (2004).

^{21.} For a historical treatment of cooperation, see George C. Harris, *Testimony for Sale: The Law and Ethics of Snitches and Experts*, 28 PEPP. L. REV. 1, 13–16 (2000) (describing historical practice of "approvement," cooperation's antecedent practice in England); Graham Hughes, *Agreements for Cooperation in Criminal Cases*, 45 VAND. L. REV. 1 (1992) (discussing historical basis of cooperation). For a more modern discussion of the problems that accompany cooperation, see the articles reproduced from a Symposium held at Cardozo Law School in 2001, entitled *The Cooperating Witness Conundrum: Is Justice Obtainable?*, 23 CARDOZO L. REV. 747 (2002).

^{22.} See, e.g., Cynthia K.Y. Lee, From Gatekeeper to Concierge: Reigning in the Federal Prosecutor's Expanding Power Over Substantial Assistance Departures, 50 RUTGERS L. REV. 199, 234–39 (1997) (arguing that Sentencing Guidelines vest excessive discretion in prosecutors).

^{23.} See, e.g., Cynthia Kwei Yung Lee, Prosecutorial Discretion, Substantial Assistance, and the Federal Sentencing Guidelines, 42 UCLA L. REV. 105, 139 (1994); Stephen J. Schulhofer, Rethinking Mandatory Minimums, 28 WAKE FOREST L. REV. 199, 212 (1993) (criticizing cooperation "paradox" whereby more culpable defendants receive lesser sentences). But see Daniel C. Richman, Cooperating Defendants: The Costs and Benefits of Purchasing Information from Scoundrels, 8 FED. SENT'G REP. 292, 294 (1996) (arguing that extent of "horizontal equity" between cooperators and noncooperators is an open question).

^{24.} See, e.g., Weinstein, supra note 2, at 565 (arguing that cooperation imposes externalities such as "systemic problems of inequity, damage to the adversary system and the moral ambivalence surrounding snitching"). Although Weinstein treats cooperation as a market, his critique focuses on how it affects criminal defendants. In contrast, Richman's brief account of costs and benefits in Cooperating Defendants, The Costs and Benefits of Purchasing Information from Scoundrels, supra note 23, is provided from a prosecutor's perspective.

assistance.²⁵ Others have questioned the reliability of cooperators' information and convictions based on such testimony.²⁶ More recently, critics such as Alexandra Natapoff have questioned the policy's long-term effect on communities that are the sustained targets of criminal investigations and the manner by which cooperation and undercover investigations increase possibilities for state-sponsored deception and abuse.²⁷ Under this reasoning, cooperation, and the deceptive police practices that often accompany it, affront the social norms that keep criminal conduct at bay.²⁸

Because cooperation's critics focus on process and punishment, their suggested reforms also focus on process and punishment. Thus, they argue that interviews with cooperators should be audio- or videotaped to deter cooperators from lying and changing stories;²⁹ prosecutors should be accorded less discretion in deciding who will or will not receive a cooperation agreement;³⁰ and unwarranted sentencing disparity, to the extent it exists, should be reduced.³¹ Whatever their individual merits,

^{25.} See, e.g., United States v. Milo, 506 F.3d 71, 77 (1st Cir. 2007) (observing that cooperation "lessen[s] public confidence in the law's insistence on just deserts [sic], and [undercuts] equal treatment vis-a-vis those who similarly offended but happen to have nothing to trade"); see also Richman, supra note 23, at 293 ("One must wonder at the damage done to the force of our laws . . . when murderers 'walk' because they were fortunate enough to have others to 'rat' on.").

^{26.} Saul M. Kassin, *Human Judges of Truth, Deception, and Credibility: Confident But Erroneous*, 23 CARDOZO L. REV. 809, 809 (2002) (arguing that cooperator testimony is suspect because people "are poor human lie detectors").

^{27.} Alexandra Natapoff, *Snitching: The Institutional and Communal Consequences*, 73 U. CIN. L. REV. 645, 658–59 (2004) (criticizing lack of transparency in cooperation process); *see also* Richard H. McAdams, *The Political Economy of Entrapment*, 96 J. CRIM. L. & CRIMINOLOGY 107, 111–13 (2005) (citing abuses in undercover investigations that used confidential informants).

^{28.} Under the social norms theory, people avoid wrongdoing not because they fear formal punishment, but rather because of "the informal enforcement of social mores by acquaintances, bystanders, trading partners, and others." Robert C. Ellickson, *Law and Economics Discovers Social Norms*, 27 J. LEGAL STUD. 537, 540 (1998). For a critical analysis of norms theory as it has been applied to criminal law, see Robert Weisberg, *Norms and Criminal Law, and the Norms of Criminal Law Scholarship*, 93 J. CRIM. L. & CRIMINOLOGY 467, 489–95 (2003). For an argument of how cooperation may be used to alter undesirable social norms, see Tracy L. Meares & Dan M. Kahan, *Law and (Norms of) Order in the Inner City*, 32 LAW & SOC'Y REV. 805, 825 (1998) (arguing that snitching might undermine social norms surrounding juvenile gun possession in the inner city). *But see* Bernard E. Harcourt, *After the "Social Meaning Turn": Implications for Research Design and Methods of Proof in Contemporary Criminal Law Policy Analysis*, 34 LAW & SOC'Y REV. 179 (2000) (questioning evidentiary support for Kahan and Meares's argument).

^{29.} See, e.g., Sam Roberts, Note, Should Prosecutors be Required to Record Their Pretrial Interviews with Accomplices and Snitches?, 74 FORDHAM L. REV. 257 (2005).

^{30.} Compare Lee, supra note 22, at 249 (arguing for greater oversight of prosecutorial decisions not to cooperate), with Weinstein, supra note 2, at 568 (arguing for numerical cap on number of cooperators that prosecutors can use).

^{31.} Schulhofer, *supra* note 23, at 221 (arguing for replacement of mandatory minimum drug sentences with sentencing guidelines). Schulhofer's "cooperation paradox" argument—that less

these reforms miss the larger point: if cooperation fails to deter, then government actors ought to reconsider whether to use the policy *at all*. Failure to address the question is thus a serious gap in the cooperation literature.

Indeed, this presumption of deterrence allows both current users and future adopters of the policy to overstate its value. For example, in an August 2009 speech to the New York City Bar Association, Robert Khuzami, the newly appointed Director of the Enforcement Division of the SEC, announced his intention to improve the SEC's enforcement muscle by "incentivizing cooperation by individuals" in SEC investigations. In early January 2010, Khuzami announced the SEC's "Cooperation Initiative," which imported the broad outlines of federal criminal cooperation policy. As is the case for federal criminals, under the new initiative, offenders who assist the SEC are eligible for reduced penalties. "

Khuzami's proposal was itself an extension of the SEC's "Seaboard" decision. In Seaboard, the SEC established a policy whereby it would impose less punishment on regulated entities whose officers and directors cooperated during the course of an investigation.³⁴ Seaboard, in turn, was itself an offshoot of the Department of Justice's internal guidelines for prosecuting business organizations for their employees' criminal offenses. Like the SEC, the DOJ has awarded cooperative corporations with lesser punishment (deferred prosecution agreements instead of criminal indictments), assuming the corporations meet conditions laid out by the

culpable defendants received worse sentences because they had less valuable information with which to bargain—was later rebutted by Maxfield and Kramer's report, *supra* note 18, at 12–14, which indicated that self-professed high-level drug dealers received cooperation agreements less frequently than low-level offenders. Importantly, the report did not address the *reliability* of the prosecutors' determination as to the relative culpability of offenders. For a more recent indication that the paradox remains a problem, see David M. Zlotnick, *The Future of Federal Sentencing Policy: Learning Lessons from Republican Judicial Appointees in the Guidelines Era*, 79 U. Colo. L. Rev. 1, 9 n.125, 40 (2008) (reporting concerns of federal judges).

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^{32.} Robert Khuzami, Dir. of Enforcement Div., U.S. Sec. & Exch. Comm'n, Remarks Before the New York City Bar: My First 100 Days as Director of Enforcement (Aug. 5, 2009) (transcript available at http://www.sec.gov/news/speech/2009/spch080509rk.htm). Khuzami is also a former federal prosecutor in the United States Attorney's Office for the Southern District of New York (Manhattan).

^{33.} Press Release, U.S. Sec. & Exch. Comm'n, SEC Announces Initiative to Encourage Individuals and Companies to Cooperate and Assist in Investigations (Jan. 13, 2010) (available at http://www.sec.gov/news/press/2010/2010-6.htm).

^{34.} See Report of Investigation Pursuant to Section 21(a) of the Securities and Exchange Act of 1934 (Seaboard Report), [2001–2003 Transfer Binder] Fed. Sec. L. Rep. (CCH) ¶ 74,985 (Oct. 23, 2001); SEC DIVISION OF ENFORCEMENT, OFFICE OF CHIEF COUNSEL, ENFORCEMENT MANUAL § 4.3, at 99–100 (Mar. 3, 2010), available at http://www.sec.gov/divisions/enforce/enforcementmanual.pdf.

Justice Department.³⁵ Separately, the DOJ's Antitrust Division has granted immunity to those corporations (and in some instances, to the corporation's employees) who admit their participation in cartels and provide the Antitrust Division with information about the other members of the cartels.³⁶ Finally, administrative agencies have implemented a whole host of "self-regulatory" regimes whereby government agencies apply a lenient sanction to business organizations in exchange for their disclosure of legal and administrative violations and their assistance in identifying and sanctioning wayward employees.³⁷

Until now, "regulatory cooperation" has focused primarily on corporate entities, whose owners effectively are rewarded when the company's managers and directors identify and turn on fellow employees and officers. The SEC's recent announcement, however, demonstrates a desire to import individual, criminal-style cooperation into the regulatory context. Regulators would do well to pause before doing that, however, because entity- and individual-level cooperation differ substantially.

First, whereas the government imposes cooperative obligations on corporations in order to leverage private enforcement resources, ³⁹ the purpose of individual criminal cooperation is to enable the government's own agents (prosecutors and investigators) to improve the public's enforcement mechanism. ⁴⁰

Second, unlike corporate cooperation, individual cooperation does not condition the individual criminal's cooperation agreement on his ex ante

^{35.} The Filip Memorandum can be found in U.S. DEP'T OF JUSTICE, U.S. ATTORNEYS' MANUAL § 9-28.000, *available at* http://www.justice.gov/opa/documents/corp-charging-guidelines.pdf (last visited Feb. 19, 2011).

^{36.} Christopher R. Leslie, Cartels, Agency Costs, and Finding Virtue in Faithless Agents, 49 WM. & MARY L. REV. 1621, 1630–31 (2008).

^{37.} See, e.g., Christopher A. Wray & Robert K. Hur, Corporate Criminal Prosecution in a Post-Enron World: The Thompson Memo in Theory and Practice, 43 AM. CRIM. L. REV. 1095, 1107–33 (2006) (observing that numerous federal administrative agencies and departments decide entity-based liability by considering the entity's cooperation with enforcement authorities in the identification and punishment of culpable employees).

^{38.} Ellen S. Podgor lays out some of the differences between individual and organization-level cooperation in *White-Collar Cooperators: The Government in Employer-Employee Relationships*, 23 CARDOZO L. REV. 795 (2002).

^{39.} *Cf.* Arlen & Kraakman, *supra* note 5, at 696 (pointing out that firms may be able to sanction their employees more cheaply than government actors).

^{40.} The difference may be due partially to the fact that corporate cooperation interposes a third party, the corporate employer, between the government and targeted employee. See Samuel W. Buell, Criminal Procedure Within the Firm, 59 STAN. L. REV. 1613, 1614 (2007) (developing "tripartite" model for understanding prosecutions of corporate employees). This additional layer alters both the incentives to seek cooperation (on both sides), as well as the ability to comply with, and verify compliance with, a given cooperation agreement. See also Arlen, supra note 5, at 834–35 (explaining that organizational crime includes additional agency cost component).

efforts to prevent his own, much less others', crimes. This is a significant difference, because in order to secure the benefits of cooperation, putative corporate "cooperators" effectively must put in place policing and prevention systems long before any wrongdoing has been detected by the government. By contrast, the average individual defendant need not decide whether to cooperate until shehe or she has been arrested, when she presumably has substantial incentives to seek a means of reducing her (likely) sentence. Thus, whereas corporate cooperation may impose ex ante compliance costs on firms, individual cooperation does not appear to require any level of "self regulation" prior to the government's apprehension of wrongdoers.

In sum, although in both instances the government must "pay" the cooperator (entity or individual person) a bounty for assisting the government, the actors' incentives to consume and purchase cooperation in the individual context differ significantly from the incentives that arise in the corporate context. Whereas much has been written regarding the incentives and disincentives for corporate entities to cooperate, this Article focuses primarily on the decision-making process from the perspective of the individual, and not the organizational, cooperator.

A final caveat is in order. Some readers may assume, based on media reports and popular culture, that the bulk of federal criminal cooperation is reserved either for the prosecution of blockbuster Enron-style corporate frauds, or for the prosecution of highly structured and organized crime families, such as the Gambino family. This is, however, an incomplete portrayal.

Nearly 10,000 defendants who were sentenced in the federal criminal justice system in 2008 were the beneficiaries of Section 5K1.1 motions, ⁴³

^{41.} See Arlen & Kraakman, supra note 5, at 699 (describing difference between policing and prevention mechanisms). Because corporations must make this "cooperation" decision before they have become the focus of a government investigation, they may shy away from cooperation-based measures that have the effect of detecting rather than preventing internal crime, as detection efforts increase the entity's expected liability. *Id.* at 707–08.

^{42.} Under this model, the "bounty" that the government must pay to induce the corporation's private enforcement is either an adjusted sanction to reflect the firm's investment in the increased probability of punishment, or a two-tiered system that imposes strict liability on all firms, plus an added sanction on those firms that fail to implement adequate detection and prevention measures. Arlen, *supra* note 5, at 856–58.

^{43.} See 2008 SOURCEBOOK, supra note 1, at tbl.30 (reporting that 9,498 defendants received 5K1.1 letters). The United States Sentencing Guidelines ("Guidelines") set forth advisory sentence ranges for federal criminal offenses. See United States v. Booker, 543 U.S. 220, 245 (2005) (concluding that Guidelines must be advisory in order to pass muster under Sixth Amendment of Constitution). Although courts are no longer obliged to adhere to the ranges set forth in the Guidelines, a Section 5K1.1 letter remains one of the common methods by which defendants achieve substantial

which expressed the government's view that they were in fact "cooperators" worthy of a reduction in their criminal sentences. ⁴⁴ The primary charge for over half the members of that group related to the sale of narcotics. ⁴⁵ This is not new; drug dealers have represented at least half of the cooperator "pool" for the last ten years. ⁴⁶ The rest of the pool is split between defendants convicted of firearms (854 defendants in 2008), fraud (1006), and a host of other crimes, which range from robbery (113) to more "white collar" fare, such as forgery (102) and tax violations (108). ⁴⁷ Even the "fraud" category of cooperators is quite broad, as it includes all cooperating defendants who have committed mail, wire, securities, bank, credit card, and other frauds. Judging by the median sentence for fraud (twelve months' imprisonment in 2008), most of these frauds are gardenvariety scams and not billion-dollar *Ponzi* schemes. ⁴⁸

Thus, the low-level, mildly culpable employee of a Fortune 500 company who assists the government in prosecuting ten corporate officers is not typical of the cooperator pool. Instead, it is the mid-level drug dealer offering the government the possibility of a diffuse network of cocaine suppliers and competitors. Nor is the transparently structured, publicly

sentence reductions. See Stephanos Bibas, Regulating Local Variations in Federal Sentencing, 58 STAN. L. REV. 137, 149 (2005) (explaining that the Section 5K1.1 motion "unlock[s] the Guidelines, allowing the judge to depart below the otherwise applicable sentencing range"). Moreover, where mandatory minimum statutes apply, defendants seeking a sentence beneath the statutory minimum either must cooperate successfully or, in narcotics cases, seek relief under Title 18, United States Code, Section 3553(f), the so-called "safety valve" provision. The "safety valve" permits first-time, nonviolent defendants who were not supervisors in the offense to escape the mandatory minimum sentence, provided they plead guilty and provide law enforcement agents truthful information about their crime. See Ryan Scott Reynolds, Note, Equal Justice Under Law: Post-Booker, Should Federal Judges Be Able to Depart from the Federal Sentencing Guidelines to Remedy Disparity Between Codefendants' Sentences?, 109 COLUM L. REV. 538, 544 (2009).

- 44. Caren Myers Morrison points out that this list is underinclusive as it does not include federal cooperators for whom the government filed motions pursuant to Fed. R. Crim. Proc. 35 ("Rule 35"), which permits the government to file a motion for a reduction in the length of the defendant's sentence based on the defendant's substantial assistance to the government. Whereas a Section 5K1.1 substantial assistance motion is filed prior to the defendant's sentencing, a Rule 35 motion can be filed up to a year following the date of the defendant's sentencing. The Sentencing Guidelines track the former, but not the latter. See Caren Myers Morrison, Privacy, Accountability, and the Cooperating Defendant: Towards a New Role for Internet Access to Court Records, 62 VAND. L. REV. 921, 936 (2009) (criticizing discrepancy in data collection).
- 45. See 2008 SOURCEBOOK, supra note 1, at tbl.30. Narcotics defendants are overrepresented in the cooperator pool; drug related offenses made up just 32.6% of the overall offender pool that year. *Id.* at fig.A.
- 46. See, e.g., U.S. SENTENCING COMM'N, SOURCEBOOK OF FEDERAL SENTENCING STATISTICS, tbl.30 (1999–2008); Weinstein, *supra* note 2, at 579–80 & n.57 (observing, in 1996, that narcotics defendants were a substantial proportion of cooperators).
 - 47. 2008 SOURCEBOOK, supra note 1, at tbl.30.
 - 48. Id. at tbl.13.

