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Rationalizing Drug Policy Under Federalism

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David W. Rasmussen & Bruce L. Benson

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RATIONALIZING DRUG POLICY UNDER FEDERALISM

DAVID W. RASMUSSEN* & BRUCE L. BENSON†

I.	INTRODUCTION.....	679
II.	THE INTENDED BENEFITS OF CRIMINALIZATION AND ENFORCEMENT: ARE THEY EFFECTIVELY ACHIEVED?	684
	A. <i>Reducing Drug Consumption</i>	685
	B. <i>The Elusive Benefit of Lowering Drug Use via Enforcement</i>	687
III.	ENFORCEMENT CAN CHANGE RELATIVE PRICES AND CONSUMPTION PATTERNS.....	692
	A. <i>Persistence of Demand</i>	692
	B. <i>Persistence Leads to Substitution</i>	693
	C. <i>Alcohol and Cannabis</i>	694
IV.	IMPACT OF ENFORCEMENT ON SUPPLY.....	696
	A. <i>Enforcement Can Reduce the Supply of a Drug</i>	696
	B. <i>Suppliers Act to Offset the Effects of Enforcement</i>	698
	C. <i>Enforcement Can Increase Potency</i>	700
V.	DRUG ENFORCEMENT AND PUBLIC SAFETY	703
	A. <i>Do Drugs Cause Crime?</i>	703
	B. <i>Drug Enforcement Can Cause Violence</i>	706
	C. <i>Do Drugs or Drug Enforcement Cause Property Crime?</i>	708
	D. <i>Corruption</i>	709
VI.	SUPPLIERS OF DRUG POLICY: THE ROLE OF BUREAUCRATIC SELF-INTEREST ...	710
	A. <i>Bureaucratic and Political Interests</i>	711
	B. <i>Civil Asset Forfeiture</i>	715
	C. <i>Tragedy in the Criminal Justice Commons</i>	721
VII.	TOWARD AN OPTIMAL LEVEL OF DRUG ENFORCEMENT.....	722
	A. <i>A Federalist Drug Policy</i>	725
	B. <i>Reform International Drug Policy Agreements</i>	726
	C. <i>Decentralize National Drug Policy</i>	728
	D. <i>Removing Perverse Policy Incentives and Constraints</i>	731
	1. <i>Asset Forfeiture</i>	731
	2. <i>Minimum Mandatory Sentences</i>	732
	3. <i>Unintended Consequences of Well-Intentioned Reforms: Mandated Treatment and Agency Incentives</i>	732
VIII.	CONCLUSION	733

I. INTRODUCTION

Legal systems and economic organizations have a common purpose because they exist to create incentives and constraints that modify human behavior.¹ The field of law and economics is an intel-

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lectual niche that rests on the assumption that, in the common law at least, economic efficiency is the principle that guides legal reasoning.² But some legal rules appear very inefficient, and economic analysis can also be employed to see why the incentives and constraints emerging from laws do not promote their stated purpose. Such analysis often ferrets out unintended consequences of rules and regulations.

This Article uses economic analysis to examine the consequences of legal incentives and constraints that are designed to curb the use of illicit drugs. The analysis indicates that U.S. drug policy, to the extent that it shrinks these illicit markets, does so at an enormous financial burden and also generates many other unintended costs. We examine why such a policy persists and argue that, in a federalist system, devolution of policy making from the national government to local jurisdictions is required for a more rational drug policy. In this introduction, we identify the areas of economics that are especially pertinent to this analysis and describe how the subsequent argument was developed.

Following the publication of Gary Becker's economic theory of crime³ and Isaac Ehrlich's controversial empirical tests of that theory,⁴ a large amount of theoretical and empirical literature developed very rapidly, testing, extending, and criticizing the use of rational decision-making models to predict criminal behavior.⁵ Similarly, fol-

The authors wish to acknowledge Daniel Maier-Katkin, Iljoong Kim, Kathy Makinen, Will H. Moore, Andrew Morriss, and Matthew Schultz for helpful comments on previous versions of this paper.