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held corporation typical of the criminal organizations that the government prosecutes. To the contrary, most are smaller, more informal groups with less stable levels of hierarchy. Here again, the statistics are illuminating: in 2008, of 67,887 defendants sentenced for criminal conduct, only 4.4% received an enhancement for an "aggravating role" as an organizer, leader, or supervisor in an offense. Either the government is doing a very poor job of identifying and prosecuting leaders, or many offenders avoid large, hierarchical criminal organizations.

Several implications flow from these conclusions. First, in many criminal cases, cooperators will promise payoffs—additional convictions and investigations—that are difficult to value. It is one thing to "sign up" a cooperator who has information about insider trading within a well-known, successful, and formerly respected hedge fund; such a prosecution may be quite salient for the other members of that industry. It is quite another matter to enter into an agreement with a cooperator who can implicate one or two of her cocaine suppliers.

Second, and equally important, the informality of the criminal organization will allow more people to cooperate, even if the government sincerely desires to use cooperators to prosecute other defendants who committed equally or more serious crimes. Even if government agents prefer to use lesser criminals to cooperate against more serious ones, they may encounter difficulty discerning who the most culpable person is within an organization, if they can in fact even identify that organization fully. Moreover, because much of cooperation will involve smaller, fluid groups, even the "heads" of those groups will have the ability to cooperate by providing assistance in prosecuting the members of other, (allegedly) more serious groups.

In sum, the paradigmatic image of the prosecutor using "little fish" to swallow "bigger fish" simply may not hold. With this more ambiguous backdrop in mind, the remainder of this Article picks apart cooperation's relative benefits and costs.

II. THE DETECTION EFFECT OF COOPERATION

Cooperation exerts two competing effects on would-be violators. The first is a Detection Effect, whereby the government increases its ability to detect and prosecute wrongdoers. Because cooperation leverages the government's ability to enforce and detect crime, rational violators should

^{49.} *Id.* at tbl.18. *See also* U.S. SENTENCING GUIDELINES MANUAL § 3B1.1 (2009) (setting forth provisions and criteria for "aggravating role" in offense enhancement).

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presume that cooperation increases their chances of getting caught. Having come to this conclusion, they either will be deterred or take (potentially costly) measures to avoid detection. Commentators who commend cooperation's crime-fighting value implicitly reference the Detection Effect.

The second and less discussed aspect of cooperation, which I discuss in Part III, is cooperation's Sanction Effect. Because the cooperators themselves receive a lesser prison sentence in exchange for their cooperation, the policy inherently reduces the criminal's expected sanction.50

To understand the competing Detection and Sanction Effects of a cooperation-based law enforcement policy, it is useful to first review the traditional theory of deterrence, which is premised on the neoclassical rational actor. Admittedly, the neoclassical view of intentional wrongdoing cannot provide a complete explanation of why people fail to comply with the law. Nevertheless, it provides a starting point for understanding the potential value—and the corresponding limitations—of a law enforcement policy that relies in large part on the assumption that it improves deterrence.

A. Neoclassical Economics and Deterrence

Under Gary Becker's famous formulation, the rational actor refrains from wrongdoing when the expected costs of such conduct outweigh its expected benefits.⁵¹ That is, when the benefit the actor can expect from a crime is outweighed by the sanction, S, multiplied by the probability of getting caught and punished, p, the actor rationally decides not to commit the crime. Society, in turn, should take efforts to deter criminals from engaging in such conduct when the aggregate benefits of such conduct are outweighed by the harm imposed on society.⁵²

^{50.} The "Sanction Effect" refers to the criminal's expected sanction once she is caught. Her overall expected cost of criminal conduct combines the Detection Effect and the Sanction Effect. Thus, her expected cost of criminal conduct may go up or down depending on how she weighs the two effects.

^{51.} See generally Gary S. Becker, Crime and Punishment: An Economic Approach, 76 J. POL. ECON. 169 (1968).

^{52. &}quot;Social welfare is taken to be the sum of the gains less the harms associated with the subset of individuals who commit harmful acts." A. Mitchell Polinsky & Steven Shavell, Should Liability Be Based on the Harm to the Victim or the Gain to the Injurer?, 10 J.L. ECON. & ORG. 427, 430 (1994). For torts, Polinsky and Shavell argue that society should ordinarily set the injurer's cost to exceed the harm, and not his gain. Id. Where wrongdoers derive utility solely from malicious conduct, however, Polinsky and Shavell agree that punishment should be set to wipe out the wrongdoer's gain since the gain provides no value to society. A. Mitchell Polinsky & Steven Shavell, Punitive Damages: An

Although Becker treated probability and sanctions as fungible variables, subsequent analyses (both theoretical⁵³ and empirical⁵⁴) concluded that the offenders responded more readily to increases in probability than they did to increases in sanctions. Accordingly, government actors who wish to reduce crime must apportion some resources toward detecting offenders.

The government can increase the probability of detection in a number of ways.⁵⁵ It can hire new agents and officers to investigate reports of wrongdoing or otherwise increase law enforcement agencies' budgets.⁵⁶ It can impose ex ante disclosure and monitoring requirements on regulated entities, thereby making it more difficult for wrongdoers to evade detection. It can encourage innocent victims and witnesses of crimes to come forward with information, either through laws that protect them from retaliation or that reward them financially for their assistance.⁵⁷ Finally—

Economic Analysis, 111 HARV. L. REV. 869, 909–10 (1998); see also Keith N. Hylton, Punitive Damages and the Economic Theory of Penalties, 87 GEO. L.J. 421, 421 (1998) (explaining that "complete deterrence" in criminal law ordinarily attempts to wipe out the criminal's gain). For the sake of simplicity, I assume that harms and gains are equivalent.

- 53. For theoretical accounts of why sanctions and probability of detection differ in importance, see Yair Listokin, Crime and (with a Lag) Punishment: The Implications of Discounting for Equitable Sentencing, 44 AM. CRIM. L. REV. 115 (2007) (arguing that time lag between commission of crime and imposition of punishment creates discount on sanction); A. Mitchell Polinsky & Steven Shavell, On the Disutility and Discounting of Imprisonment and the Theory of Deterrence, 28 J. LEGAL STUD. 1 (1999) (introducing concepts of both declining disutility and discounting of extended periods of imprisonment); Steven Shavell, Criminal Law and the Optimal Use of Nonmonetary Sanctions as a Deterrent, 85 COLUM. L. REV. 1232, 1245–46 (1985) (explaining how uniformly maximal sanctions eliminate marginal deterrence of less harmful crimes).
- 54. See Jeremy A. Blumenthal, Law and the Emotions: The Problems of Affective Forecasting, 80 IND. L.J. 155, 200–01 (2005) (explaining that criminal defendants' ability to adapt to imprisonment reduces effectiveness of longer prison sentences); Darley, supra note 10; Robinson & Darley, supra note 13 (citing empirical research); see also Dan M. Kahan, Social Influence, Social Meaning, and Deterrence, 83 VA. L. REV. 349, 380 & nn.112–13 (1997) (citing empirical research and theorizing that changes in the probability of detection may signal greater social meaning about the crime than changes in the sanction).
- 55. The "p" in Becker's equation is often referred to as a probability of detection. That term, however, encompasses the apprehension, conviction, and implementation of a given sanction. "[T]he probability of sanction is determined by a series of sequential events (such as being caught by the police, being charged by a prosecutor, and being convicted by a court in accordance with the various procedural rules of the legal system)." Yuval Feldman & Doron Teichman, Are All Legal Probabilities Created Equal?, 84 N.Y.U. L. REV. 980, 983 (2009).
- 56. For example, the Financial Economic Recovery Act of 2009, enacted in the wake of the subprime mortgage meltdown, authorized the appropriation of 245 million dollars to several law enforcement agencies, for each of fiscal years 2010 and 2011. See Congressional Budget Office Cost Estimate, Fraud Enforcement and Recovery Act of 2009, S. 386, 111th Cong. (2009), available at http://www.cbo.gov/ftpdocs/100xx/doc10030/s386.pdf.
- 57. Within criminal organizations, witnesses who are themselves innocent but who are aware of wrongdoing by others are often referred to as "whistle-blowers." For an economic analysis of whistle-

although this list is hardly exhaustive—the government can enact broad laws and regulations that cover a large swathe of conduct and reduce the likelihood that wrongdoers will find legal loopholes through which to justify or immunize their conduct.⁵⁸

All of these tactics are helpful. Cooperation, however, provides unique advantages to law enforcement agents, several of which I describe below.

B. Cooperation's Detection Effect

Cooperation increases the probability of detection in a number of ways, all of which improve deterrence insofar as offenders properly perceive this risk.⁵⁹

1. Eliciting Information

Cooperation benefits the government by encouraging defendants to proffer information at an early stage of the government's prosecution. This information includes (a) details that fill in blanks in the government's case against the defendant, (b) new information about other defendants and suspects, (c) information about the efficacy of the government's investigation techniques, and (d) insights on the defendant's bargaining position and willingness to go to trial.

It is no secret that the unequal bargaining position between prosecutor and defense attorney serves as an information-forcing device. Whereas the prosecutor often may choose her cooperator from a group of willing defendants, the defendant has no choice but to take his information to the prosecutor trying his case. Except in those instances in which prosecutors in neighboring jurisdictions actively compete for the same case, prosecutors generally enjoy monopoly power over the cooperation process. ⁶²

blowing policies, see Anthony Heyes & Sandeep Kapur, An Economic Model of Whistle-Blower Policy, 25 J.L. ECON. & ORG. 157 (2008).

^{58.} Dru Stevenson, *Toward a New Theory of Notice and Deterrence*, 26 CARDOZO L. REV. 1535, 1583 n.200, 1584 n.203 (2005).

^{59. &}quot;To the extent that devoting more attention to one type of crime increases the probability of detection, conviction, and punishment of criminal wrongdoing, this will result in a deterrent effect on that crime." Mark A. Cohen, *The Economics of Crime and Punishment: Implications for Sentencing of Economic Crimes and New Technology Offenses*, 9 GEO. MASON L. REV. 503, 511 (2000).

^{60.} See Yaroshefsky, supra note 18, at 929 (discussing pressure to cooperate early).

^{61.} The defendant nevertheless retains some bargaining power depending on the uniqueness of his information, the strength of the government's case, and the abilities of the defendant's defense counsel to parlay these factors into a concrete benefit.

^{62.} Neighboring prosecutors' offices therefore have incentives to coordinate their power—

Cooperation produces information not simply because the government controls the process, but also because it has the power to limit the number of cooperation agreements available to defendants.⁶³ As discussed below, scarcity provokes competition by defendants, and competition in turn yields information for government investigators and prosecutors.⁶⁴

For every defendant who receives a cooperation agreement, some undefined additional number will at least "try out" for such an agreement by meeting with the government and proffering information. Even when the government "pays" a cooperator for her assistance in prosecuting another defendant, it receives far more than the single cooperator's assistance. In addition to the cooperator's help, the government receives the information streams from *all* of the defendants who have met with government agents in the course of the government's investigation and who attempted, but ultimately failed, to secure a cooperation agreement.

Consider the average defendant who seeks cooperation and attends a typical "proffer" session. If the government's case already is strong, the defendant will likely conclude that the opportunity costs of cooperation are rather low. 65 The upside is a vastly reduced sentence, which, prior to the Supreme Court's decision in *Booker*, may have seemed quite unlikely given the (previously) mandatory nature of the United States Sentencing Guidelines. 66 Accordingly, even if the defendant maintains a healthy skepticism regarding his chances of becoming a cooperator (and behavioral psychology would suggest that he will do exactly the

formally or informally—in order to maintain their monopoly power over the cooperation process. See, e.g., U.S. DEP'T OF JUSTICE, Organization and Functions Manual No. 27: Coordination of Parallel Criminal, Civil, and Administrative Proceedings (1997), in UNITED STATES ATTORNEYS' MANUAL, available at http://www.justice.gov/usao/eousa/foia_reading_room/usam/title1/doj00027.htm (coordinating criminal and civil white-collar crime proceedings across agencies); Michael Simons, Prosecutorial Discretion and Prosecution Guidelines: A Case Study in Controlling Federalization, 75 N.Y.U. L. REV. 893, 957 n.292 (2000) (describing federal-state coordination guidelines).

- 63. Pro-defense commentators have criticized the government's monopoly over such agreements. *See, e.g.*, Weinstein, *supra* note 2, at 580–81 (observing that many more defendants with narcotics charges provide information than receive cooperation agreements).
- 64. Weinstein's proposed reform, to cap the number of cooperation agreements at some arbitrary number, *see id.* at 568, is thus counterproductive. Prosecutors already have incentives to create a sense of scarcity in order to pressure defendants to compete for cooperation. At least until the cap was reached (which the government would do everything possible to hide), a specific cap on cooperation agreements would increase the government's leverage over defendants, who would now be competing for even more limited resources.
- 65. See Weinstein, supra note 2, at 592–93 (theorizing that even small chance of mitigation causes defendants to "flock to proffer sessions").
- 66. In *Booker*, the Supreme Court held that sentencing courts were not bound by the Guidelines' sentencing ranges, thereby permitting courts to sentence defendants according to the broader factors set forth by Congress in Title 18, United States Code, Section 3553. United States v. Booker, 543 U.S. 220, 245 (2005).

opposite⁶⁷), he will likely conclude that he has much to gain by offering his assistance.

Once he attends the proffer, the defendant will answer the government's questions and provide information about his own crime, other crimes, and any number of topics. Regardless of whether he becomes a cooperator, at least some of his information will assist the government. He may identify new suspects, confirm the government's instincts (good or bad) about another cooperator's information, illuminate certain aspects of his crime that enable the government to improve current or future investigations, and clarify information that the government possesses but does not fully comprehend.

Even a proffer that yields none of the benefits described above will provide value. Apart from the content of a proffer, the fact that a defendant is willing to speak to the government conveys valuable "meta" information, such as the defendant's willingness to take the case to trial, his attorney's willingness and ability to defend his client at trial, and whether the defendant (or his attorney) believes that he has a viable defense. Granted, the government may sometimes infer the wrong signal. Over time, however, cooperation provides additional information that aids and informs the government's litigation strategy.

The fact of the defendant's proffer (assuming it is communicated to others) also aids the government insofar as it exploits coordination and collective action problems among defendants.⁶⁹ The possibility of cooperation enhances the government's bargaining position if all of the defendants in the case either know or assume that the government is conducting proffers and choosing cooperators.⁷⁰ In a classic example of the prisoner's dilemma, each co-defendant's self-interested conduct harms the group's collective interest in remaining silent.⁷¹ Arguably, this

^{67.} For a discussion on the overoptimism of defendants regarding their sentences, see Bibas, *supra* note 20, at 2500.

^{68.} In some cases, the fact that the prosecution is willing to consider cooperating also transmits information to defense attorneys. Proffers may thus serve as the first step in a process that ultimately leads to a more efficient plea bargain than if the parties had never met. *Cf.* Russell D. Covey, *Signaling and Plea Bargaining's Innocence Problem*, 66 WASH. & LEE L. REV. 73 (2009) (using similar argument to explain benefits of police interrogations).

^{69.} See Oren Bar-Gill & Omri Ben-Shahar, *The Prisoners' (Plea Bargain) Dilemma*, 1 J. LEGAL ANALYSIS 737 (2009) (explaining that collective action and coordination problems cause defendants to accept plea bargains rather than demand en masse that prosecutors take their cases to trial).

^{70.} See, e.g., United States v. Garcia, 926 F.2d 125, 127–28 (2d Cir. 1991) (upholding a downward departure despite the government's unwillingness to file "substantial assistance" motion because defendant's cooperation with authorities "broke the log jam' in a multi-defendant case" and caused other defendants to negotiate guilty pleas with the prosecutor).

^{71.} See Bar-Gill & Ben-Shahar, supra note 69, at 740 ("Defendants are like a battalion of

dynamic would exist regardless of cooperation. Nevertheless, by elevating the stakes, cooperation exacerbates the prisoner's dilemma. 72

Finally, the competition to become a cooperator often provides the government with sufficient information to convict multiple defendants, regardless of whether they become cooperators. Although the proffering defendant often signs an agreement that limits how the prosecutor may use his statements in the government's case in chief, the prosecutor still can use much of the proffered information to the government's advantage. For example, most agreements permit the government to use the defendant's statements for impeachment at trial. Accordingly, once the defendant has himself admitted wrongdoing to agents and the government, his ability to testify in his own defense will likely be foreclosed, as will his ability to generate any argument that is inconsistent with what he said during the proffer session. Moreover, proffer agreements usually do not preclude the government from gathering derivative evidence from the defendant's proffered information.

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. . . . 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.").

- 72. Although some defendants might overcome the prisoner's dilemma by threatening would-be cooperators with violence, the strategy can backfire. *See*, *e.g.*, United States v. Spinelli, 551 F.3d 159, 162 (2d Cir. 2008) (explaining how organized crime family's threats upon one of its members caused him to agree to cooperate with the government).
- 73. Justice Souter observed as much in his dissent in *United States v. Mezzanatto*, 513 U.S. 196, 218 (1995), that for the defendant who proffers but fails to secure a cooperation agreement, "the possibility of trial... will be reduced to fantasy."
- 74. Proffer agreements are described at length by Rasmusen, *supra* note 7, at 1545–47 (describing three categories of proffer agreements that allow the government to use the defendant's proffer statements in subsequent prosecutions in increasingly broad circumstances). *See also* Steven Glaser, *Proffer Agreements: To Execute or Not to Execute?*, N.Y. L.J., July 17, 2008; Benjamin A. Naftalis, Note, "Queen for a Day" Agreements and the Proper Scope of Permissible Waiver of the Federal Plea-Statement Rules, 37 COLUM. J.L. & SOC. PROBS. 1 (2003) (discussing use of agreements).
- 75. Although the defendant's statements are made in the course of plea negotiations and therefore governed by Federal Rule of Evidence 410 and Federal Rule of Criminal Procedure 11(f), the Supreme Court has held that the defendant can waive these rights with regard to the prosecution's impeachment of the defendant's testimony at trial. *Mezzanatto*, 513 U.S. at 210.
- 76. Although *Mezzanatto* addressed the narrower question of using the defendant's proffer statements to impeach his own testimony, proffer agreements have since expanded to allow prosecutors to use proffer statements "not only for impeachment of the defendant, but also in rebuttal and in the government's case-in-chief when defense counsel makes statements or elicits testimony that conflicts with the proffer." Naftalis, *supra* note 74, at 3.
- 77. A standard proffer agreement form used in the United States Attorney's Office for the Southern District of New York plainly states, at paragraph 3, that government agents may gather and use derivative evidence against the defendant in a subsequent prosecution. THE NEW YORK CRIMINAL

establish new leads and strengthen its case against the defendant regardless of whether he subsequently cooperates. Thus, although it does not take the place of a confession, the defendant's proffer session vastly reduces his option of proceeding to trial. Indeed, insofar as the proffer system reduces the effectiveness of lying subsequently at trial, cooperation increases the "truth-finding" function of the criminal justice system.

2. Altering Criminal Conduct Ex Ante

In addition to eliciting information from defendants following their arrest, cooperation alters criminal behavior prior to arrest. Because anyone could be (or become) a cooperator, criminals must invest time and energy screening their co-conspirators, victims, and associates. Moreover, because cooperators help undercover agents gain access to organizations by posing as potential clients, co-conspirators, or victims, cooperation similarly forces criminals to screen for undercover stings. A second-order aspect of the Detection Effect is that it increases the cost of doing criminal business, thereby deterring crime.

Scholars already have recognized cooperation's deterrent effect on conspiracies. In their seminal respective accounts of conspiracy law and collective sanctions, Neal Katyal and Daryl Levinson laid the groundwork for understanding how cooperation leverages law enforcement power. As Katyal and Levinson separately demonstrated, group liability creates incentives to cooperate; if five criminals conspire to commit a crime and all can be charged for participating in the same conspiracy, then each of the five may be held liable for committing that crime, regardless of his or her particular role in the offense. True, this dynamic may encourage criminals to be *more* careful ex ante to work together and avoid detection, but it also encourages them to break ranks and talk once they are caught.

BAR ASSOCIATION, SOUTHERN DISTRICT OF NEW YORK PROFFER AGREEMENT FORM (2001), available at http://nycrimbar.org/Members/otherlinks/Forms/Proffer-SDNY.pdf.

^{78. &}quot;[C]riminals must be more cautious once they are aware that their clients—or even their recruiters and bosses—in criminal transactions could be government agents." Dru Stevenson, Entrapment and the Problem of Deterring Police Misconduct, 37 Conn. L. Rev. 67, 107 (2004). Bruce Hay provides an expanded theoretical account of how undercover operations affect deterrence efforts. Bruce Hay, Sting Operations, Undercover Agents, and Entrapment, 70 Mo. L. Rev. 387 (2005).

^{79.} Neal Kumar Katyal, *Conspiracy Theory*, 112 YALE L.J. 1307 (2003); Daryl J. Levinson, *Collective Sanctions*, 56 STAN. L. REV. 345, 398–400 (2003). Katyal's piece exhaustively sets forth the various benefits of imposing criminal conspiracy liability on group conduct. Levinson applies the broader concept of "collective sanctions" (criminal or civil) to, among others, individuals who are themselves innocent of wrongdoing but who "are in an advantageous position to identify, monitor, and control responsible individuals." *Id.* at 348.

Therefore, the government need apprehend only one of the five in order to further its investigation. Rooperation allows the government to realize the benefits of group liability and thereby weakens bonds between wrongdoers ex ante. The uncertainty created by both dynamics destabilizes criminal conduct within group settings. Criminals who know that cooperators will trade information and assistance ex post are more inclined to choose their conspirators more carefully, use norms or payments to bond their co-conspirators to the conspiracy, and watch for signs of defection. Collectively, these "agency costs" divert criminals' energies away from the "profit-generating" premise of their criminal enterprise. They spend more time and energy watching their backs and less time harming others. Indeed, the dynamic extends beyond the typical criminal conspiracy; the possibility of cooperation increases the costs of interacting with *anyone*.

The story, however, is not all positive. If cooperation increases the agency costs of groups, then criminals should respond either by reducing their size or finding alternate ways of screening and bonding their members. Notice, however, that these methods themselves (gang initiation rites and organized family oaths, for example) may generate additional costs *to society*. When one gang member threatens to kill another member if she snitches on the group, the second gang member may respond by committing *more* crime on the group's behalf in order to prove her loyalty. Thus, attempts to reduce the agency costs of cooperation may result in more, and not less, harm to society.

Moreover, by encouraging criminals to reduce the size of their conspiracies, cooperation ironically may result in leaner and more efficient

^{80. &}quot;Conspiracy law makes it possible for prosecutors to threaten low-level conspirators with severe sentences and then offer them reductions in exchange for inculpatory evidence about higher-level conspirators." Levinson, *supra* note 79, at 399. Levinson does not consider the extent to which prosecutors might fail to distinguish culpability among conspirators and inadvertently favor "high-level" conspirators who inculpate their unlucky, less culpable colleagues.

^{81.} Katyal, *supra* note 79, at 1340–43.

^{82. &}quot;Conspiracy law encourages organizations to adopt practices, such as employee monitoring, that generate inefficiencies, stymie group identity, and sow distrust within the group." Katyal, *supra* note 79, at 1334.

^{83.} Agency costs are the costs that accrue when an agent fails to act in accordance with his principal's wishes. To prevent "shirking," the principal must expend resources monitoring and bonding the agent. The total costs of the relationship include monitoring and bonding costs, plus the costs of whatever residual shirking remains. *See generally* WARD FARNSWORTH, THE LEGAL ANALYST: A TOOLKIT FOR THINKING ABOUT THE LAW 87–99 (2007) (chapter co-written with Eric Posner).

^{84.} Cooperators need not be accomplices or co-conspirators; they can be victims or mere acquaintances. Cooperation thus reduces incentives not just to conspire with other criminals, but also to interact with *anyone*.

groups. Just as corporate actors grow beyond efficient boundaries due to hubris or empire building, so too might criminal groups. ⁸⁵ Cooperation thus reminds criminals to behave more efficiently.

In markets for illegal substances, cooperation's effect on size may generate a more "competitive" market, thereby reducing price and increasing availability. For example, between 1980 and 1992, despite the fact that the government strongly policed the drug trade, the per gram price of cocaine and heroin dropped significantly and output increased in the United States. Some researchers theorize that price dropped and output expanded because law enforcement efforts broke up previously large cartels. Narcotics became cheaper, and demand increased. Smaller and perhaps more successful groups then committed (at least in the aggregate) more crime. Cooperation may have reduced the size of the typical drug conspiracy, but the overall harm to society remained constant or in fact increased.

At best, then, the most we might say is that cooperation places certain pressures on group-oriented conduct. As Katyal and Levinson have argued, these pressures may indeed redound to society's benefit, and if they do, they are not limited to formal criminal conspiracies; criminals can cooperate against their competitors and sometimes even strangers. Nevertheless, cooperation's effect on ex ante conduct is not easy to control, and, at least in some instances, it may leave society worse off. Yet again, the net Detection Benefit will likely depend on context.

3. Leveraging the Benefits of Stealth

Cooperation enables the government to improve its detection abilities stealthily without alerting particular suspects that they are the subjects of an investigation. ⁸⁹ For example, when the SEC announces with great

^{85.} Ironically, cooperation may force criminals who irrationally prefer large enterprises (due either to empire-building concerns or hubris) to implement their wrongdoing through smaller and more efficient entities.

^{86.} Abdala Mansour, Nicolas Marceau & Steeve Mongain, *Gangs and Crime Deterrence*, 22 J.L. ECON & ORG. 315, 316–18 (2006). Prices may also decrease because the threat of enforcement forces purchasers and sellers to forego optimal bargaining. *See* Beth A. Freeborn, *Arrest Avoidance: Law Enforcement and the Price of Cocaine*, 52 J.L. & ECON. 19 (2009).

^{87.} Id.

^{88.} By the same token, cooperation might simply crowd out some of the more risk-averse and possibly less dangerous criminals, leaving the rest of the field to their more entrepreneurial and risk-preferring colleagues. *See, e.g.*, Brendan O'Flaherty & Rajiv Sethi, *Why Have Robberies Become Less Frequent but More Violent*?, 25 J.L. ECON. & ORG. 518, 519 (2009) (theorizing that deterrence strategies reduce absolute number of robberies but leave more violent offenders in the robbery pool).

^{89.} For a discussion of how police deception can usefully sort guilty and innocent actors, see

fanfare a massive increase in enforcement spending, it creates several responses among those who practice in the securities industry. It deters some potential offenders by causing them to revise the probability of detection and conclude that the costs of criminal conduct outweigh the perceived benefits. It alerts other individuals to invest in detection avoidance techniques. Finally, it spurs other offenders to choose alternate forms of misconduct that cause equal or greater harm.

Because it combines elements of conspicuous and unobserved policing, cooperation achieves the best of both worlds: it preserves the criminal's incentive to expend resources on detection avoidance, while rendering those efforts less effective. ⁹² That is, although criminal suspects know generally that any of their co-conspirators, victims, or associates might be cooperators (or, for that matter, undercover agents), they usually do not know *which* ones are cooperators. As a result, criminals lack perfect information to make efficient choices on how to order their affairs.

Accordingly, cooperation increases the risk of apprehension, but it does so in an ambiguous manner. Ambiguity, in turn, persuades some would-be offenders to desist or substitute alternate conduct. Meanwhile, the stealthy nature of cooperation at least enables the government to apprehend and incapacitate those stalwart offenders who would go ahead with their intended course of action no matter what.

Consider a City that wishes to increase the likelihood of catching those who deal in narcotics. Assume the City plans to do this by increasing the

William J. Stuntz, Lawyers, Deception, and Evidence Gathering, 79 VA. L. REV. 1903 (1993).

^{90.} See generally Chris William Sanchirico, Detection Avoidance, 81 N.Y.U. L. REV. 1331, 1337 (2006).

^{91.} Neal Kumar Katyal, *Deterrence's Difficulty*, 95 MICH. L. REV. 2385, 2391–2402 (1997); *see also* Daniel S. Nagin, *Criminal Deterrence Research at the Outset of the Twenty-First Century*, 23 CRIME & JUST. 1, 6–8 (1998) (explaining how deterrence is affected by perception).

^{92.} Avraham Tabbach recently theorized that because punishment avoidance efforts can be costly to criminals, they should be encouraged insofar as they substitute for costlier punishments such as imprisonment. Tabbach realizes, however, that avoidance efforts are socially undesirable if the offender can externalize them onto innocent parties. *See* Avraham D. Tabbach, *The Social Desirability of Punishment Avoidance*, 26 J.L. ECON & ORG. 269 (2009).

^{93.} Although criminals may, as a general rule, be "risk-seeking," they still may avoid uncertain or ambiguous situations. *See* Stevenson, *supra* note 58, at 1574–77 (distinguishing uncertainty from risk); *see also* Yuval Feldman & Doron Teichman, *Are All "Legal Dollars" Created Equal?*, 102 NW. U. L. REV. 223, 232 n.45 (2008) ("[T]he behavioral literature distinguishes between perceptions of risk (when the probability of the event is known) and perceptions of uncertainty (when the probability of the event is unknown).").

^{94.} See Tom Baker, Alon Harel & Tamar Kugler, The Virtues of Uncertainty in Law: An Experimental Approach, 89 IOWA L. REV. 443, 473–74 (2004) (making similar arguments for periodic "enforcement campaigns"); Alon Harel & Uzi Segal, Criminal Law and Behavioral Law and Economics: Observations on the Neglected Role of Uncertainty in Deterring Crime, 1 AM. L. & ECON. REV. 276 (1999).

number of police detectives assigned to narcotics activity in certain neighborhoods. When the City increases its enforcement efforts, it has two choices. It can increase enforcement efforts conspicuously or secretly. If the increase in enforcement efforts is transparent, the announced increase might deter putative wrongdoers by causing them to conclude that they are highly likely to be apprehended and that the expected sanction outweighs the expected value of the conduct. Moreover, announced increases in enforcement efforts may encourage private actors to assist the government in apprehending and identifying wrongdoing because a show of government force expresses the community's view that the conduct is wrong and will not be tolerated. The government's enforcement conduct strengthens social norms in favor of law-abiding and law-assisting behavior. 95

Alternately, conspicuous enforcement may backfire. Among other things, it may cause putative victims to become less vigilant⁹⁶ and enable wrongdoers to engage in detection avoidance.⁹⁷ That is, by announcing its increase in enforcement, the government gives ample warning to the wrongdoer to alter her conduct so as not to be apprehended. Still, similar to the increased agency costs of group conduct discussed in Section 2 *supra*, conspicuous enforcement is valuable when it forces criminals to divert energy to cover-ups and away from additional harm.

Unfortunately, as is the case with agency costs, criminals can pass avoidance costs on to others and thereby exacerbate the costs of crime. A top executive who has already embezzled money from a company account may respond to an internal audit by creating fake customer invoices to cover his otherwise unexplained withdrawals of money from the company account. In doing so, the executive not only avoids detection for the initial crime, but he also increases the end-of-year bonus that the company will pay him for bringing in additional business. In other words, the action that the executive takes to avoid detection exerts an additional cost on the

^{95.} For an introduction to the now-voluminous literature on how government actors shape norms, see generally Richard H. McAdams, *The Origin, Development, and Regulation of Norms*, 96 MICH. L. REV. 338 (1997); Cass R. Sunstein, *Social Norms and Social Roles*, 96 COLUM. L. REV. 903 (1996). For application in the criminal law context, see Sara Sun Beale, *Federalizing Hate Crimes: Symbolic Politics, Expressive Law, or Tool for Criminal Enforcement?*, 80 B.U. L. REV. 1227, 1255–63 (2000); Dan M. Kahan, *The Secret Ambition of Deterrence*, 113 HARV. L. REV. 413, 487–88 (1999).

^{96.} See Amitai Aviram, Counter-Cyclical Enforcement of Corporate Law, 25 YALE J. ON REG. 1, 20 (2008) (explaining that conspicuous enforcement can reduce putative securities fraud victims' perceived risk of harm).

^{97.} See Sanchirico, supra note 90, at 1336.

^{98.} See Tabbach, supra note 92.

victim company, but does not reduce the profitability of his criminal conduct, at least not in the short run. 99

In sum, for a certain class of wrongdoers, conspicuous enforcement does not deter. Instead, it perversely increases the wrongdoer's effectiveness. Therefore, to improve deterrence and avoid the costs of cover-ups and intensified harm, the government must use less observable measures to increase its enforcement and the corresponding likelihood of detection. A stealthy increase in enforcement means that the government increases its ability to apprehend and punish, but does so without announcing the increase to the general public. A stealthy enforcement regime incapacitates unsuspecting wrongdoers, but does not deter. Incapacitation, however, may be better than nothing.

Of course, stealth has its drawbacks. Purely unobserved surveillance fails to deter potential criminals since they have no idea that they face increased detection or punishment. Stealthy policing also fails to signal innocents that society views as a priority the eradication and punishment of certain conduct. If society mistakenly infers stealth enforcement as a lack of interest, social norms are weakened. More people may commit crimes (or fail to report them) simply because they assume no one cares. Stealth also exerts a number of collateral costs, such as increased potential for abuse of power and corruption within government agencies. It also seems highly inconsistent with the notion of a robust adversarial process. ¹⁰³

For many of the reasons discussed above, the government and society should prefer a strategy that flexibly combines transparency and stealth. ¹⁰⁴ In many instances, we will expect the government to announce that it is

^{99.} Over time, however, the cover-up may increase the offender's risk of detection and punishment, particularly if the government chooses to prosecute him for additional "process" oriented crimes such as perjury or obstruction of justice. See Erin Murphy, Manufacturing Crime: Process, Pretext, and Criminal Justice, 97 GEO. L.J. 1435, 1444 (2009).

^{100.} Dru Stevenson makes a similar argument for uncertain application of substantive statutes. Stevenson, *supra* note 58, at 1574–77.

^{101.} Society benefits when the costs of incapacitating the criminal (prison costs plus opportunity costs of lost contributions to society) are outweighed by the harm he would impose in a given period. See Hugo M. Mialon & Paul H. Rubin, *The Economics of the Bill of Rights*, 10 Am. L. & ECON. REV. 1, 41–42 (2008) (citing Steven Shavell, *A Model of Optimal Incapacitation*, 77 Am. ECON. REV. 107, 107–10 (1987)).

^{102.} Of course, the stealth strategy has a number of collateral costs, the most important being the fact that the government may become unaccountable and abuse its power. Stevenson, *supra* note 58, at 1578-79

^{103.} See generally McAdams, supra note 27 (citing abuses in undercover stings).

^{104.} For a discussion of the tradeoffs between transparency and stealth in undercover investigations, see Hay, *supra* note 78, at 411–12.

increasing its enforcement of certain laws, but we will also expect the government *not* to describe in specific detail how it plans to detect or apprehend such conduct. We will require the government to explain and document what it has done ex post (at trial or during a hearing, for example) without foreclosing its ability to use similar techniques ex ante. The optimal combination of stealth and transparency will be one that (a) deters putative wrongdoers who fear marginal increases in detection and sanctions, (b) fosters and supports law-abiding social norms, but (c) does not provide a detection-avoidance road map to wrongdoers who are intent on accomplishing or maintaining a given course of harmful conduct.

Arguably, cooperation provides just that mix. The public knows as a general rule that cooperators exist and that they may help the government by attending and recording meetings with other criminals ex ante, or by testifying against them at trial ex post. The public also knows that the government is committing resources to the reduction of crime, signaling not only its existence but also society's disapproval of such conduct.