1. CHARLES J. GOETZ, *CASES AND MATERIALS ON LAW AND ECONOMICS* 1 (1984).
2. See, e.g., RICHARD A. POSNER, *ECONOMIC ANALYSIS OF LAW* (2d ed. 1973).
3. Gary S. Becker, *Crime and Punishment: An Economic Approach*, 76 J. POL. ECON. 169 (1968).
4. Isaac Ehrlich, *Participation in Illegitimate Activities: A Theoretical and Empirical Investigation*, 81 J. POL. ECON. 521 (1973); Isaac Ehrlich, *The Deterrent Effect of Criminal Law Enforcement*, 1 J. LEGAL STUD. 259 (1972).
5. See, e.g., KENNETH L. AVIO & C. SCOTT CLARK, *PROPERTY CRIME IN CANADA: AN ECONOMETRIC STUDY* (1976); JOHN R. LOTT, JR., *MORE GUNS, LESS CRIME: UNDERSTANDING CRIME AND GUN-CONTROL LAWS* (1998); M.K. Block & J.M. Heineke, *A Labor Theoretic Analysis of the Criminal Choice*, 65 AM. ECON. REV. 314 (1975); Stephen S. Brier & Stephen E. Fienberg, *Recent Econometric Modeling of Crime and Punishment: Support for the Deterrence Hypothesis?*, 4 EVALUATION REV. 147 (1980); Samuel Cameron, *The Economics of Crime Deterrence: A Survey of Theory and Evidence*, 41 KYKLOS 301 (1988); Christopher Cornwell & William N. Trumbull, *Estimating the Economic Model of Crime with Panel Data*, 76 REV. ECON. & STAT. 360 (1994); Isaac Ehrlich, *Crime, Punishment, and the Market for Offenses*, J. ECON. PERSP., Winter 1996, at 43; Jeffrey Grogger, *Certainty vs. Severity of Punishment*, 29 ECON. INQUIRY 297 (1991); Simon Hakim et al., *Interjurisdictional Spillover of Crime and Police Expenditure*, 55 LAND ECON. 200 (1979); Stephen K. Layson, *Homicide and Deterrence: A Reexamination of the United States Time-Series Evidence*, 52 S. ECON. J. 68 (1985); Steven D. Levitt, *Why Do Increased Arrest Rates Appear to Reduce Crime: Deterrence, Incapacitation, or Measurement Error?*, 36 ECON. INQUIRY 353 (1998); John R. Lott, Jr. & David B. Mustard, *Crime, Deterrence, and Right-to-Carry Concealed Handguns*, 26 J. LEGAL STUD. 1 (1997); David Lawrence Sjoquist,

lowing the publication of books by James Buchanan and Gordon Tullock,⁶ Mancur Olson,⁷ and William Niskanen⁸ that present economic models of government institutions, there has been an explosion in the literature using or criticizing the use of the economic, or “public choice,” model to analyze decision-making in the public sector.⁹ With few exceptions, developments in the economics of crime and public choice have not overlapped.¹⁰ However, they are now being brought together in the rapidly growing economics literature that analyzes the causes and consequences of illicit drug policy.¹¹

Property Crime and Economic Behavior: Some Empirical Results, 63 AM. ECON. REV. 439 (1973); William N. Trumbull, *Estimations of the Economic Model of Crime Using Aggregate and Individual Level Data*, 56 S. ECON. J. 423 (1989).

6. JAMES M. BUCHANAN & GORDON TULLOCK, *THE CALCULUS OF CONSENT* (1962).

7. MANCUR OLSON, *THE LOGIC OF COLLECTIVE ACTION: PUBLIC GOODS AND THE THEORY OF GROUPS* (1971).

8. WILLIAM A. NISKANEN, JR., *BUREAUCRACY AND REPRESENTATIVE GOVERNMENT* (1971). This book was preceded by William A. Niskanen, Jr., *Nonmarket Decision Making: The Peculiar Economics of Bureaucracy*, 58 AM. ECON. REV. 293 (1968).

9. This “public choice” literature is very large as the approach has been adopted by a large portion of political science scholars as well as economists who focus on the determinants of public policy. A number of journals are devoted to the approach (e.g., PUBLIC CHOICE, CONSTITUTIONAL POLITICAL ECONOMY, and THE JOURNAL OF PUBLIC FINANCE AND PUBLIC CHOICE), so the literature continues to grow rapidly. For useful reviews, see DENNIS C. MUELLER, *PUBLIC CHOICE II: A REVISED EDITION OF PUBLIC CHOICE* (1989); Bruce L. Benson, *Understanding Bureaucratic Behavior: Implications from the Public Choice Literature*, 13 J. PUB. FIN. & PUB. CHOICE 89 (1995); Gary J. Miller, *The Impact of Economics on Contemporary Political Science*, 35 J. ECON. LITERATURE 1173 (1997); and the papers in *THE ELGAR COMPANION TO PUBLIC CHOICE* (William F. Shughart II & Laura Razzolini eds., 2001). A similar “rational choice” perspective has nascent roots in sociology as reviewed in Michael Hechter & Satoshi Kanazawa, *Sociological Rational Choice Theory*, 23 ANN. REV. SOC. 191 (1997).