At the same time, absent some sleuthing, a document trail, and the ability to predict the future, the public often will not know the identity of specific cooperators. Those who can be deterred will be impressed by the government's use of snitches ex ante and by the possibility that any of their friends might "flip" ex post. Those who cannot or will not be deterred will be apprehended when one of their colleagues flips. Whatever its drawbacks, cooperation's mix of transparent and unobserved policing improves the government's ability to deter and incapacitate offenders.

C. Some Limitations on the Detection Effect

Until now, I have explored the various benefits of cooperation, particularly as they relate to the government's ability to detect and deter wrongdoing. Certain aspects of cooperation, however, reduce the net Detection Effect, including (a) potential abuse of cooperation and cooperators and (b) problems associated with the value and use of the cooperator's information.

^{105.} Criminals cannot predict which associates eventually will cooperate, and the government may mask the identity of cooperators. See Caren Myers Morrison, Privacy, Accountability, and the Cooperating Defendant: Towards a New Role for Internet Access to Court Records, 62 VAND. L. REV. 921, 956–61 (2009) (describing how availability of cooperation agreements on internet has fueled efforts to obfuscate cooperators' identities).

1. Government Abuse

Cooperation's net Detection Effect falls insofar as government agents abuse the tool in a manner that causes them to detect, prosecute, or convict fewer offenders.

If the cooperating defendant forfeits viable procedural claims in the course of seeking a cooperation agreement, cooperation permits prosecutors and law enforcement agents to ignore procedural obligations under the Fourth or Fifth Amendment. In that sense, cooperation is no different from the standard-issue plea agreement. Prosecutors and agents will become less vigilant and cease monitoring each other when they rely on cooperation as a means of encouraging defendants to refrain from filing motions to suppress illegally obtained evidence. The failure to follow procedural rules, moreover, may undermine law enforcement's legitimacy, force prosecutors to enter into agreements with suboptimal cooperators, and increase the overall likelihood of unchecked corruption and abuse within law enforcement agencies, all of which may lead to an increase in criminal conduct and a decrease in the prosecution of guilty actors.

A second possibility is that prosecutors and agents may use cooperators prospectively to apprehend offenders who never would have committed crimes in the first place, or who would have committed less serious crimes but for the cooperator's urging. ¹⁰⁹ This result is problematic, particularly if it reduces the legitimacy of law enforcement institutions or decreases the opportunity costs of engaging in criminal conduct. ¹¹⁰ That is, if would-be offenders conclude that they will be prosecuted *regardless* of whether they

^{106. &}quot;[G]uilty pleas avoid most of the potentially costly requirements that criminal procedure imposes." William J. Stuntz, *The Uneasy Relationship Between Criminal Procedure and Criminal Justice*, 107 YALE L.J. 1, 4 (1997).

^{107.} Cf. Daniel Richman, Prosecutors and their Agents, Agents and their Prosecutors, 103 COLUM. L. REV. 749, 794–95 (2003) (arguing for institutional structures that promote "mutual monitoring" by federal prosecutors and law enforcement agents).

^{108.} For a sophisticated analysis of how criminal procedure rules prevent law enforcement actors from engaging in rent-seeking behavior and corruption, see Keith N. Hylton and Vikramaditya Khanna, *A Public Choice Theory of Criminal Procedure*, 15 SUP. CT. ECON. REV. 61 (2007).

^{109.} McAdams terms this the "false offender" problem. McAdams, supra note 27, at 128.

^{110.} McAdams observes that imprisoning false offenders could temporarily increase general deterrence when aimed at a new population because it publicizes a new tactic. *Id.* at 128–29. As that population becomes aware of the tactic, deterrence should drop back to normal levels, *id.*, and indeed could drop even further if criminals become convinced that the opportunity costs of engaging in criminal conduct have decreased since innocent activity might result in a false conviction. *See also* Issachar Rosen-Zvi & Talia Fisher, *Overcoming Procedural Boundaries*, 94 VA. L. REV. 79, 89 (2008).

are guilty, the "missed opportunity" to make money legitimately will become less valuable.

The specter of government abuse certainly should not be ignored. It is unclear, however, how much abuse cooperation generates in addition or comparison to other policing techniques. Moreover, it would be an overstatement to say that cooperation offers the government a free pass to ignore the law. Reputation costs, media scrutiny, professional mores, and the possibility that some defendants might indeed decide to take their chances with a trial, all combine to lessen the risks of at least some of these abuses.

In sum, we know that abuse and corruption reduce cooperation's Detection Effect, but we do not know by how much. The answer likely depends on the context in which cooperation occurs and the structural mechanisms already in place regarding government abuse. Departments that stress ethical conduct and tolerate little abuse should also tolerate little abuse with regard to cooperation. Lax departments, by contrast, will use cooperation inappropriately and thereby destroy its Detection Effect.

2. Inaccurate and False Information

Even when government actors act in good faith, they nevertheless may find themselves acting on inaccurate or false information. To prevent this from occurring, prosecutors and government agents must spend a fair amount of time extracting and sifting information. They also must develop organizational mechanisms to maintain and use such information effectively. These tools are themselves costly and therefore reduce the Detection Benefit of cooperation.

I address each of these problems below. They will vary depending on the type of crime and the manner by which the government uses the cooperator: prospectively, to make new cases, or historically, to prove old ones. Although the government can take steps to minimize inaccuracies and falsehoods, these steps, too, are costly. Accordingly, information costs always exert a downward drag on the Detection Effect.

a. Unintentionally Inaccurate Information

Cooperators unintentionally may provide inaccurate information by jumping to conclusions, relying on a faulty memory, or accepting prosecutorial theories because of their desire to secure an agreement. Because it produces false positives (arresting innocents) and false

negatives (failing to arrest the guilty), inaccuracy reduces cooperation's net Detection Effect.¹¹¹

Even worse, government interrogators themselves may introduce a certain amount of inaccuracy into the cooperation process by asking unduly suggestive questions or encouraging cooperating defendants to make conclusions that are not necessarily correct.¹¹²

These problems can be overcome or at least mitigated. Training can help prosecutors and government agents become more adept at flagging and screening out inaccuracies. Interrogators can ask more open-ended questions during proffer sessions and seek additional corroboration from alternate sources to avoid situations in which cooperating defendants simply echo what they think prosecutors want to hear. Moreover, prospective use of cooperators (to arrange meetings with co-defendants and undercover agents, for example), rather than historical use (recounting a two-year-old conversation), reduces the potential for inaccuracy.

Despite these efforts, inaccurate information infects the cooperation process. Therefore, the inaccuracies themselves, as well as the efforts the government takes to avoid them, all exert a downward drag on the Detection Effect.

b. Information Overload and Agency Costs

Even when it receives accurate information, the government may not use it effectively. For example, the government may find itself overloaded with so much information that it is unable to process it effectively. 114 As

Consider the skilled and ethical prosecutor. When a defendant comes in saying he wants to cooperate, the prosecutor does not tell the defendant what she's looking for. Nor does she sit passively when the defendant's first tale minimizes not just his own culpability but that of his friends. She won't throw him out of the room She'll confront him, trying to walk the fine line between showing the defendant that she can tell when he's lying (good) and giving the defendant a road map of what he needs to say to make the government happy (bad).

Daniel Richman, Expanding the Evidentiary Frame for Cooperating Witnesses, 23 CARDOZO L. REV. 893, 893–94 (2002)

^{111.} See generally Louis Kaplow & Steven Shavell, Accuracy in the Determination of Liability, 37 J.L. & ECON. 1 (1994).

^{112.} Insofar as a defendant's guilt turns on statements made during conversations with cooperators, the risk for inaccuracies may be greater. See, e.g., Steven B. Duke, Ann Seung-Eun Lee & Chet K.W. Pager, A Picture's Worth a Thousand Words: Conversational Versus Eyewitness Testimony in Criminal Convictions, 44 AM. CRIM. L. REV. 1, 14 (2007) (explaining why testimony about prior conversations might be inaccurate).

^{113.} Daniel Richman suggests as much in his discussion of how a prosecutor might pressure a cooperating defendant to tell the truth without causing the cooperator to say whatever the prosecutor wishes to hear:

^{114.} For a discussion of "information overload" and how it may affect the government's effective

Matthew Bodie observes in other contexts, an excess of information can become "the equivalent of no information" or it can "drown out information that would otherwise be accessible." Although technology may ease the government's ability to use and retain the information, such technology is not costless. Someone must choose, test, train, and monitor others in implementing and using such technology.

In other cases, information may become lost or underutilized due to the agency costs associated with its distribution. A single drug conspiracy can be prosecuted by either a federal prosecutor in conjunction with the DEA or FBI, a local district attorney in connection with a city police force's narcotics bureau, or by some joint federal-local task force. Each of those agencies may have incentives to hoard information they receive about that conspiracy in order to retain control over the investigation and the attendant conviction and arrest statistics that accompany it. Moreover, even a wholly federal crime can trigger venue in two or more jurisdictions. As a result, multiple federal components will compete for control over the same case. Competition, in turn, fuels turf wars and concerns that one group is free riding off of another's hard work.

use of information, see generally Troy A. Paredes, *Blinded by the Light: Information Overload and Its Consequences for Securities Regulation*, 81 WASH. U. L.Q. 417, 470 (2003). *See also* Michael Levi & Peter Reuter, *Money Laundering*, 34 CRIME & JUST. 289, 301 (2006) (raising information overload concerns in the context of money laundering enforcement); Chad M. Oldfather, *Heuristics, Biases, and Criminal Defendants*, 91 MARQ. L. REV. 249, 261 (2007) (voicing concern that information overload could infect the plea bargaining process in response to increased disclosure requirements).

- 115. Matthew T. Bodie, *Information and the Market for Union Representation*, 94 VA. L. REV. 1, 72 (2008).
- 116. For example, the United States Attorney's Office for the Southern District of New York implemented a cooperator mapping system that tracked, among other things, cooperators who might have information about violent crimes. *See* James B. Jacobs, *Legal and Political Impediments to Lethal Violence Policy*, 69 U. Colo. L. Rev. 1099, 1110 & n.33 (1998) (citing mapping system). Such systems, however, cost money to build, maintain, and improve.
- 117. For an example of this dynamic in the private sector, see Amitai Aviram & Avishalom Tor, Overcoming Impediments to Information Sharing, 55 ALA. L. REV. 231 (2004) (describing reasons why private competitors may decline to share information). Although Aviram and Tor focus on information-sharing failures in the private sector, portions of their analysis should also apply to government agencies (and offices within a single government agency) that compete for scarce resources.
- 118. This flexibility stems from the extent of overlap between federal and state criminal statutes. "In 1997, only about 5% of all federal criminal cases involved federal statutes with no local or state counterpart" Lisa L. Miller & James Eisenstein, *The Federal/State Criminal Prosecution Nexus: A Case Study in Cooperation and Discretion*, 30 LAW & Soc. INQUIRY 239, 244 (2005) (citations omitted).
- 119. Admittedly, each jurisdiction can file charges if at least one of their elements sufficiently differ from each other. *See generally* Blockburger v. United States, 248 U.S. 299 (1931) (analyzing double jeopardy claim by comparing elements of charged offenses). Only one agency, however, can be the *first* to file charges and capture the attendant benefits that accompany that position.
 - 120. See Daniel Richman, The Past, Present, and Future of Violent Crime Federalism, 34 CRIME

The information pathologies discussed above are not necessarily intractable. They may be reduced when agencies form reciprocal relationships with each other, and protocols the growth of information-sharing norms, and create formal protocols (and increase information technology capability) for distributing cases and sharing information, and create joint investigatory bodies such as local and regional task forces. These strategies, however, are unevenly implemented, costly to enact and monitor, and prone to error and defection. Accordingly, when the interests of an agency, division, or individual prosecutor or law enforcement agent diverge from the interests of society, *some* information withholding will occur despite cultural norms or more formal protocols that encourage or demand sharing.

& JUST. 377, 405 (2006) (describing history of "turf battles" between law enforcement agencies).

121. Aviram & Tor, *supra* note 117, at 238 (explaining how fears of free riding cause competitors to underproduce and withhold information from others). Since cooperation provides so many benefits to prosecutors, the underproduction of information is not likely a concern here. By contrast, the *sharing* of information may well be a concern when multiple agencies and units can generate the same set of arrests and convictions, albeit with differing levels of effort and success. Instead of flowing to the agency or agent who can best utilize it, information will remain stuck with the agent or prosecutor who first elicits it.

122. Nor will they always exist. In some instances, for example, a well-regarded agency or prosecutor may share a cooperator's information either because she lacks the jurisdiction, time, or interest in developing the case. The point here is that *some* residual amount of withholding will exist, and thereby drive down the Detection Effect.

- 123. Aviram & Tor, supra note 117, at 241.
- 124. In August 2008, the FBI published a National Information Sharing Strategy that urged a "sharing" culture over a "need to know" approach to information between and within law enforcement agencies. *See* FED. BUREAU OF INVESTIGATION, NATIONAL INFORMATION SHARING STRATEGY (2008), *available at* http://www.fbi.gov/stats-services/publications/national-information-sharing-strategy-1/national-information-sharing-strategy-2008-pdf.
- 125. For an in-depth discussion of a number of programs designed to increase cooperation between federal and state law enforcement agents and prosecutors, see Miller & Eisenstein, *supra* note 118.

126. In the wake of the terrorist attacks on September 11, 2001, Congress enacted the Intelligence Reform and Terrorism Prevention Act of 2004 (IRTPA), which, among other things, directed the Department of Justice (DOJ) to revamp its information sharing capabilities with federal and state enforcement agencies. In 2005, the DOJ announced the Law Enforcement Information Sharing Program (LEISP), which created a "OneDOJ" network designed to share information. Although IRTPA was designed to address terrorism concerns, LEISP is designed to enable information sharing in the broader context of general criminal law enforcement. See Current Awareness: From the Federal Bureau of Investigation: FBI Announces Contract Award in Information Sharing Program, 7 CYBERCRIME L. REP. (Thomson West, Rochester, N.Y.), Mar. 6, 2007, at 4; U.S. DEP'T OF JUSTICE, Law Enforcement Information Sharing Program, http://www.justice.gov/jmd/ocio/projects.htm (last visited Feb. 20, 2011). The FBI's Criminal Justice Information Services Division (CJIS), also maintains a number of programs designed to encourage the sharing of information between law enforcement agencies. See Criminal Justice Information Services, FED. BUREAU OF INVESTIGATION, http://www.fbi.gov/about-us/cjis/cjis (last visited Feb. 20, 2011).

127. See Richman, supra note 120, at 406 (discussing ways in which joint task forces and informal personal relationships reduce organizational costs).

Thus, even when cooperators provide useful and accurate information, there is no guarantee that the information will be transmitted efficiently to the person or persons who can best use it. The agency costs of information sharing, in turn, drag down the Detection Effect.

c. Cooperator Lies

Finally, and perhaps most importantly, cooperators may lie. 128 They certainly have ample incentive to do so; a potentially massive reduction in sentence is at stake. 129 Although cooperators can lie about any number of matters, I will discuss those that fall within the following categories: (a) attempts by the cooperator to minimize his culpability for conduct with which he has been charged; (b) omissions of information about the cooperator's prior criminal conduct; and (c) lies that falsely implicate others.

i. Minimization Lies

The first category, so-called "minimization lies," undermines the Detection Effect of cooperation because it enables the cooperating defendant to avoid taking full responsibility for the already-charged crime. Imagine the government arrests several public employees with embezzling money from the public agency that employs them. The accompanying complaint charges that Employee A stole in excess of \$100,000 from the agency. During a subsequent proffer in which she seeks a cooperation agreement, Employee A contends that she stole only \$10,000, but she offers her cooperation in prosecuting her four co-conspirators. Since Employee A stole less money than some of her co-conspirators (assuming she is telling the truth), the prosecutor chooses Employee A as the government's cooperator.

If Employee A is lying and the government accepts her word and enters a cooperation agreement with her, the government prosecutor will tell the judge at sentencing that Employee A embezzled only \$10,000. Not only will Employee A receive the benefit of a cooperation designation, but she

^{128.} Numerous scholars have discussed this problem. For one of the most recent treatments of the issue, see Robert P. Mosteller, *The Special Threat of Informants to the Innocent Who Are Not Innocents: Producing "First Drafts," Recording Incentives, and Taking a Fresh Look at the Evidence*, 6 OHIO ST. J. CRIM. L. 519 (2009).

^{129. &}quot;[T]he temptation to lie in cooperation agreement cases is not just a natural feature of the landscape but specifically is introduced or inflated by the government when it offers immunity or leniency in return for cooperation." Hughes, *supra* note 21, at 35.

will also start out with a lower baseline sentence due to the government's acceptance of her claim that she stole less money. In other words, Employee A's minimization improves her chances of obtaining a cooperation agreement *and* reduces the baseline sentence from which the court applies its cooperation discount.

Employee A's lies cause the government to detect *less* crime by the defendant. Now, assuming for a moment that Employee A is lying only about her own conduct but is truthful about everyone else's, it may be that Employee A's lies are overcome by the government's increased ability to prosecute her co-workers. Nevertheless, minimization lies detract from whatever additional detection ability the government gains as a result of the defendant's cooperation.

Of course, prosecutors and agents realize that Employee A maintains strong incentives to minimize her culpability. So do the other employees' defense attorneys, who will fiercely cross-examine Employee A should any of her co-workers decide to take their chances at trial. For these reasons, prosecutors will have no choice but to test Employee A's minimization claims. They can interview Employee A multiple times to examine her story's internal logic; seek independent means of corroboration through documents, wiretaps, or other forensic evidence; and interview additional witnesses and other would-be cooperators to test Employee A's claims (with the caveat that they, too, may lie).

After such a process, the government either will convince itself that Employee *A* is telling the truth or that Employee *A* has lied. If the government concludes that Employee *A* is telling the truth, the prosecutor's attempt to corroborate Employee *A*'s story still constitutes a drag on the Detection Effect because the effort itself is costly. If, on the other hand, the government concludes that Employee *A* has lied, it either will charge Employee *A* with obstruction of justice or force Employee *A* to accept a quick guilty plea on the original charges.

In sum, the government can, and likely will, take steps to filter truthful minimization claims from false ones. ¹³¹ The mere fact of such filtering should deter some would-be cooperators from lying. However, a number

^{130.} For discussions of how and how often prosecutors attempt to corroborate cooperator claims, see Yaroshefsky, *supra* note 18, at 932.

^{131. &}quot;[P]rosecutors assume . . . that defendants tend to minimize their role in and respobsility for criminal conduct, and that they tend to exculpate friends and allies and implicate rivals and adversaries." Cohen, *supra* note 1, at 822 (arguing that prosecutors make efforts to prevent minimization).

of defendants will lie anyway. Filtering thus remains essential, both to make the threat of corroboration credible, and to avoid meltdowns in the cases that do proceed to trial. 132

Nevertheless, filtering imposes costs, and in a world where potential cooperators are plentiful, rational prosecutors should prefer the cooperators who impose the fewest costs. Accordingly, when cooperators are fungible and the government has a plentiful supply of them, minimization lies are unlikely to affect the Detection Effect because the government will be loath to choose cooperators who deny engaging in the scope of conduct with which they have already been charged.

ii. Criminal History Lies

In some federal judicial districts, most notably the Southern District of New York, the federal prosecutor's office requires cooperating defendants not only to admit their responsibility for charged conduct, but also to disclose all prior criminal conduct and plead to the most serious crimes among the charged and uncharged conduct. Cooperator defendants in the Southern District therefore may find themselves pleading guilty to charges of which the government was previously unaware prior to the initiation of the cooperation process. To retain cooperation's palatability, the United States Attorneys' Office specifies at sentencing which charges came about solely as a result of the cooperator's own admission, and Southern District judges ordinarily do not include those charges in their baseline sentencing calculations.

Just as cooperators have incentives to minimize their charged conduct, they also have incentives to omit certain details of their criminal history. If, as a general rule, juries prefer likeable cooperators, prosecutors will choose defendants who have engaged in less serious wrongdoing in the past. Defendants therefore may omit details about prior crimes of which

^{132.} The pooling problem discussed above is a variant of problems that arise in the interrogation of suspected criminals. A robust right to remain silent theoretically allows innocents to separate themselves from guilty defendants who would otherwise lie, see Daniel J. Seidmann & Alex Stein, The Right to Silence Helps the Innocent: A Game-Theoretic Analysis of the Fifth Amendment Privilege, 114 HARV. L. REV. 430 (2000), but guilty offenders may be so optimistic about their ability to hoodwink government agents that they submit to interrogation anyway. See Stephanos Bibas, The Right to Remain Silent Helps Only the Guilty, 88 IOWA L. REV. 421, 426–31 (2003) (detailing suspects' multiple incentives to lie).

^{133.} Yaroshefsky, supra note 18, at 928.

^{134.} *Id.* For concerns that sentencing judges may be unaware of such practices, see *id.* at 928–29 nn.50–51.

the government is completely unaware.¹³⁵ Moreover, defendants may omit information about prior crimes if they committed them with friends or family members and fear that the government will prosecute those friends or family members, or seek the fruits of said crimes.¹³⁶

Criminal history lies do not exert the same downward drag on the Detection Effect as minimization lies because they do not place the government in a worse position than if the defendant declined to cooperate. Returning to the example of Employee A, she might confess her involvement in the charged crime (i.e., that she stole \$100,000), but decline to tell the government about a separate fraud that took place three years ago, but which has not been brought to any government agent's attention. In the earlier minimization scenario, the government charges Employee A with stealing \$100,000 and she successfully (and willfully) convinces the prosecutor that she stole only \$10,000; the employee therefore receives both the benefits of cooperation and a lesser baseline sentence. In the current scenario, Employee A receives the benefit of cooperation, but, because she takes responsibility for the full \$100,000 loss, she starts with the same baseline sentence she would have received had there been no cooperation agreement. Since the government would have had no knowledge of the prior criminal conduct anyway, it is made no worse off by the defendant's lies about her criminal history.

The caveat to the foregoing is that the government *will* be made worse off if Employee A testifies against a coconspirator at trial and one of the other defense attorneys learns about the prior conduct and successfully cross-examines her.¹³⁷ In that instance, the government's case against Employees B, C, D, and E may very well fall apart. Then again, trials are scarce in the federal criminal system, and prosecutors often control the flow of information undermining their witnesses' own credibility.¹³⁸

Moreover, if the government is smart, it may use the cooperator in such a way that the cooperator need never testify. For example, assume that the government approached Employee *A* before any legal proceeding had ever

^{135.} Moreover, defendants may have incentives to omit prior crimes insofar as they continue to benefit and use the fruits of those crimes.

^{136.} Supra note 131.

^{137.} See Rasmusen, supra note 7, at 1566 (quoting Stephen S. Trott, Words of Warning for Prosecutors Using Criminals as Witnesses, 47 HASTINGS L.J. 1381, 1429 (1996) (observing that government's cases can be substantially damaged by witnesses whose credibility has been successfully challenged at trial)).

^{138.} If the cooperator testifies as a witness against another defendant, the government is obligated to disclose the cooperator's criminal history so that he may be cross-examined by the defense. Giglio v. United States, 405 U.S. 150, 154–55 (1972).

been brought against the other targets. Admitting her crime, Employee *A* agrees to cooperate with the government and wears an undercover wire to a meeting with Employees *B*, *C*, *D*, and *E*. Since *B*, *C*, *D*, and *E* have yet to be charged with any criminal misconduct, Employee *A*'s undercover wire is beyond the boundaries of the Fourth, Fifth, and Sixth Amendments. During the meeting, *B*, *C*, *D*, and *E* all make incriminating statements about the conspiracy. Even if Employee *A*'s criminal history lies come to light as the case progresses, the government can avoid Employee *A*'s testimony and instead rely on the taped conversations in the unlikely event any of the remaining employees choose to go to trial.

For all these reasons, we should expect the government to address the specter of criminal history lies by minimizing its own reliance on a single cooperator's testimony. Not surprisingly, this is exactly what Ellen Yaroshefsky found when she interviewed former prosecutors in the Southern and Eastern Districts of New York regarding their strategies for using cooperating defendants. ¹⁴⁰ If cooperator lies are costly, then prosecutors seem to be at least aware of this risk and appear to be taking precautions to reduce them.

iii. Lies About Others

Finally, cooperators may lie about others, either by implicating innocents, exaggerating the culpability of other criminals, or attempting to minimize the culpability of others.¹⁴¹

The prosecution and sanctioning of persons for crimes they did not commit reduces the government's accuracy in enforcement. A reduction in accurate arrests, however, is not equivalent to a reduction in the Detection Effect, because that effect is based on the government's *perceived* ability to identify and prosecute wrongdoers. Accordingly, the cooperator-fueled prosecution of innocents may increase the Detection Effect if the public 142

^{139.} See Illinois v. Perkins, 496 U.S. 292, 296–300 (1990) (Fifth Amendment inapplicable to defendant's undercover discussion with government agent); United States v. White, 401 U.S. 745, 752 (1971) (informant's covert taping of conversation does not implicate Fourth Amendment). If the defendant has been indicted, an undercover agent or cooperator's attempt to elicit information from the defendant about the indicted offense violates the Sixth Amendment right to counsel. Massiah v. United States, 377 U.S. 201, 206 (1964).

^{140.} Yaroshefsky, supra note 18, at 923-33.

^{141.} The above analysis considers each category singularly. When cooperators employ combinations of lies, the difficulty in filtering increases substantially.

^{142.} Putative criminals, however, may be less convinced by cooperator-fueled prosecutions since they themselves know that criminals—particularly those who become government witnesses—have

sincerely believes that such individuals are guilty, particularly if those individuals enter guilty pleas. Putting aside our moral revulsion, the prosecution of innocents can theoretically improve deterrence, at least temporarily. 143

Nevertheless, inflating convictions inaccurately is not a very smart policy in the long run. Isacchar Rosen-Zvi and Talia Fisher aptly summarize:

[W]rongful convictions waste limited resources and instigate underparticipation in lawful and socially beneficial activity. Moreover, exposure to the risk of wrongful conviction impairs deterrence, since it lowers the marginal cost of choosing to engage in criminal behavior; when innocent people are systematically exposed to the risk of criminal sanctions, the price of criminal activity becomes cheaper in relation to noncriminal activity. 145

Although the above account is largely theoretical, the well-publicized fruit of now-ubiquitous "innocence projects" supports the theory. ¹⁴⁶ Over the last two decades, numerous well-publicized DNA-fueled exonerations have demonstrated the innocence of over two hundred state and federal criminal offenders, many of whom were convicted with the assistance of cooperating defendants, informants, and jailhouse snitches. ¹⁴⁷ Innocence findings, reported prominently in multiple media outlets, can undermine the law enforcement system's overall credibility, thereby reducing deterrence. To prevent this occurrence, prosecutors must corroborate their cooperators' stories. ¹⁴⁸

Here again, the nature of the cooperation itself will impact the government's willingness and ability to offer a cooperation agreement. For prospective cooperators (that is, defendants who assist the government in

143. But see Katherine J. Strandburg, Deterrence and the Conviction of Innocents, 35 CONN. L. REV. 1321 (2003) (arguing that rules intended to avoid conviction of innocents is based in efficiency, as well as morality, concerns).

the ability to lie.

^{144. &}quot;[A]ccuracy and enforcement effort are substitute means of increasing deterrence" Kaplow & Shavell, *supra* note 111, at 3.

^{145.} Rosen-Zvi & Fisher, *supra* note 110, at 89 (footnotes omitted).

^{146.} Brandon L. Garrett, *Judging Innocence*, 108 COLUM. L. REV. 55, 56–58 (2008) (tracking growth of innocence movement and state and federal responses).

^{147.} *Id.* (providing a rigorous analysis of the causes and treatment of the first 200 exonerated prisoners as compared to a control group).

^{148.} Prosecutors understand this dynamic. *See* Cohen, *supra* note 1, at 821–25 (discussing the process of testing cooperator's credibility based on past experiences as a federal prosecutor); Yaroshefsky, *supra* note 18, at 932–33 (recounting interviews in which prosecutors stressed the importance of corroborating cooperators' claims).

future cases), the undercover investigation itself will provide some of the corroboration for the cooperator's claim. If Stacy contends that Bob sells Ecstasy at the local night club, then the government will corroborate Stacy's claim when Stacy visits the club wearing a body wire and, with undercover agents nearby, purchases Ecstasy from Bob. Thus, Stacy has very little incentive to implicate purely innocent actors.

Of course, the issue may not be so simple. Stacy might encourage Bob, a local Ecstasy dealer, to agree to distribute far more Ecstasy than he normally would. Stacy need not be an evil person to bring this event about. If Stacy perceives her own sentence as being tied to the dangerousness of the offender she helps prosecute, she will have every reason in the world to urge Bob to increase his distribution. Assuming Bob is already predisposed to sell Ecstasy, Stacy's manipulation will not likely affect a jury's determination of guilt at trial, and may not even trigger a very strong claim for a reduced sentence, although a few courts have recognized a limited "sentencing entrapment" defense for defendants who contend they were persuaded by government agents to engage in more harm than they otherwise intended. 150

Does Bob's excessive sentence reduce the Detection Effect of cooperation? Possibly. If the government allocates too many resources toward the apprehension and incarceration of criminals like Bob (what some might call "low hanging fruit"), it may fail to deter more serious offenders. In fact, cooperation of this type may cause us to reduce the number of aggregate offenders, while clearing the field for the most aggressive and dangerous offenders. ¹⁵¹

Finally, if we are worried about a cooperator's manipulation when she provides "prospective" assistance (by arranging undercover buys and taping her conversations with others, for example), then we should be even more concerned when her assistance is primarily "historical." A historical case is one in which the cooperator solely assists with solving a crime that has occurred in the past. Because the cooperator is retelling facts, it is far

^{149.} *Cf.* Cohen, *supra* note 1, at 822 ("[I]t is not too difficult to determine if a defendant is being truthful about his illicit conversations with his confederates when the defendant and his confederates have been the subject of an extensive wiretap investigation spanning months and including hundreds of telephone calls.").

^{150.} See, e.g., Jess D. Mekeel, Note, Misnamed, Misapplied, and Misguided: Clarifying the State of Sentence Entrapment and Proposing a New Conception of the Doctrine, 14 WM. & MARY BILL RTs. J. 1583 (2006).

^{151.} See O'Flaherty & Sethi, supra note 88.

more difficult to corroborate her story—except by obtaining testimony from other witnesses, many of whom will likely be co-defendants. 152

Admittedly, this may be less of a problem in cases that are dominated by emails and written documents. 153 Nevertheless, documents often fail to speak for themselves, and cooperators can provide crucial interpretations for ambiguous statements. For all these reasons, prosecutors will find it necessary to corroborate historical cooperator testimony with *other* cooperator testimony. In other words, in the historical context, the government needs several cooperating defendants to demonstrate that the single cooperator's story is in fact truthful. Historical cooperation therefore increases the amount of time the government must spend working on the same case, as well as the number of defendants to whom it must extend potentially sentence-reducing agreements. For all of these reasons, we should expect the government to rely on historical cooperation primarily in the most serious and difficult-to-prosecute cases: massive corporate frauds, particularly violent gangs, or similarly dangerous organized crime outfits.

In sum, there are a number of ways in which bad information can drag down the Detection Effect. The question, then, is whether prosecutors and investigators adequately mitigate them. We do not know the answer, but we do know that these costs are not monitored in any rigorous or systematic way. Moreover, we also know that societal costs, even when they are perceived correctly, are not necessarily internalized evenly or completely by government actors. ¹⁵⁴ For all these reasons, then, we should be worried that cooperation's Detection Effect is not quite as robust as we assume it to be.

D. Conclusion

Cooperation improves the government's ability to detect and prosecute crime, but with certain limitations. Agents and prosecutors may elicit incorrect information, or improperly handle information that is otherwise accurate and useful. Cooperators may lie, either about themselves or about others. All of these problems place limitations on the Detection Effect. Certainly, these drawbacks can be mitigated by internal training and

^{152.} Yaroshefsky's subjects discuss exactly this type of problem. See Yaroshefsky, supra note 18, at 938–39.

^{153.} I am grateful to Professor Jennifer Arlen for pointing this out.

^{154.} See Daryl J. Levinson, Making Government Pay: Markets, Politics, and the Allocation of Constitutional Costs, 67 U. CHI. L. REV. 345 (2000).

monitoring, and with stronger efforts to corroborate cooperator claims. Many prosecutors and agents would say that is exactly what they do. ¹⁵⁵ Nevertheless, these efforts themselves are costly and therefore reduce the benefits of cooperation. They may become even more important when one considers cooperation's greater problem, the Sanction Effect.

III. THE SANCTION EFFECT OF COOPERATION

The Detection Effect describes only one half of cooperation's effect on deterrence. Cooperation also alters the punishment that the defendant reasonably expects in the event he is apprehended. This is the Sanction Effect of cooperation, and it has been ignored for too long.

When the government "pays" the defendant for his assistance by reducing his sentence, cooperation reduces the expected sanction for a given crime, notwithstanding the fact that it also increases the probability of detection. The question, then, is whether and how the reduction in sanction (the Sanction Effect) interacts with the increase in probability of detection (the Detection Effect). The answer to this question will depend, in part, on three factors: (a) how broadly the government extends cooperation agreements; (b) how deeply judges impose cooperation discounts; and (c) how optimistically criminals perceive the likelihood of an agreement and discount. After reviewing the fairly sparse information that the government publishes on cooperation, this Part takes up each of these issues in turn.

A. Background on Cooperator Sentencing

In 2008, federal prosecutors filed substantial assistance motions in approximately 13.5% of the cases sentenced that year. ¹⁵⁷ A majority of those cooperators were defendants who had been charged with drug trafficking offenses. ¹⁵⁸ In the same year, fraud defendants made up another 10–11% of the cooperating population. Defendants charged with firearm offenses, previously just 3% of the cooperation workforce, took up another

^{155.} See Yaroshefsky, supra note 18, at 932.

^{156.} By using the term "expected sanction" in this section, I am not referring to the overall expected punishment. Instead, I am referring only to the defendant's expectation as to what sentence the judge will impose on the defendant in the event she is caught and successfully prosecuted.

^{157. 2008} SOURCEBOOK, *supra* note 1, at tbl.16, tbl.N.

^{158. 2008} SOURCEBOOK, *supra* note 1, at tbl.30 (showing that drug trafficking cases were clearly more than 50% of overall 5K1.1 cases). For more on why drug traffickers overwhelmingly seek cooperation agreements, see Michael A. Simons, *Departing Ways: Uniformity, Disparity and Cooperation Federal Drug Sentences*, 47 VILL. L. REV. 921, 938 (2002).

9%.¹⁵⁹ The remaining cooperators were distributed among a variety of miscellaneous federal criminal offenses.

FIGURE 1¹⁶⁰

5K1.1 Sentences as a Percentage of the Overall Sentencing Pool

	1999	2000	2001	2002	2003	2004161	2005162	2006	2007	2008
5K1.1 Sentences ¹⁶³	9,788	9,754	9,390	10,203	10,360	9,909	10,099	10,139	10,049	10,048
All Reported Sentences ¹⁶⁴	52,425	54,617	54,851	58,684	65,171	65,043	68,850	70,187	69,893	74,493
Cooperator Percentage	18.7%	17.9%	17.1%	17.4%	15.9%	15.2%	14.7%	14.4%	14.4%	13.5%

Although the absolute number of cooperators has remained relatively constant, the percentage of cooperating defendants has declined somewhat from 18.7% in 1999 to 13.5% in 2008. 1655

Several factors might explain a declining cooperator percentage. The government's "offense pool" may increasingly include crimes for which cooperation is little to no help. The government also may have become a more efficient consumer of cooperation, learning to convict more defendants with the same number of cooperators.