10. These exceptions include *BUDGETS AND BUREAUCRATS: THE SOURCES OF GOVERNMENT GROWTH* (Thomas E. Borchering ed., 1977); Bruce L. Benson, *Corruption in Law Enforcement: One Consequence of “The Tragedy of the Commons” Arising with Public Allocation Processes*, 8 INT’L REV. L. & ECON. 73 (1988) [hereinafter Benson, *Corruption in Law Enforcement*]; Bruce L. Benson, Iljoong Kim & David W. Rasmussen, *Estimating Deterrence Effects: A Public Choice Perspective on the Economics of Crime Literature*, 61 S. ECON. J. 161 (1994) [hereinafter Benson et al., *Estimating Deterrence Effects*]; and Steven D. Levitt, *Using Electoral Cycles in Police Hiring to Estimate the Effect of Police on Crime*, 87 AM. ECON. REV. 270 (1997).

11. See, e.g., DANIEL K. BENJAMIN & ROGER LEROY MILLER, *UNDOING DRUGS: BEYOND LEGALIZATION* (1991); DAVID W. RASMUSSEN & BRUCE L. BENSON, *THE ECONOMIC ANATOMY OF A DRUG WAR: CRIMINAL JUSTICE IN THE COMMONS* (1994) [hereinafter RASMUSSEN & BENSON, *ECONOMIC ANATOMY*]; MARK THORNTON, *THE ECONOMICS OF PROHIBITION* (1991); Bruce L. Benson & David W. Rasmussen, *Predatory Public Finance and the Origins of the War on Drugs: 1984-1989*, in *TAXING CHOICE: THE PREDATORY POLITICS OF FISCAL DISCRIMINATION 197* (William F. Shughart II ed., 1997) [hereinafter Benson & Rasmussen, *Predatory Public Finance*]; Bruce L. Benson & David W. Rasmussen, *Relationship Between Illicit Drug Enforcement Policy and Property Crimes*, *CONTEMP. POLY ISSUES*, Oct. 1991, at 106; Bruce L. Benson, David W. Rasmussen & Iljoong Kim, *Deterrence and Public Policy: Trade-Offs in the Allocation of Police Resources*, 18 INT’L REV. L. & ECON. 77 (1998) [hereinafter Benson et al., *Deterrence and Public Policy*]; Bruce L. Benson, David W. Rasmussen & David L. Sollars, *Police Bureaucracies, Their Incentives, and the War on Drugs*, 83 PUB. CHOICE 21 (1995) [hereinafter Benson et al., *Police Bureaucracies*]; Brent D. Mast, Bruce L. Benson & David W. Rasmussen, *Entrepreneurial Police and*

The economic analysis of illicit drug policy considers the incentives and constraints that affect the behavior of drug users, drug suppliers, employees of the criminal justice system, and treatment providers in order to understand how alternative policies affect drug use in particular and drug markets in general.¹² Furthermore, drug

Drug Enforcement Policy, 104 PUB. CHOICE 285 (2000) [hereinafter Mast et al., *Entrepreneurial Police*]; Jeffrey A. Miron & Jeffrey Zwiebel, *The Economic Case Against Drug Prohibition*, J. ECON. PERSP., Fall 1995, at 175; Chris Paul & Al Wilhite, *Illegal Markets and the Social Costs of Rent-Seeking*, 79 PUB. CHOICE 105 (1994); Chris Paul & Al Wilhite, *On the Economic Case Against Drug Prohibition*, J. ECON. PERSP., Summer 1996, at 196; Llad Phillips, *The Political Economy of Drug Enforcement in California*, CONTEMP. POL'Y ISSUES, Jan. 1992, at 91; David W. Rasmussen, Bruce L. Benson, & David L. Sollars, *Spatial Competition in Illicit Drug Markets: The Consequences of Increased Drug Law Enforcement*, 23 REV. REGIONAL STUD. 219 (1993) [hereinafter Rasmussen et al., *Spatial Competition*]; Andrew J. Resignato, *Violent Crime: A Function of Drug Use or Drug Enforcement?*, 32 APPLIED ECON. 681 (2000); see also David W. Rasmussen, Bruce L. Benson & H. Naci Mocan, *The Economics of Substance Abuse in Context: Can Economics Be Part of an Integrated Theory of Drug Use?*, 28 J. DRUG ISSUES 575 (1998) (found in issue devoted to the economics of substance abuse).