Finally, and perhaps most plausibly, it may be that the numbers are simply more truthful than they used to be, now that the Guidelines ranges are advisory. 166 Whereas previously, attorneys might have masked other

^{159.} See 2008 SOURCEBOOK, supra note 1, at tbl.30. In 1999, out of 8937 documented cooperation cases, prosecutors filed 5K1.1 letters in just 260 firearms cases. See U.S. SENTENCING COMM'N, SOURCEBOOK OF FEDERAL SENTENCING STATISTICS, at tbl.30 (1999), http://ftp.ussc.gov/ANNRPT/1999/SBTOC.htm [hereinafter 1999 SOURCEBOOK].

^{160.} Figure 1 was compiled using statistics from Table 26 and Table 26A of the U.S. SENTENCING COMM'N, SOURCEBOOK OF FEDERAL SENTENCING STATISTICS, at tbl.26 (1999–2003, 2006–2008), tbl.26A (2003–2005), http://ftp.ussc.gov/annrpts.htm [hereinafter Annual Report].

^{161.} The first two figures in this column were calculated by adding the relevant data contained in the Pre- and Post-*Blakely* versions of Table 26A. The percentage was then calculated using the two absolute figures

^{162.} The first two figures in this column were calculated by adding the relevant data contained in the Pre- and Post-Booker versions of Tables 26 and 26A for 2005. The percentage was then calculated using the two absolute figures.

^{163.} Figures in this row have been taken from Tables 26 and 26A (for years 2003–2005) for each year of the Sentencing Commission's annual Sourcebook of Statistics.

^{164.} *Id.* Note that the actual number of sentenced defendants is greater, but that the Sentencing Commission excludes from its calculations cases that lack sufficient information. *See, e.g.*, 2008 SOURCEBOOK, *supra* note 1, at tbl.26, tbl.26A (1999–2008).

^{165.} Compare Annual Report, supra note 160, at app. B, National Data, with Annual Report, supra note 160, at tbl.N. Caren Myers Morrison contends that these statistics provide an incomplete picture of cooperation. See Morrison, supra note 105, at 936.

^{166.} See Nagel & Schulhofer, supra note 18, at 509 (arguing that Section 5K1.1 "almost invites

forms of leniency as cooperation, they no longer have the incentive or need to do so.

The discount that cooperators receive for their assistance also has declined, albeit slightly and in varying amounts according to the charged crime. Here are fraud defendants have experienced a significant reduction in median discount (from 100% to 70% discounts), Here drug traffickers receive more or less the same discount as they always did: 50% of the lowest applicable recommended Guideline sentence.

Although the nationwide percentage of cooperators has inched downward steadily between 1999 and 2008, the reduction has been distributed across districts quite unevenly. Between 1999 and 2008, the Second Circuit, which includes federal prosecutions in New York and Connecticut, experienced a modest drop of cooperators from approximately 23% of all defendants sentenced in 1999 to a little more than 21% in 2008. By contrast, during the same time period, the percentage of Eighth Circuit cooperating defendants dropped by nearly half, and the percentage of D.C. Circuit cooperators nearly doubled.

prosecutors to treat substantial assistance as a vehicle for discretionary plea negotiation benefits"). Nagel and Schulhofer's 1992 article cited evidence that some prosecutors were in fact using Section 5K1.1 as a means of smoothing otherwise rigid Guideline ranges. *Id.* at 522. Since that time, however, a number of events (culminating in the Supreme Court's *Booker* decision) have obviated the need for "fake" 5K1.1 letters.

 $^{167. \ \}textit{See}$ U.S. Sentencing Comm'n, Sourcebook of Federal Sentencing Statistics (1999–2008).

^{168.} Compare 1999 Sourcebook, supra note 159, at tbl.30, with 2008 Sourcebook, supra note 1, at tbl.30.

^{169.} See, e.g., supra note 167.

^{170.} See infra Figure 2. Compare 1999 SOURCEBOOK, supra note 159, at tbl.26, with 2008 SOURCEBOOK, supra note 1, at tbl.26.

^{171.} See infra Figure 2.

^{172.} Id.

Figure 2 demonstrates the disparity:

FIGURE 2¹⁷³

5K1.1 Motions as a Percentage of Defendants Sentenced

			Ū		2002		2005175	2006	2007	2000
Circuit	1999	2000	2001	2002	2003	2004 ¹⁷⁴	2005 ¹⁷⁵	2006	2007	2008
1	15.5	15.9	14.6	14.4	13.5	13.8/16.6	14.1/11.5	13.6	10.8	10.5
2	23.1	23.9	21.7	19	17.5	19.2/23.0	24.4/21.4	21.2	21.6	21.9
3	32.2	30.5	30.6	32.3	28.8	30.3/26.7	26.9/22.7	27.4	27.1	24.2
4	22.7	20.9	20.2	18.6	18.3	16.7/16.8	18.7/18.4	17.3	16.8	17.6
5	15.4	13.6	12.3	13.4	12.5	10.3/9.6	8.3/8.2	7.9	8.4	7.5
6	25.6	24.4	27.2	26	24.6	24.3/22.6	24.2/25.0	25.4	25.2	25.7
7	20.4	21.7	21.2	21.8	21.2	19.0/17.0	18.8/17.5	17.4	17.7	18.4
8	26.0	23.1	22.0	18.9	17.6	15.3/14.0	16.2/14.4	15.9	14.7	15.1
9	10.4	11.6	10.7	11.8	10.2	10.6/9.5	10.4/10.4	10.6	10.0	9.3
10	12.8	10.9	11.0	11.0	9.4	10.3/10.8	10.5/9.8	8.7	9.1	6.9
11	22.1	21.4	19.9	22.4	19.9	21.0/19.0	17.5/17.5	18.3	17.8	15.2
DC	19.6	19.3	13.8	31.1	26.4	31.3/29.6	24.8/27.2	18.4	33.9	34.5

One final point: the decline in the percentage of cooperators does not appear to be for want of criminals seeking that status. Otherwise, we would see an increase in cooperator discounts. That, however, has not occurred. Discounts either have remained flat (as with narcotics defendants) or have decreased (as with fraud offenders). ¹⁷⁶ Notwithstanding significant changes in the law and procedure of federal sentencing, the government retains significant power to choose its cooperators. That being said, the news is not all good for the government. Despite its considerable power, the government still can find itself on the losing end of the deals it strikes with defendants. I explain how in the section below.

^{173.} Figure 2 was compiled using data from 2008 SOURCEBOOK, supra note 1, at tbl.26 (1999–2002, 2006–2008), tbl.26A (2003–2005).

^{174.} The 2004 column has been broken into Pre- and Post-*Blakely* figures, as provided by Table 26A in the 2004 Sourcebook.

^{175.} The 2005 column into Pre- and Post-Booker figures, as provided by Table 26A in the 2005 Sourcebook.

^{176.} *See supra* notes 158–59.

B. Three Factors that Increase the Sanction Effect

The Sanction Effect comes about because the government's lenience at sentencing reduces the expected sentence for a given range of crimes. As I suggest later, in Part IV, the Sanction Effect should not necessarily bother us if it is relatively small or modest. When it overcomes the Detection Effect, however, the Sanction Effect threatens deterrence goals. Accordingly, we should be concerned about factors that cause the Sanction Effect to balloon in size. In this section, I theorize three factors that inflate the Sanction Effect. The first is "excessive cooperation," whereby the government signs up more cooperators than it can effectively use. The second, which is related, is "excessive payment," whereby the government pays the cooperator a greater discount than the cooperator's assistance actually warrants. The third is the cooperator's own over-optimism, which causes her to overestimate the discount she will receive if she cooperates.

1. Excessive Cooperation

Despite the fact that criminals have ample reason to compete for cooperation agreements (as discussed *supra* in Part II), prosecutors and law enforcement agents have their own incentives to sign up cooperators, which, in turn, may cause them to purchase more cooperation than they actually need.

Assume both agents and prosecutors seek generally to maximize convictions and avoid embarrassing losses at trial. Agents may push prosecutors to sign up otherwise unreliable defendants as cooperators because the agents have professional interests in investigating and solving cooperation-intensive crimes. Job promotions, after all, often come from dismantling large criminal organizations and from amassing a long record of arrests and convictions. And when the cooperator's information in fact leads to this result, society too benefits from the government's agreement with the cooperator.

However, in some instances, the cooperation agreement may lead to only a few arrests or the dismantling of a small group that would have disbanded or been apprehended anyway. In those situations, the law

^{177. &}quot;[T]he Justice Department has become more attuned to 'outputs,' pressing U.S. Attorneys for measurable results in terms of numbers of cases processed, either to trumpet the success of an administration crime initiative, or to demonstrate tangible results in crime types that have become the focus of congressional interest." Frank O. Bowman, III, *American Buffalo: Vanishing Acquittals and the Gradual Extinction of the Federal Criminal Trial Lawyer*, 156 U. PA. L. REV. 226, 236 (2005).

enforcement agent's interest diverges from society's interest. The agent prefers cooperation because it generates arrests and convictions and therefore improves her record. By contrast, society might prefer the agent to work on other investigations, particularly investigations of more intractable and dangerous criminal organizations. Individual law enforcement agents, however, are unlikely to perceive this divergence, and even if they do, they will likely ignore it so long as promotions and prestige are premised on the continuous churning of convictions and arrests. Supervisors are also likely to prefer cooperation, particularly if they are forced to show statistics to legislators who set budgets and allocate limited resources. Most importantly, it seems highly unlikely that ordinary citizens will be able to monitor these problems, since they, too, will be lulled by an agency's announcement of "X arrests over the past Y months."

Prosecutors also have strong incentives to enter into cooperation agreements, which may or may not diverge from society's interest. To the extent prosecutors have reason to maximize convictions *and* avoid embarrassing losses (and, in fewer instances, cement high-profile wins), cooperation serves both of these ends. ¹⁷⁹ Moreover, cooperation serves the prosecutor's interest in avoiding needless procedural litigation. Consider a defendant who is the subject of a search whose constitutionality is questionable. Except in those rare cases in which the search promises to make new law in the government's favor, the benefits of proceeding with a suppression hearing are minimal. At best, the trial court will find the search constitutional and the defendant subsequently will plead guilty. Even so, his guilty plea will be preceded by a time-consuming hearing, a delay in closing his case, lengthy witness preparation for the officers, and fewer opportunities to investigate and prosecute more serious crimes.

By contrast, if the defendant becomes a cooperator, the legal implications of the cooperator's investigation largely disappear. The defendant immediately begins "working" with the law enforcement agents by contacting associates, setting up meetings, and taking direction from his new "supervisors." Instead of investing energy and time justifying a prior arrest, law enforcement agents and prosecutors instead get the benefit

^{178.} For an interesting discussion of how data-driven approaches can distort criminal justice institutions and policies, see Mary De Ming Fan, *Disciplining Criminal Justice: The Peril amid the Promise of Numbers*, 26 YALE L. & POL'Y REV. 1 (2007). *See also* Marc L. Miller & Ronald F. Wright, *The Black Box*, 94 IOWA L. REV. 125, 184–85 (2008) (explaining how increasingly cheaper access to technology fuels increase in data-driven law enforcement strategies).

^{179.} See Simons, supra note 62, at 932–33 (observing perception that offices that prosecute more defendants are rewarded with greater resources).

of a conviction (since the cooperator's guilty plea counts as one), as well as the expectation of future arrests and possibly more dangerous (and therefore more newsworthy) criminals. Through cooperation, a questionable arrest metamorphoses from a potential cost center, whereby the prosecutor and agents must waste time justifying a prior arrest, to an attractive income stream, whereby the prosecutor and agents can generate future convictions.

Behavioral economics further suggests that both prosecutors and agents should lean strongly toward cooperation. For example, an empirical study by Ehud Guttel and Alon Harel suggests that individuals may be more willing to predict a future event than to guess the results ("postdict") of a past event. Under this framework, prosecutors, defendants, and defense counsel all might prefer cooperation to a trial or evidentiary hearing. Hearings and trials trigger postdictive questions about the strength of evidence already collected. Cooperation, by contrast, encourages the interested parties to indulge in predictive estimations, such as the future value of the cooperator's assistance on one hand and the potential size of the cooperator's discount on the other.

Cooperation also appeals to prosecutors' risk aversion. If, as Stephanos Bibas has observed, prosecutors are both risk averse and loss averse, they should prefer the certainty of convictions over the uncertainty of possible trial losses. No prosecutor will lose her job or reputation for signing up an extra defendant to testify against a drug kingpin. Losing the case against the kingpin, however, is far more embarrassing, particularly in a world of diminishing trial opportunities.

^{180.} Ehud Guttel & Alon Harel, *Uncertainty Revisited: Legal Prediction and Legal Postdiction*, 107 MICH. L. REV. 467 (2008).

^{181.} Cooperation also may result in what is known as "fundamental attribution bias," whereby prosecutors might "put too much weight" in their analysis of the cooperator's perceived "character traits" in predicting the cooperator's future usefulness, while "ignoring the often more important influence of the situation on behavior." Donald C. Langevoort, *Monitoring: The Behavioral Economics of Corporate Compliance with Law*, 2002 COLUM. BUS. L. REV. 71, 84.

^{182.} Bibas, *supra* note 20, at 2471 (contending that risk aversion causes prosecutors to prefer plea bargains over maximal sentences).

^{183.} During the last year, federal prosecutors in New York have already signed up nine cooperators in the investigation and prosecution of Raj Rajaratnam and his hedge fund, Galleon Group, for insider trading. Although the cooperators are reportedly assisting in additional investigations, the government's heightened risk aversion may also explain the large number of cooperators. See Amir Efrati, Hello Franz! Cooperator No. 9 in Galleon Case Makes Debut, WALL ST. J. L. Blog (Mar. 10, 2010, 10:02 AM), http://blogs.wsj.com/law/2010/03/10/hello-franz-cooperator-no-9-in-galleon-case-makes-debut/.

^{184.} Moreover, as the number of trials decreases, prosecutors become less adept at determining how many cooperators are necessary to support a case if it goes to trial. *See* Bowman, *supra* note 177,

Finally, whereas cooperation's benefits will be quite obvious to the prosecutor and her law enforcement agents, its costs are more abstract and therefore easier to ignore. Because they accrue in the aggregate and over a relatively long period of time, the costs of excessive cooperation are not likely to affect or be evident to individual government actors. These costs are also likely to be ignored because they need not be paid up front. The prosecutor does not pay the defendant when she signs the cooperation agreement. Indeed, since the discount is set by the defendant's sentencing judge, the prosecutor technically does not pay the defendant anything. Thus, cooperators can claim truthfully, when testifying at trial that, so far as they know, the prosecutor lacks the power to set their sentence.¹⁸⁵

This is, of course, a convenient fiction. Judges do not sanction in a vacuum, and the 5K1.1 "substantial assistance" letters that prosecutors write and file with the court are not mere formalities. The content of the prosecutor's letter clearly can influence the sentencing court's degree of discount. Accordingly, although they do so indirectly, prosecutors do in fact "pay" for cooperation. Nevertheless, the indirect means of payment combined with the time delay in imposing the sentence create a recipe whereby prosecutors are more likely to ignore or downplay the costs of cooperation agreements. As a result, they will use less restraint when they decide whether to enter into such agreements in the first place. ¹⁸⁶

2. Excessive Discounts

The foregoing section suggests that legal actors have individual, institutional, and behavioral incentives to enter into too many cooperation

at 237 (arguing that as number of trials decreases, "the attention each trial receives within the [prosecutor's] office increases, as does the potential professional risk to any lawyer involved").

^{185.} Jeffries and Gleeson note the paradox that "[w]hile federal law conditions leniency on prosecutorial initiative, it allows the prosecutor to delegate to the court the task of determining the degree of leniency. The distinction is critical to the credibility of the accomplice witnesses on whom most organized crime prosecutions depend." Jeffries & Gleeson, *supra* note 9, at 1121–22. See also R. Michael Cassidy, "Soft Words of Hope:" Giglio, Accomplice Witnesses, and the Problem of Implied Inducements, 98 NW. U. L. REV. 1129, 1132 (2004) (explaining that prosecutors purposely leave cooperator's promised discount "vague and open-ended" to preserve cooperator's credibility as testifying witness).

^{186.} One might argue that over time, repeat players should learn from their mistakes. However, even repeat players may fail to grasp the system-wide costs imposed by excessive cooperation. Morover, in some of the most popular prosecutors' offices, however, the turnover rate can be quite high. See Adam M. Gershowitz, Prosecutorial Shaming: Naming Attorneys To Reduce Prosecutorial Misconduct, 42 U.C. DAVIS L. REV. 1059, 1093–94 (2009); see also Daniel Richman, Institutional Coordination and Sentencing Reform, 84 TEX. L. REV. 2055, 2069 n.81 (2006) (citing studies indicating that, despite growing careerism in some prosecutor's offices, "[o]ffices in the largest metropolitan areas' run counter to that trend).

agreements. Law enforcement actors also may increase the Sanction Effect by overcompensating cooperators for their service. As I suggest in this section, these two factors may be linked.

Any number of factors may produce "overpayment" in some, but not all, cases. The Guidelines provide no insights on how judges should calculate discounts, and judges likely prefer different sentencing philosophies. Nevertheless, one should expect judges to sentence cooperators relative to *some* baseline, assuming that is how they sentence defendants generally. Discounts will differ depending on whether a judge sentences by comparing a given cooperator to other cooperators that he has sentenced recently, or by comparing the cooperator to the noncooperating defendants in the case. Finally, discounts may differ depending on whether the court believes *any* defendant (much less a cooperator) deserves the prescribed baseline sentence.

All of the above factors introduce noise into cooperator sentencing. But it is not clear that these factors, by themselves, would create a systematic bias in favor of overpayment. Presumably, some factors—how the cooperator compares with the noncooperating defendant, or how heavily a judge leans on potentially meaningless numerical data—could cancel each other out. One cooperator's stingy discount theoretically could be matched by another's comparative windfall. ¹⁸⁹

That being said, there may be some instances in which legal actors systematically overpay cooperators. For example, prosecutors may (somewhat surprisingly) trend toward overpayment. If government prosecutors sign up one hundred cooperators, but only eighty were truly necessary to increase the rate of conviction and detection, government prosecutors nevertheless may convince themselves that all one hundred were necessary. Prosecutors' offices will do this for several reasons: (a) a valuation of the cooperator is in essence a valuation of the prosecutor's prior decision to hire or purchase the cooperator's services; ¹⁹⁰ (b) over

^{187.} See Stephanos Bibas, Max M. Schanzenbach & Emerson H. Tiller, *Policing Politics at Sentencing*, 103 Nw. U. L. Rev. 1371, 1377 n.24 (2009) (citing studies addressing judges' philosophies).

^{188.} See Gerard E. Lynch, Sentencing Eddie, 91 J. CRIM. L. & CRIMINOLOGY 547, 555–56 (2001) (asserting that sentencing is "intrinsically a relative [question]" for which the answer should "be worked out by reference to what punishment is . . . imposed on a range of other offenders").

^{189.} *Compare* United States v. Torres, 251 F.3d 138, 142, 152 (3d Cir. 2001) (affirming trial court's one-month downward departure for defendant who assisted the government over five-year period and contributed to thirty convictions), *with* United States v. Dalton, 404 F.3d 1029, 1033–34 (8th Cir. 2005) (reversing departure that appeared excessive compared to assistance provided).

^{190.} For similar observations of cognitive dissonance in the corporate context, see Langevoort, *supra* note 181, at 87 ("When there is accountability for decisions, people tend to construe information

time, the government and its agents come to sympathize with the cooperator, particularly in instances of prolonged contact between government agents and cooperating defendants; and (c) prosecutors feel a greater need to maintain cooperation's attractiveness as a policy to defendants than they do to rein in the overall costs of cooperation. ¹⁹¹

If prosecutors trend toward overpayment, judges too may trend toward overpayment, albeit for different reasons. First, the inclusion of suboptimal cooperators in the cooperator pool may cause judges to "overpay" *all* of the cooperating defendants. If the typical judge applies a modest sentence discount (30%) for cooperators whose assistance meets the government's minimal definition of substantial assistance, the 30% discount may be the floor from which the judge builds increasingly generous discounts. She may apply a more generous discount (50%) for good cooperators and a highly generous discount (80%) for outstanding cooperators.

Assuming judges sentence cooperators relative to each other, the government's inclusion of minimally helpful cooperators in the court's "cooperating pool" leads judges to excessively remunerate the entire pool. Even worse, this form of "cooperator creep" may create reciprocal effects between judges on one hand, and prosecutors and cooperators on the other. That is, over time, prosecutors may demand, and potential cooperators may offer, less useful information and assistance.

A further source of overpayment might be the government's publication annually of mean cooperator discounts. If cooperators are aware of the mean discount, then in many instances they (and their attorneys) should rationally seek discounts greater than the mean. (A caveat: this may not be true of defense attorneys who are repeat players in small districts and therefore interested in preserving their long-term credibility before judges.) Unless the mean discount translates into *no* term of imprisonment, all criminal cooperators should argue that they have delivered better than average value.

This might not be cause for concern if the government matches the defense with its own pressure for stingier discounts. Yet, as discussed *infra*, institutional and behavioral factors may cause prosecutors to decline to counteract the defendants' collective push for ever generous discounts.

in ways that bolster their prior commitments.").

^{191.} In contrast, Cynthia Lee, *see supra* note 22, at 219–20, worries that prosecutors may deny substantial assistance motions arbitrarily, particularly in light of the Supreme Court's opinion in *Wade v. United States*, 504 U.S. 181, 185–86 (1992) (holding that prosecutor's failure to file substantial assistance motion is unreviewable unless defendant alleges unconstitutional motive).

That is, fundamental attribution error, sympathy and personal bias, and a desire to maintain cooperation's overall attractiveness as a system (particularly if the prosecutor is in the midst of negotiating new cooperation agreements at the time of sentencing), all could restrain prosecutors from seeking discounts below the mean.

Presumably, if "escalating pay" were a problem in cooperator circles, we might expect to see discounts follow a continuous upward trajectory. Happily, that is not the case. As indicated by Figure 3 below, the national discount rate for narcotics, fraud, and robbery offenses either has remained flat or has decreased in recent years.

FIGURE 3—COOPERATOR DISCOUNTS (MEDIAN PERCENT DECREASE FROM MINIMUM GUIDELINE SENTENCE)¹⁹²

Offense	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Drugs—										
Trafficking	48.5	47.8	48.1	46.7	45.2	44.7	45.8	43.5	42.6	44.4
Fraud	100.0	99.7	99.6	99.8	99.9	94.3	97.8	80.0	80.0	70.3
Robbery	33.3	34.5	34.1	35.1	33.3	29.1	35.6	34.6	31.2	33.3
TOTAL	50.0	50.3	50.0	50.0	49.9	48.9	50.0	47.8	47.4	47.8

The discount rate, however, says nothing about the value of assistance that the government has received in exchange. Defendants could potentially be providing better information and assistance for the same or decreased discount, or they could be providing gradually less valuable information and assistance. Without additional information on the type and amount of assistance that prosecutors receive, our data on cooperation is profoundly incomplete.

In sum, there remains the possibility that courts will overpay cooperating defendants. Do prosecutors and courts take steps to guard against it? There does not appear to be any mechanism in place to test for overpayment. Presumably, some judges keep track of the scope and degree of their own cooperator discounts. Similarly, some United States Attorneys' Offices may implement office-wide suggestions on how much of a discount a given type of assistance merits. ¹⁹³ But on the whole, there

^{192.} Figure 3 was compiled using data from the ANNUAL REPORT, supra note 160, at tbl.30 (1999–2008) (including data for over thrity primary offenses).

^{193.} For references to such practices, see Frank O. Bowman, III & Michael Heise, *Quiet Rebellion? Explaining Nearly a Decade of Declining Federal Drug Sentences*, 86 IOWA L. REV. 1043, 1112 n.273 (2001).

exists no mechanism by which a court or prosecutor can reliably value a defendant's assistance.

3. Excessive Optimism

In a 1998 study, researchers found that nearly twice as many defendants attempted to cooperate with the government than actually received substantial assistance departures. ¹⁹⁴ The same study cited a 1996 survey of federal judges, which indicated that, of those judges queried, 59% had had at least one case in which they believe the defendant should have received a substantial assistance departure, although the same study indicated that judges believed wrongful withholding of 5K1.1 letters by prosecutors occurred infrequently. ¹⁹⁵

Despite the jurists' follow-up contention that wrongful denials were infrequent, critics of cooperation might well argue that, based on the two sets of statistics cited above, one can condlude prosecutors were overly stingy in the 1990s in handing out 5K1.1 letters.

On the other hand, claimed incidences of "wrongful" denials may also demonstrate that defendants maintain unrealistic expectations regarding their ability to secure cooperation agreements. These unrealistic expectations, in turn, may further inflate cooperation's Sanction Effect.

As John Jeffries and Judge John Gleeson explained back in 1995, prosecutors select cooperators on a number of factors, including "the degree of credibility-damaging baggage [a defendant] would bring to the witness stand." By design, prosecutors possess far more information about their choices of cooperators than do criminal defendants. As a result, it would not be surprising if defendants were overly optimistic about their chances of being chosen as a cooperator. Indeed, skilled prosecutors might attempt to nurture this optimism, since it would result in additional proffers and additional flows of information. The problem, of course, is that the very optimism that causes an offender to give up information in search of a cooperation agreement may also cause her to discount the sentence that she would receive if caught.

Finally, excess cooperation and overoptimism create perversely effective synergies. In some circuits, as many as one in four defendants

^{194.} MAXFIELD & KRAMER, supra note 18, at 10, cited in Cynthia Lee & Brian Derdowski, Jr., The Future of Substantial Assistance: Recommendations for Reform, 11 Fed. Sent'G Rep. 78 (1998).

^{195.} MAXFIELD & KRAMER, supra note 18, at 15.

^{196.} Jeffries & Gleeson, supra note 9, at 1121.

^{197.} See discussion supra Part II.

becomes a cooperator. ¹⁹⁸ Since some defendants presumably did not seek cooperation agreements, the percentage of defendants that the government is selecting from the cooperation pool is even higher. A relatively high percentage of cooperation renders overoptimism a more serious problem. If a prosecutor's office offers cooperation agreements to one in three defendants, it would not be surprising if most of the offenders in that district assumed that they would be the "one."

Moreover, criminals also may overestimate the potential discount they will receive in exchange for cooperation. One court has observed that cooperating defendants often expect sentences of no incarceration, despite their underlying crimes. Although the source of such expectations is difficult to track, the media's discussion of infamous cooperators may contribute. When the government finally convicted John Gotti, the infamous boss of the Gambino family, for racketeering offenses, the press widely reported not only Gotti's sentence (life imprisonment) but also the five-year sentence the district court judge imposed on the government's star cooperator, Sammy "the Bull" Gravano, despite Gravano's admissions that he had committed nineteen murders while a member of the mob. Gravano's discount was widely reported and criticized in the popular media, particularly after he subsequently set up his own narcotics network in Arizona.

In more recent times, white collar cooperators have received substantial and widely reported discounts for their help, resulting in minimal or sometimes nonexistent sentences of imprisonment.²⁰² Scott Sullivan, Worldcom's former CFO, was arguably the architect of the accounting

^{198.} See supra Figure 2. The D.C. and Sixth Circuits cooperated with over a quarter of their defendants in 2008. The Second, Third, and Seventh Circuits also have fairly high cooperation rates. See id.

^{199.} United States v. Losovsky, 571 F. Supp. 2d 545, 547 (S.D.N.Y. 2008).

^{200.} See, e.g., David L. Lewis, Substantial Subversion, NAT'L L.J., Nov. 28, 1994, at A23; John Marzulli, Sammy Bull to Testify—For Himself, N.Y. DAILY NEWS, Mar. 24, 2002, at 18.

^{201.} See Marzulli, supra note 200 (reporting that after serving a five-year sentence, Gravano moved to Arizona and set up large Ecstasy-distribution network); see also William K. Rashbaum, Gotti's Accuser is Accused in Phoenix Drug Ring, N.Y. TIMES, Feb. 25, 2000, at B1 (describing Gravano's role as head of multi-million dollar Ecstasy and white-supremacist ring).

^{202.} Laura Smitherman, Sullivan Given 5-Year Term in WorldCom Case, BALT. SUN, Aug. 12, 2005, at 1E, available at http://www.baltimoresun.com/business/bal-bz.sullivan12aug12,1,3374667. story. For examples of reports of cooperation discounts in the street crime context, see Jim McElhatton, A Slow Cruel Death; Drug Dealer Avoids Jail in Abuse of His Daughter, WASH. TIMES, May 31, 2009, at M5, available at http://www.washingtontimes.com/news/2009/may/31/drug-dealer-avoids-jail-killing-his-daughter (detailing federal cooperator's failure to serve additional time for abuse and killing of two-year-old daughter); Guy Sterling, They're Called 'Wiseguys' for Reason—Turnabout's Fair Play When Pal is a Snitch, STAR-LEDGER (N.J.), Aug. 7, 2001, at 1.

fraud the company perpetrated on its shareholders. ²⁰³ Nevertheless, because he cooperated against Bernard Ebbers, Worldcom's CEO, Sullivan received a prison sentence of just five years, while Ebbers received a sentence five times as long. ²⁰⁴ One newspaper report cited legal experts for the conclusion that Ebbers's double-digit sentence "sends a message to Corporate America to clean up its act," while Sullivan's comparatively light sentence "sends another message to wrongdoers: cooperate."

Thus the media's coverage of particularly light cooperator sentences may increase cooperation's perceived value to potential criminals. In some instances, perceptions may well outweigh reality. According to the 2008 Bureau of Sentencing Statistics, the median discount for cooperating narcotics defendants was roughly 40% less than the minimum Guidelines recommended sentence. Although this represents a substantial reduction, it leaves many cooperators with substantial jail sentences. Potential criminals may perceive a far higher discount, however, because of the media's focus on celebrated cases of cooperation.

The media's reporting of cooperator discounts also creates important implications for cooperation's reputation costs. Ordinarily, the defendant considering cooperation must also weigh the costs of his community's hatred. Despite what has been called an anti-snitching norm in popular culture, cooperation nevertheless has flourished in the federal criminal justice system. Part of this may be due to the fact that

^{203.} Tom Fowler & Mary Flood, CFOs Are Often the Star Witnesses, Hous. CHRON., June 28, 2009, at D1.

^{204.} Id.

^{205.} Smitherman, supra note 202.

^{206.} See 2008 SOURCEBOOK, supra note 1, at tbl.30.

^{207. &}quot;In movies, on television, in literature, the cooperator embodies all that society holds in contempt: he is disloyal, deceitful, greedy, selfish, and weak." Michael A. Simons, *Retribution for Rats: Cooperation, Punishment, and Atonement*, 56 VAND. L. REV. 1, 2 (2003) (arguing that reputation costs and "atonement" are additional sources of punishment for cooperators).

^{208.} With the advent of the Internet and the widespread dissemination of court documents online, the cooperator must contend with the possibility that his identity will become widely known. *See generally* Morrison, *supra* note 105, at 922–23.

^{209.} See, e.g., Richard Delgado, Law Enforcement in Subordinated Communities: Innovation and Response, 106 MICH. L. REV. 1193, 1205–06 (2008).

^{210.} For an account of how persistent coordinated law enforcement efforts ultimately wore down the Italian mob's code of silence, see JAMES B. JACOBS WITH COLEEN FRIEL & ROBERT RADICK, GOTHAM UNBOUND: HOW NEW YORK CITY WAS LIBERATED FROM THE GRIP OF ORGANIZED CRIME 133 (1999) ("Until . . . 1963, there had never been a Cosa Nostra defector willing to testify about the organization. In the late 1980s and 1990s many high-ranking organized-crime figures were cooperating with federal, state, and local prosecutors in exchange for leniency and placement in the Witness Security Program.").

federal offenders often face substantial, if not mandatory, sentences of imprisonment. Communal hatred may pale when compared with near-certain ten-year prison sentences with no possibility of parole.

Ironically, widespread reporting of cooperation and cooperator discounts may reduce the reputation costs of cooperation. Sara Sun Beale has discussed the manner by which the media's portrayal of crime influences popular attitudes about criminal punishment. Similarly, the media's portrayal of criminal cooperators can shape popular attitudes about criminal cooperation and criminal sentences. For example, widespread reporting of cooperation can reduce the intensity of antisnitching norms by demonstrating cooperation's popularity among defendants. Regardless of inner-city initiatives to "stop snitching" among offenders, cooperation cannot be so bad if everyone does it.

Critics might argue that the media's coverage of criminal sentences cuts both ways. After all, the press does not report solely the cooperator's sentence; it also reports, usually with great fanfare, the noncooperator's conviction and substantial sentence. Accordingly, one might argue that media's coverage sends dual messages that neutralize each other.²¹⁴

The problem with this "wash-out" analysis is that the potential criminal may not weigh both outcomes equally. As noted before, we tend to be overly optimistic individuals; we assume we have a greater ability to control future events than is actually the case. Criminals may be particularly prone to overoptimism. Accordingly, a corporate executive contemplating accounting fraud may focus her attention on the "good news" portion of a given account of a criminal prosecution (Scott Sullivan's discount for cooperating in the Worldcom prosecution, for example), and ignore the "bad news" portion of that same report (such as Bernard Ebbers's twenty-five-year sentence of imprisonment for spearheading the Worldcom accounting fraud).

^{211.} In 1999, Ian Weinstein, a former criminal defense attorney, observed that the prospect of harsh federal sentences had "reduced whatever honor there may have been among thieves." Weinstein, *supra* note 2. at 583.

^{212.} Sara Sun Beale, The News Media's Influence on Criminal Justice Policy: How Market-Driven News Promotes Punitiveness, 48 Wm. & MARY L. REV. 397 (2006).

^{213.} For an account of the "stop snitching" movement in Baltimore and the "Whosarat" website, see Morrison, *supra* note 105, at 939 n.84 ("Stop Snitching"), 926 ("Whosarat").

^{214.} For similar analysis of dual messages sent by law enforcement to victims, see Aviram, *supra* note 96, at 4 (explaining that conspicuous law enforcement causes victims to perceive more crime, but also more enforcement of said crime).

^{215.} Bibas, supra note 20, at 2500.

IV. THE SANCTION AND DETECTION EFFECTS COMBINED

Cooperation creates both Sanction and Detection Effects, which place competing strains on the government's attempt to deter crime by altering the defendant's ex ante expected costs of conduct. The Detection Effect increases the defendant's perceived probability of getting caught, whereas the Sanction Effect decreases his expected sanction if he is in fact caught. What matters most, however, is his expected *punishment*, which in turn relies on how the two effects interact.

The first section of this Part considers the three basic permutations for Sanction and Detection Effects. The first is that the Detection Effect outweighs the Sanction Effect. The second is that the two cancel each other out, which still results in a loss to society since cooperation is itself a costly policy, whose administrative costs I discuss at some length below. Finally, the worst case scenario is that the Sanction Effect overcomes the Detection Effect, in which case society pays for a policy that creates more crime.

Having considered these three scenarios, I then explore the two types of responses a government might take in the event it discerns an imbalance in Sanction and Detection Effects. One set of responses would attempt to cure the problem by tinkering with the cooperation process itself. Thus, the government might purposely reduce the number of cooperation agreements it offers or reduce the discounts it provides for "substantial assistance." The coordination problems that created the imbalance in the first place, however, may not be so easy to solve.

The alternate means of responding to Detection/Sanction Effect imbalances is to change other aspects of law enforcement, such as increasing law enforcement efforts overall or increasing the baseline sanction for given offenses. Unfortunately, this strategy, too, creates additional problems, which I explore below.