12. There is also an economic literature on drug markets that focuses on the economics of crime issue of deterrence, often by emphasizing standard issues of price theory, such as the elasticities of demand and supply. See, e.g., JONATHAN A.K. CAVE & PETER REUTER, RAND, *THE INTERDICTOR'S LOT: A DYNAMIC MODEL OF THE MARKET FOR DRUG SMUGGLING SERVICES* (1988) [hereinafter CAVE & REUTER, *INTERDICTOR'S LOT*]; MARK HARRISON MOORE, *BUY AND BUST: THE EFFECTIVE REGULATION OF AN ILLICIT MARKET IN HEROIN* (1977) [hereinafter MOORE, *BUY AND BUST*]; PETER REUTER ET AL., RAND, *MONEY FROM CRIME: A STUDY OF THE ECONOMICS OF DRUG DEALING IN WASHINGTON, D.C.* (1990) [hereinafter REUTER ET AL., *MONEY FROM CRIME*]; PETER REUTER ET AL., RAND, *SEALING THE BORDERS: THE EFFECTS OF INCREASED MILITARY PARTICIPATION IN DRUG INTERDICTION* (1988); George F. Brown, Jr. & Lester P. Silverman, *The Retail Price of Heroin: Estimation and Applications*, 69 J. AM. STAT. ASS'N 595 (1974); Billy J. Eatherly, *Drug-Law Enforcement: Should We Arrest Pushers or Users?*, 82 J. POL. ECON. 210 (1974); Edward Erickson, *The Social Costs of the Discovery and Suppression of the Clandestine Distribution of Heroin*, 77 J. POL. ECON. 484 (1969); Raul A. Fernandez, *The Clandestine Distribution of Heroin, Its Discovery and Suppression: A Comment*, 77 J. POL. ECON. 487 (1969); John Holahan, *The Economics of Control of the Illegal Supply of Heroin*, 1 PUB. FIN. Q. 467 (1973); Il-Joong Kim et al., *An Economic Analysis of Recidivism Among Drug Offenders*, 60 S. ECON. J. 169 (1993); Mark H. Moore, *Policies to Achieve Discrimination on the Effective Price of Heroin*, 63 AM. ECON. REV. 270 (1973) [hereinafter Moore, *Policies*]; Mark H. Moore, *Supply Reduction and Drug Law Enforcement*, in *DRUGS AND CRIME* 109 (Michael Tonry & James Q. Wilson eds., 1990) [hereinafter Moore, *Supply Reduction*]; Charles T. Nisbet & Firouz Vakil, *Some Estimates of Price and Expenditure: Elasticities of Demand for Marijuana Among U.C.L.A. Students*, 54 REV. ECON. & STAT. 473 (1972); Peter Reuter, *Eternal Hope: America's Quest for Narcotics Control*, PUB. INT., Spring 1985, at 79 [hereinafter Reuter, *Eternal Hope*]; Peter Reuter, *On the Consequences of Toughness*, in *SEARCHING FOR ALTERNATIVES: DRUG-CONTROL POLICY IN THE UNITED STATES* 138 (Melvyn B. Krauss & Edward P. Lazear eds., 1991); Peter Reuter & Mark A.R. Kleiman, *Risks and Prices: An Economic Analysis of Drug Enforcement*, in 7 *CRIME AND JUSTICE: AN ANNUAL REVIEW OF RESEARCH* 289 (Michael Tonry & Norval Morris eds., 1986); Simon Rottenberg, *The Clandestine Distribution of Heroin, Its Discovery and Suppression*, 76 J. POL. ECON. 78 (1968); James R. Roumasset & John Hadreas, *Addicts, Fences, and the Market for Stolen Goods*, 5 PUB. FIN. Q. 247 (1977); Lester P. Silverman & Nancy L. Spruill, *Urban Crime and the Price of Heroin*, 4 J. URB. ECON. 80 (1977); Michael D. White & William A. Luksetich, *Heroin: Price Elasticity and Enforcement Strategies*, 21 ECON. INQUIRY 557 (1983). In addition, following Gary S. Becker & Kevin M. Murphy, *A Theory of Rational Addiction*, 96 J. POL. ECON. 675 (1988), an economics literature on addiction is developing.

policies, like all public interventions that affect incentives and constraints, can have unintended consequences that potentially offset their intended purposes.¹³ Much of the drug policy debate focuses on extreme arguments of legalization and punitive prohibition commonly referred to as the “drug war,” but there is a long continuum between these alternatives that has not been adequately examined from the analytical perspective offered here.¹⁴ This Article analyzes the current policy of drug prohibition from an economics perspective based on measurable costs and benefits, rather than entering into

13. Examples abound in the economics literature. See, for example, JAMES D. GWARTNEY ET AL., *ECONOMICS: PRIVATE AND PUBLIC CHOICE* 101 (9th ed. 2000), for classic examples involving minimum wage legislation causing unemployment and changing the nature of compensation to low wage employees. *Id.* at 101-03. This source also provides an example of a wide variety of public insurance schemes that increase the prevalence of risky behavior due to moral hazard problems. *Id.* at 346.

14. Much of this middle ground can be claimed by people who advocate “harm reduction.” Harm reduction is viewed by some drug war advocates as an ill-disguised argument for the legalization of drugs. Although some advocates of harm reduction may, in fact, have such views, here we accept that the case for legalization of drugs can be made without the prior condition that it also minimizes the harms of drug use. Advocates of legalization, such as THOMAS SZASZ, *OUR RIGHT TO DRUGS: THE CASE FOR A FREE MARKET* 8-11, 13-20 (1992), place an *a priori* value on the right of individuals to consume any substances when they are not harming others. While this view is obviously held to be consistent with harm reduction in the minds of its advocates, in this discussion, harm reduction explicitly excludes the benefits accruing to people when they are allowed to exercise what some may consider their natural rights to consume what are now illicit substances. The arguments presented here focus on observable consequences of drug policy in order to conceptually clarify the benefits and costs of illicit drug policy.