A. Measuring the Interaction of Detection and Sanction Effects

This section first considers how psychological factors may or may not elevate changes in detection over changes in sanctions. The remainder of the section considers three permutations for Detection and Sanction Effects.

1. The Presumed Magnitude of Detection

If criminals viewed detection and sanction probabilities equally, one could measure cooperation's overall effect on deterrence by measuring the

Detection Effect against the Sanction Effect directly. Such comparisons, however, are greatly hampered by the fact that criminals reportedly *do* pay more attention to the probability of punishment than they do to the severity of punishment.²¹⁶ Accordingly, one cannot measure the two effects simply by comparing the two deltas (change in probability of detection and change in sanction) on a one-to-one basis. Instead, the Detection Effect arguably gets the benefit of some unknown multiplier.

I say "arguably" because although detection probability matters more to defendants than a small or even moderate reduction in sanctions, detection's advantage may evaporate when the perceived sentence is one of *no* incarceration. A sentence of no incarceration carries none of the stigma nor the restrictions on liberty that even a six-month jail term carries. A cooperation agreement that eliminates prison time altogether alters the social meaning of the sanction.²¹⁷ It is a change in kind and not just degree.²¹⁸

For that very reason, we should be concerned that the Sanction Effect is perceived by criminal defendants not as a moderate reduction in sanctions (in which case the Detection Effect will often dwarf it), but rather as a means of reducing the possibility of *any* real punishment, in which case the two competing effects will be judged equally.

Whether potential wrongdoers are justified in assuming a "zero sanction" is beside the point. If criminal offenders perceive the discount to be so generous as to take the sanction to zero, then it might as well be zero. Even more importantly, if sanctions are perceived as zero, criminals may perceive the Sanction Effect as simply another way of avoiding

^{216.} See, e.g., Miriam H. Baer, Linkage and the Deterrence of Corporate Fraud, 94 Va. L. REV. 1295, 1306 n.38 (2008) (citing studies examining the theoretical bases for this difference); John Braithwaite & Toni Makkai, Testing an Expected Utility Model of Corporate Deterrence, 25 Law & SOC'Y REV. 7, 8 (1991) (citing studies finding certainty of sanction is more reliable deterrence than severity); Robert J. MacCoun, Testing Drugs Versus Testing for Drug Use: Private Risk Management in the Shadow of Criminal Law, 56 DEPAUL L. REV. 507, 514 (2007) (citing later studies establishing similar variance between certainty and severity of punishment); Nagin, supra note 91, at 21 (observing tax evasion research that "suggests that people do not perceive that costs are proportional to potential punishment"); Robinson & Darley, supra note 13, at 183–93 (citing psychological studies revealing this difference).

^{217. &}quot;Imprisonment unmistakenly expresses moral indignation because of the sacred place of liberty in our culture." Dan M. Kahan, *Social Meaning and the Economic Analysis of Crime*, 27 J. LEGAL STUD. 609, 616 (1998); *see also* Kahan, *supra* note 54.

^{218.} In that sense, a sentence of no incarceration may function very much like the sale of an item for "free." *See* Kristina Shampanier, Nina Mazar & Dan Ariely, *Zero as a Special Price: The True Value of Free Products*, 26 MARKETING SCI. 742 (2007) (presenting empirical evidence that individuals behave irrationally when products are dubbed "free").

getting caught. In other words, when the expected sanction is zero, criminals may equate the Sanction Effect with the Detection Effect.

In sum, even if we presume that defendants value the probability of detection more than they value moderate decreases in sanctions, we would be foolish to ignore the Sanction Effect.

2. Three Possibilities

Detection and Sanction Effects can interact in three ways. The Detection Effect may exceed the Sanction Effect, causing the expected cost of punishment to increase; the two Effects may cancel each other out, in which case the criminal's expected cost stays the same; and the Sanction Effect may exceed the Detection Effect, causing the criminal's expected cost to decrease.

Even if prosecutors overpay some defendants, the net Detection Effect may well exceed the Sanction Effect, particularly if other defendants are underpaid (or unpaid) for their assistance. The government benefits not just from the defendants who cooperate, but from the overall *incentive* to cooperate, which allows the government to secure other benefits from defendants without having to pay them. 220

If cooperation's aggregate Detection Effect exceeds its Sanction Effect, then the expected cost of criminal conduct increases and the policy deters some crimes. This is not the end of the inquiry, however, because the avoided harm must be measured against the costs of implementing the policy. Cooperation involves a number of administrative and transaction costs that, depending on the harms avoided, may or may not outweigh its marginal improvement in deterrence. In other words, even when the Detection Effect exceeds the Sanction Effect, cooperation still may be far more costly to administer than it is worth.

^{219.} The fact that cooperation causes defendants to compete and provide information without remuneration, *see* discussion in Part II, *supra*, therefore might be seen as a salutary means of increasing the overall probability of detection without excessively decreasing the sanction for a given crime.

^{220.} This benefit, however, may be waning. In the past, prosecutors had nearly total discretion to decide whether or not to file a 5K1.1 motion on behalf of a would-be cooperator. Accordingly, prosecutors could and did "underpay" would-be cooperators who assisted the government but failed to clear the "substantial assistance" hurdle. Now that the Guidelines are advisory, courts may grant defendants partial credit for attempted cooperation. If partial credit becomes prevalent, so-called underpayments will disappear and the overall Sanction Effect may increase.

^{221.} It may also be that the policy's marginal increase in deterrence is less than the deterrence society would achieve if it tried a different combination of policies. Since it is difficult to know which policies the government would use instead, I leave that for future consideration.

Cooperation creates both transactional and administrative costs. Prior to entering an agreement, the government must arrange multiple proffer sessions, which create administrative headaches insofar as the defendant is incarcerated or speaks another language. Moreover, negotiating and interpreting cooperation agreements, however much boilerplate they may contain, also costs time and money. 223

More troubling are the costs that accrue after the cooperator has signed her agreement and entered her guilty plea. First, the government must protect the cooperator from other criminals or members of society who would harm the cooperator, either out of spite or a desire to avoid detection. These protection costs may increase as technology improves the ability of other offenders and would-be intimidators to identify and locate cooperators. The cooperators are the cooperators.

In addition, like any other principal who contracts with an agent, the government must monitor the cooperator to make sure she is following orders. These agency costs of cooperation can be quite significant. Having already broken the law, cooperators are not exactly the most trustworthy agents. They have incentives and opportunities to shirk their responsibilities, either by declining to report on other criminals (especially if the criminals are friends or family), by continuing to engage in criminal activity, or by hiding the proceeds of their prior criminal activity. As noted earlier in Part II, to prevent the harms created by these agency costs, the government therefore must expend substantial resources to monitor cooperators.

When prosecutors know in advance that agency costs are likely to be high, prosecutors might choose their cooperators more carefully, pay cooperators a lower premium to reflect higher agency costs, or limit cooperation to those cases in which the underlying crime is particularly

^{222.} See Rasmusen, supra note 7, at 1553–54 (citing Supreme Court oral argument in which government's attorney cited substantial administrative headaches in setting up proffers).

^{223.} However, the costs of negotiating a cooperation agreement may be no greater than the costs of negotiating a guilty plea. If that is the case, the prosecutor might as well seek the cooperation agreement because it offers a future "income stream" in the form of future prosecutions and convictions.

^{224.} On the difficulties of protecting cooperators from retaliation, see Morrison, *supra* note 105, at 958 n.213 (citing instances of retaliation). Morrison's examples of retaliation tend to revolve around cooperations in murder prosecutions, which are relatively rare in the federal system. *See* 2008 SOURCEBOOK, *supra* note 1, at tbl.30.

^{225.} In response to the increasing accessibility of cooperation information over the Internet, prosecutors have generated a number of methods to mask cooperator identities. *See* Morrison, *supra* note 105, at 941–43.

^{226.} See generally Clifford S. Zimmerman, Toward a New Vision of Informants: A History of Abuses and Suggestions for Reform, 22 HASTINGS CONST. L.Q. 81, 97–102 (1994).

serious, harmful, or difficult to combat without cooperation. Accordingly, agency costs may provide a partial explanation for the substantial differences between the discounts that cooperators receive in narcotics cases (40%) and the discounts they receive in fraud cases (70-100%).²²⁷

If administrative costs are anything above zero, then the second permutation, whereby the Detection and Sanction Effects equal each other, is surely a negative proposition for society. If deterrence stays exactly the same, cooperation is nothing more than a highly inefficient transfer of wealth from taxpayers to the "entrepreneurs" who benefit from cooperation: defendants, defense attorneys, prosecutors, and the law enforcement agencies that are paid to use and protect cooperators.

The final permutation is the worst one, that the Sanction Effect outweighs the Detection Effect. Recall: the Sanction Effect reduces the defendant's weighted sanction, while the Detection Effect increases her probability of being apprehended and punished. If the Sanction Effect outweighs the Detection Effect, deterrence is *reduced*. The incidence of crime increases because, despite the increased likelihood of getting caught, criminals presume that they will be able to reduce their sanctions substantially by cooperating with the government. Since cooperation is itself costly, society effectively pays for more crime.

B. Reducing the Sanction Effect: A Difficult Endeavor

Assume for a moment that society could easily measure cooperation's Detection and Sanction Effects, and it determined that the Sanction Effect outweighed the Detection Effect, at least in some contexts. How could the government remedy the imbalance without eliminating all or some of cooperation's benefits?

One approach might be to tinker with the cooperation process itself. For example, prosecutors might cooperate with fewer defendants. They might also ask sentencing courts to reduce cooperator discounts, or withdraw more quickly from agreements when cooperators provide insufficient information or violate the terms of the agreement. All of these activities would introduce more uncertainty into the cooperation process and therefore reduce the Sanction Effect.

^{227.} The different discounts reflect additional factors, such as the supply of potential cooperators relative to those willing to take a straight guilty plea or go to trial.

^{228.} Weinstein suggested as much in his 1999 article, *see* Weinstein *supra* note 2, at 614–15, but he was concerned primarily with disparity's unjust implications for defendants and not with maximizing cooperation's enforcement value.

Unfortunately, if the supply of cooperators is elastic—in other words, if defendants have viable alternate means of achieving reductions in their sentences—the introduction of such uncertainty will affect the Detection Effect negatively. Some defendants will no longer attempt to become cooperators and proffer sessions will decrease. Moreover, defendants who are already cooperators will feel less pressure to maximize their cooperation. Accordingly, when substitutes are available, the government's attempts to reduce the Sanction Effect may also reduce the Detection Effect. In other words, if we reduce cooperation's benefits, we might find ourselves with fewer and less helpful cooperators.

Five years ago, one might plausibly have stated that there were no such substitutes and that the government therefore could cut cooperator benefits with little worry of damaging its supply of potential cooperators. Post-Booker, the story has changed. The Sentencing Guidelines are no longer mandatory. Where mandatory statutory minimums are not present, judges have far more latitude to sentence defendants below the recommended Guideline range of imprisonment. In such an environment, the government may well be reluctant to test the elasticity of cooperator demand.

More importantly, even if the demand for cooperation is inelastic, coordination problems will likely interfere with any sustained attempt to reduce the Sanction Effect. Even when cooperator "demand" is high in the aggregate, prosecutors and individual law enforcement agents still may worry that *their* cases will suffer should they cut back on the number of cooperators or take measures to reduce cooperator discounts. Larger subunits to which prosecutors and agents belong—such as an individual United States Attorney's Office or FBI unit—will be similarly reluctant to reduce cooperation if those reductions impact all-important conviction and arrest statistics, which are the source of resources and prestige.

Accordingly, the best solution might be a centralized one, whereby the Department of Justice limits either the number or value of benefits extended to cooperators by its United States Attorneys' Offices. ²³¹ Such intervention, however, would be a break from the DOJ's current hands-off stance. True, the DOJ has directed its prosecutors to plea bargain "honestly" and to file charges that "reflect the totality and seriousness of

^{229.} Simons, supra note 158.

^{230.} United States v. Booker, 543 U.S. 220 (2005).

^{231.} Stephanos Bibas has advocated for centralized prosecutorial reforms in other contexts. *See* Stephanos Bibas, *Prosecutorial Regulation and Prosecutorial Accountability*, 157 U. PA. L. REV. 959, 1000–01 (2009).

the defendant's conduct."²³² It also has directed prosecutors to seek approval from supervisors prior to filing substantial assistance motions on behalf of a criminal defendant.²³³ Beyond these bromides, however, the DOJ traditionally has exercised little control over the manner by which individual United States Attorneys' Offices implement cooperation. Absent strong empirical evidence of an excessive Sanction Effect, it seems unlikely that DOJ officials will extensively review (much less intervene in) local prosecutorial decision making about cooperation.

If the government is disinclined to remedy the Sanction/Detection Effect imbalance by altering its own stance on cooperation, it can instead seek redress outside the cooperation system. That is, it can push for more enforcement resources, higher sanctions, or for an increase in the number and scope of substantive laws that define certain types of behavior. ²³⁴ The perverse implications of this spiral should now be clear: when government actors cause the Sanction Effect to exceed the Detection Effect, they have a choice. They can fix the problem from within, and suffer the various transactional and political costs that might accrue when a centralized political body intervenes in the (previously) discretionary decision making of its local offices and prosecutors. Or, those same actors can lobby for more resources and harsher baseline criminal sanctions. They can then dole out to the local officers and prosecutors more money and harsher laws and sentences. One does not have to be a strong adherent of public choice theory to recognize that in most instances, the DOJ will likely choose the latter over the former.

Critics will argue that the doomsday scenario described above is largely hypothetical. We do not know if the Sanction Effect exceeds the Detection Effect because the government has made no (public) effort to measure or compare either of the two effects. Nevertheless, it is interesting to note that over the last two decades, the minimum statutory and Sentencing Guidelines ranges for a number of federal offenses, including mail and wire fraud, have increased.²³⁵

It may well be that these increases have nothing to do with the deterrent value of cooperation, but instead reflect a preference "to err on

^{232.} U.S. DEP'T OF JUSTICE, U.S. ATTORNEYS' MANUAL § 9-27.400, available at http://www.justice.gov/usao/eousa/foia_reading_room/usam/title9/27mcrm.htm#9-27.400 (setting out general policies for plea bargains).

^{233.} Id.

^{234.} See Buell, supra note 10, at 1507-09.

^{235.} See Frank O. Bowman, III, Sentencing High-Loss Corporate Insider Frauds After Booker, 20 FED. SENT'G REP. 167 (2008) (discussing the dramatic rise in sentences for same offense).

the side of harshness."²³⁶ But another rather disquieting explanation for such laws is the one we never consider: that they result from our overreliance on cooperation as a law enforcement technique. If this suggestion is correct, then cooperation's greatest cost may be the funds that society spends to correct imbalances that legislators fail to perceive and that law enforcement actors have little incentive to avoid.

CONCLUSION

Cooperation is a complex system that creates two important and competing effects on the cost-benefit analyses of potential wrongdoers. When one of those effects, the Sanction Effect, exceeds or equals the other, the Detection Effect, the policy fails to deter. Even when the Detection Effect outweighs the Sanction Effect, cooperation may be more costly than we assume.

Currently, we do not know whether or when the Sanction Effect outweighs the Detection Effect. What we do know, however, is that if the Sanction Effect becomes too robust, it can create great problems for deterrence, and these problems may be difficult to correct. For all those reasons, we should take a closer look at our use of cooperation. To that end, several lines of inquiry come to mind:

First, to better understand the Sanction Effect's potential scope, behavioral researchers should test how potential criminals perceive the possibility of cooperation. Are defendants overly optimistic about either their ability to cooperate or the degree of their expected sentencing discount? Does the Sanction Effect—particularly the notion that the sanction will be reduced to "zero"—in fact "spill over" into the defendant's perceived probability of detection?

Because the Sanction Effect is also a story about bureaucratic slack, researchers must focus their attention on prosecutors and law enforcement agents. A thorough, timely, and transparent review and comparison of the cooperation-based policies that are used throughout United States Attorneys' Offices would go a long way toward identifying the policies that maximize and minimize Sanction and Detection Effects.²³⁷ Such

^{236.} Bibas, Schanzenbach & Tiller, supra note 187, at 1374.

^{237.} Not only should researchers compare prosecutors' policies (geographically and longitudinally if possible), but they should also compare conviction rates, arrest rates, and defendant perceptions. In sum, the government should undertake the path of research that Frank Bowman called for back in 1999. Frank Bowman, *Defending Substantial Assistance: An Old Prosecutor's Meditation on* Singleton, Sealed Case, *and the Maxfield-Kramer Report*, 12 FED. SENT'G REP. 45, 47–49 (1999). Bowman is hardly alone. *See also* Morrison, *supra* note 105, at 934 (lamenting dearth of empirical

analysis would cast further light on the recurrent debate over how much disparity we should tolerate in federal prosecution policies across the nation.²³⁸ Whatever the general arguments for prosecutorial discretion, cooperation's pathologies suggest the need for intervention by a more distant, centralized authority such as the DOJ.²³⁹

Finally, the foregoing analysis should at least serve as a warning for regulators eager to adopt and expand cooperation-type policies. Trading leniency for information is neither costless nor guaranteed to reduce wrongdoing. Although no one would reasonably suggest the wholesale abandonment of this tool, regulators would be equally foolish to ignore cooperation's competing effects on the cost-benefit calculations of putative offenders. It may be impossible to eliminate cooperation's pathologies without imposing additional and undesirable costs. All the more reason, then, for regulators to look before they leap. To do any less is to leave themselves—and the public they serve—vulnerable to cooperation's greatest cost.

studies of cooperation); cf. Alexandra Natapoff, Deregulating Guilt: The Information Culture of the Criminal System, 30 CARDOZO L. REV. 965, 1020 (arguing that when the government seeks to protect identities of its informants, it "should have to provide some empirical justification ... by demonstrating that forgiving criminals in exchange for information actually produces a net systemic good").

^{238.} See Bibas, supra note 43.

^{239.} See Kahan, supra note 19.