There is no consensus about the role of prohibition in a harm reduction strategy. Diane Riley et al., *Harm Reduction: Concepts and Practice. A Policy Discussion Paper*, 34 *SUBSTANCE USE & MISUSE* 9, 12 (1999), define harm reduction as a pragmatic program that balances benefits and costs and which also respects “[t]he dignity and rights of the drug user.” *Id.* Since drug users in this view have standing in the benefit calculation, they argue that “harm-reduction strategies would *not* include strategies such as abstinence-oriented treatment programs or the criminalization of illicit drug use.” *Id.* at 11. In contrast, consider the position of the UN International Drug Control Programme (UNDCP): “The principles of harm reduction . . . are sometimes confused with those of legalization Many of the arguments put forward on behalf of harm reduction may also be applied through a flexible interpretation of prohibition.” See UNDCP, *WORLD DRUG REPORT* 188 (1997). The latter interpretation is adopted for the purposes of this Article.

R.J. MACCOUN & PETER REUTER, *DRUG WAR HERESIES: LEARNING FROM OTHER VICES* TIMES, AND PLACES, 318 (2001), point to an important ambiguity in the notion of harm reduction by making a distinction between “macro harm” and “micro harm.” Macro harm is defined to be the product of the number of users, average drug consumption, and the average harm per unit of consumption (micro harm). Believing that any drug consumption generates significant harms to users will generate very high estimates of macro harms even when the average user consumes very little, thereby logically suggesting a case for prohibition. A common perspective among advocates of drug policy reform, on the other hand, is that few user harms are generated by casual use; thereby they view macro harms as being comparatively small. The ensuing analysis suggests that these distinctions are systematically distorted in policy discussions due to the institutional context in which drug policy is conducted.

the normative debate that focuses on other important but intangible values.¹⁵

The argument for a decentralized drug policy is developed in the following way. Section II considers the intended benefits of criminalizing drug use and enforcement activity. It shows how enforcement can increase the price of illicit drugs and therefore reduce some potential harms by lowering the incidence and frequency of drug use. This approach is also costly, however. Thus, its actual effectiveness must be considered and compared to its costs, many of which are unintended consequences attributable to the enforcement process. These issues are also investigated in this Section. The focus on the consequences of illicit drug enforcement continues in Sections III and IV. Since enforcement may be more effective against some drugs than others, Section III shows that the resulting changes in relative prices may shift drug consumption patterns in ways that may or may not be consistent with a goal of reducing the harms of drug abuse. In Section IV, we explore the impact of enforcement on the supply of illicit substances and examine additional unintended consequences of drug enforcement. The relationships among drug use, drug enforcement policy, and public safety are explored in Section V. The implication of this examination of drug enforcement is that the current level of criminal justice involvement is clearly excessive. Therefore Section VI, entitled "Suppliers of Drug Policy: The Role of Bureaucratic Self-Interest," explains how the federal government creates incentives for the excessive enforcement at the state and local level. The implications for drug policy reform, which are rooted in the proposition that we should decentralize drug policy in our federalist system, are explored in Section VII, which is followed by our conclusion that such institutional reform is a prerequisite for a rational drug policy.

II. THE INTENDED BENEFITS OF CRIMINALIZATION AND ENFORCEMENT: ARE THEY EFFECTIVELY ACHIEVED?

Enforcement policy can discourage drug use by raising the "full" price of drugs, and in doing so, it is assumed to reduce the harms of drug use.¹⁶ Full price refers to all costs borne by consumers of illicit

15. Issues of civil and economic liberties are undeniably important in this debate, for instance, but the current Article analyzes the efficiency of drug prohibition policies without consideration of the more fundamental issues of individual rights with respect to drug use. These issues are discussed in DOUGLAS N. HUSAK, *DRUGS AND RIGHTS* (1992). Objective rather than moral harms will be the focus of our drug policy analysis because any morals-based policy debate inevitably involves competing and highly subjective values and rights, such as sobriety, social order, freedom, and responsibility. A classic debate about social values competing with individual rights was conducted by Patrick Devlin, in *The Enforcement of Morals* (1965), and H.L.A. Hart, in *Law, Liberty, and Morality* (1963).

16. If users get utility from consuming drugs, then, properly construed, the net harm reduction generated by enforcement would be calculated by subtracting the consumer

drugs: the money price paid for the product as well as the increased costs of searching for the product and risks of toxicity, arrest, incarceration, and violent altercations in these illegal markets.¹⁷ This Section considers the anticipated benefits of drug enforcement and discusses some of the costs, both anticipated and unanticipated, that are likely to be associated with these efforts.

A. Reducing Drug Consumption

First, consider the monetary component of full price. Given the demand for illicit substances, drug enforcement reduces drug use if targeting suppliers raises the money price of illicit drugs, and drug consumption falls as a consequence of these higher prices. Drug enforcement targeted against drug suppliers most assuredly raises the money price of what are otherwise quite ordinary agricultural products,¹⁸ so the effectiveness of enforcement designed to reduce the harms of drug use depends, at least in part, on the responsiveness of drug users to monetary prices.

At times, in the public debate, demand for drugs has been characterized as being perfectly inelastic, meaning that drug users purchase the same amount of drugs irrespective of changes in the money price. The scientific evidence overwhelmingly demonstrates that the quantity of drugs purchased falls at higher drug prices, so enforcement directed against suppliers of illicit drugs will almost certainly reduce drug use in the aggregate, all else being equal.¹⁹ For instance, the case for claiming that drug consumption does not vary with changes in money price would seem to be strongest among addicts, who will supposedly do anything to avoid the pains of withdrawal. Addicts can be highly motivated to avoid withdrawal pain and still be

benefits from the harms eliminated by the enforcement effort. For the sake of this argument, it is assumed that any user benefits are not pertinent to the analysis—that is, consumers do not have standing in this benefit-cost analysis. See William N. Trumbull, *Who Has Standing in Cost-Benefit Analysis?*, 9 J. POL'Y ANALYSIS & MGMT. 201-02 (1990). This obviously raises important questions about the appropriate role of government paternalism, and, more immediately, clearly biases this analysis in favor of enforcement in drug policy. Not surprisingly, denying users standing in the benefit-cost analysis of drug policy is clearly implicit in the arguments made in support of a drug war.

17. Moore, *Policies*, *supra* note 12, at 270, introduced this notion as “effective price.”

18. Jonathan P. Caulkins & Peter Reuter, *What Price Data Tell Us About Drug Markets*, 28 J. DRUG ISSUES 593, 594-95 (1998), indicate the success of enforcement against suppliers when they report that marijuana prices per ounce vary from \$140 to \$1,000, depending on quality. This puts marijuana on par with gold, which sells for about \$300 per ounce. MACCOUN & REUTER, *supra* note 14, at 344 (estimating that a highly taxed cigarette costs about 10 cents, a small fraction of the cost of a typical \$4 marijuana joint); Moore, *Supply Reduction*, *supra* note 12, at 124 (estimating that the cost of illegal heroin is about 70 times its estimated price under legalization).

19. This claim that drug consumption does not respond to price has been thoroughly discredited by the literature reviewed in RASMUSSEN & BENSON, *ECONOMIC ANATOMY*, *supra* note 11, at 45-49, and Caulkins & Reuter, *supra* note 18, at 604-05.

responsive to price, of course, if “average daily consumption . . . significantly exceeds the amount needed to avoid withdrawal pain,” and this is often the case.²⁰ Kaplan further undermines the argument that addicts are insensitive to changes in the price of heroin even when withdrawal pain is involved because they voluntarily abstain from use for substantial periods for a variety of reasons, one of which is that they cannot afford to buy the drug.²¹ Thus, striking evidence suggests that enforcement lowers drug use by increasing illicit drug prices, and therefore it may reduce the harms associated with drug use. This effect does not necessarily justify enforcement, however, because imposing heavy taxes on legalized drugs might accomplish the same purpose.²²

Policy initiatives also can reduce demand,²³ which means that consumers will buy fewer drugs at any price offered in the drug market,²⁴ perhaps by means of education²⁵ or through the criminal justice

20. RASMUSSEN & BENSON, *ECONOMIC ANATOMY*, *supra* note 11, at 46-47. See generally MOORE, *BUY AND BUST*, *supra* note 12, at 81-82; Roumasset & Hadreas, *supra* note 12.

21. See JOHN KAPLAN, *THE HARDEST DRUG: HEROIN AND PUBLIC POLICY* 35-38 (1983).

22. A policy of imposing very high taxes after legalizing a drug also would have negative consequences, of course. Such a policy would stimulate black markets to avoid the taxes, for example, which in turn would require increasing enforcement or repeal of the taxes. For instance, after Quebec imposed high taxes on cigarettes, smuggling became so rampant that the black market was estimated to account for almost half of all cigarettes consumed. In 1994, taxes were rolled back to end the smuggling. Benson & Rasmussen, *Predatory Public Finance*, *supra* note 11, at 197-98.

23. The discussion to this point has assumed that drug enforcement has only affected the supply of drugs but that the demand for drugs is unaffected by these policies. In economic terms, we have assumed that the supply curve shifted to the left and caused a decline in the quantity of illicit drugs demanded as the supply curve moved along a stable demand curve.

24. RASMUSSEN & BENSON, *ECONOMIC ANATOMY*, *supra* note 11, at 71-72 (arguing that drug markets are best analyzed using the convention that the demand for drugs is captured as a relationship between money price and quantity demanded and that other elements of full price shift this relationship). Thus, an increased probability of being arrested for the possession of drugs causes a downward shift in the demand relationship between money price and quantity demanded.

25. Education programs that increase awareness of the dangers of drug use are an obvious mechanism to reduce demand. If young people could be induced to “just say no,” the entire problem of drug abuse would be moot. Experience suggests that this is unlikely. Project DARE (Drug Abuse Resistance Education), which is used in schools throughout the nation, has few long-term effects on its participants. See Joel H. Brown, *Youth, Drugs and Resilience Education*, 31 J. DRUG EDUC. 83 (2001); Donald R. Lynam et al., *Project DARE: No Effects at 10-year Follow-Up*, 67 J. CONSULTING & CLINICAL PSYCHOL. 590 (1999); Dennis P. Rosenbaum & Gordon S. Hanson, *Assessing the Effects of School-Based Drug Education: A Six-Year Multilevel Analysis of Project D.A.R.E.*, 35 J. RES. CRIME & DELINQ. 381 (1998). There is some evidence that more carefully crafted school-based programs with adequate “booster” sessions can be effective. See Gilbert J. Botvin et al., *Long-Term Follow-Up Results of a Randomized Drug Abuse Prevention Trial in a White Middle-Class Population*, 273 JAMA 1106 (1995); Richard Midford, *Does Drug Education Work?*, 19 DRUG & ALCOHOL REV. 441 (2000).

system by punishing possession,²⁶ increasing the risks of consuming adulterated drugs or other health dangers such as hepatitis and AIDS,²⁷ increasing the time spent searching for drugs,²⁸ or increasing the probability of drug consumers being robbed when trading in illegal drugs.²⁹

B. The Elusive Benefit of Lowering Drug Use via Enforcement

Since drug policies are directed at reducing consumption either by reducing the quantity demanded through higher prices or lowering demand by raising other costs associated with consumption, it is appropriate to consider the potential benefits of reduced consumption from an economic perspective. There actually are two economic perspectives on this question, however. The standard treatment of this issue in modern economics is to presume that individual decision-makers are rational maximizers of subjective utility, so public policy should intervene only if their behavior has an adverse impact on others. From this perspective, drug consumption should be discouraged only when it generates what economists call “negative externalities.” In contrast, an emerging literature in behavioral economics tests the underlying assumptions of traditional economics and finds that people systematically make mistakes that could lead them to consume

26. The probability of arrest and conviction is usually regarded as a more effective deterrent than the severity of punishment in the economics of crime literature, although this implies that the marginal offender prefers more risk to less. See Becker, *supra* note 3. The empirical evidence regarding violent and property crimes suggests that apprehension is a more effective deterrent than longer sentences. See Isaac Ehrlich, *Crime, Punishment, and the Market for Offenses*, J. ECON. PERSP., Winter 1996, at 43, 46; Kim et al., *supra* note 12 (finding similar evidence regarding deterrent effects among drug offenders).

27. The fact that drugs are bought and sold in illegal markets means, of course, that consumers have no legal recourse when sold unsafe goods. Reputation can be valuable to suppliers, even in illegal markets, when repeat business is desired, but within this context greater enforcement against suppliers can disrupt established trading relations between buyers and sellers with the result that consumers face a greater risk of purchasing adulterated drugs.

28. MARK A.R. KLEIMAN, AGAINST EXCESS: DRUG POLICY FOR RESULTS 137-38 (1992), argued that longer search time is a particularly desirable aspect of enforcement because it reduces consumption without raising prices, which might be associated with higher crime and greater burdens on relatives. Rasmussen and Benson dispute this contention because enforcement will most effectively disrupt the markets catering to casual users; habitual users, on the other hand, are less likely to experience supply disruptions. RASMUSSEN & BENSON, ECONOMIC ANATOMY, *supra* note 11, at 72-73. Moreover, if enforcement makes it more difficult to find alternative suppliers, drug suppliers will have more market power to raise prices.

29. Neighborhoods where drugs are regularly sold experience a relatively high rate of robbery because drug market participants carry either cash or drugs, and, when victimized, are not prone to report the crime to the police. See Paul J. Goldstein, *Drugs and Violent Crime*, in PATHWAYS TO CRIMINAL VIOLENCE 16, 35 (Neil Alan Weiner & Marvin E. Wolfgang eds., 1989). Such robberies only become official crime statistics when they involve sufficient violence to require medical treatment.

drugs even though they later regret that behavior.³⁰ This perspective can be used to argue that drug policy should discourage consumption even if drug use does not generate any negative externalities. We consider the traditional justification for drug policy first.

Raising the price of drugs by more stringent enforcement can have unintended consequences that cause some of the negative externalities that are correlated with drug use. If the demand for illicit drugs is relatively inelastic among persons who abuse these substances, for instance, total expenditures rise with a price increase because the percentage decline in quantity consumed is lower than the percentage change in price. Thus, a drug addict chooses to sacrifice other goods (such as food or health care) in order to pay the higher drug price. Heavy drug users may choose to get more money to spend on drugs rather than sacrifice consumption of other goods, however.³¹ It is frequently alleged that the unintended consequence of higher enforcement is more crime³² and family deprivation if relatives willingly or unwillingly help pay for a drug addict's purchases.³³ Whether drug enforcement reduces the harms of drug use by raising prices will,

30. Chris Starmer, *Developments in Non-Expected Utility Theory: The Hunt for a Descriptive Theory of Choice Under Risk*, 38 J. ECON. LITERATURE 332, 377 (2000), claims that "the data we have suggests that choice behavior displays complex patterns in even very simple contexts." This literature suggests that for many aspects of market behavior the traditional behavioral assumptions in economics are appropriate, but some economists observe that social context is probably a very important factor in many choices regarding school attendance, criminality, and labor force participation. See, e.g., George A. Akerlof, *Social Distance and Social Decisions*, 65 ECONOMETRICA 1005 (1997); Edward L. Glaeser et al., *Crime and Social Interactions*, 111 Q.J. ECON. 507 (1996).

31. The price elasticity of demand is the percentage change in quantity demanded divided by the percentage change in price, and in theory, it measures the consumer's response to a price change holding all other relevant factors constant, particularly income and prices of related products. Therefore inelasticity of demand does not imply that addicts must increase property crime as is often claimed. It does imply, however, that they are willing to sacrifice other goods to get the drug. Caulkins & Reuter's, *supra* note 18, at 604-06, review of the empirical literature reveals that estimates of the price elasticity of demand are much higher in absolute value than generally thought since several studies report elasticities exceeding -1.0 for heroin and cocaine. Henry Saffer & Frank Chaloupka, *The Demand for Illicit Drugs*, 37 ECON. INQUIRY 401, 408 (1999), estimate price elasticities of -.28 for cocaine and -.94 for heroin for survey respondents likely to be representative of occasional drug users. A price elasticity of -.94 means that a 1% increase in price will reduce quantity demanded by .94%. All estimates must be viewed with caution given inevitable uncertainties about the quality of the data in these studies, but they nevertheless suggest that the quantity of drugs consumed responds to price.

32. The relationships between drug use, enforcement efforts, and crime are discussed in Section V.

33. A survey of jail inmates reporting sources of income by drug use history revealed that among persons who had used drugs daily during the month prior to their incarceration, almost two-thirds had wage and salary income, 21% received legal benefits, 22% got money from family and friends, and 29% engaged in illegal activity. CAROLINE WOLF HARLOW, U.S. DEPT OF JUSTICE, BUREAU OF JUSTICE STATISTICS SPECIAL REPORT: DRUGS AND JAIL INMATES, 1989 (Aug. 1991). Families of drug users can be directly affected by providing money to buy drugs and indirectly by having less financial support from the drug user who is now dedicating more income to pay for higher-priced drugs.

therefore, depend on how the behavior of drug users is altered by price changes.

Although research on the price elasticity of demand for even hard drugs suggests that the quantity demanded is quite responsive to changes in money price, this market elasticity may not reflect the behavior of those who most seriously abuse these substances. It is at least plausible that some of the most severely addicted individuals will try to minimize changes in their consumption when enforcement increases drug prices, so this policy for these persons might actually increase expenditures on drugs.³⁴ Raising drug prices in such circumstances could result in more property crime to finance drug purchases and/or increased deprivation among families of addicts. Thus, when drug policymakers justify enforcement because drug users are hopelessly addicted, the policy they advocate may, in fact, be aggravating, rather than mitigating, some of the negative externalities they are seeking to remedy. As we will see in Section V below, the preponderance of evidence suggests that excessive drug enforcement is more likely to foster crime than increase public safety.

If drug policy is to seriously consider the impact of drug use on the relatives of users, the interests of drug users cannot be totally ignored in the cost-benefit assessment of drug policy. Policies that incarcerate casual drug users, foster increased toxicity of drugs, increase the chances that users will be victims of crime, and make it difficult for drug market participants to hold legitimate jobs obviously impose costs on both the users and their families.³⁵ Thus, while drug policy might choose to ignore the benefits users derive from drug consumption, the harms drug policy causes drug users and their families should be included in the benefit-cost calculus.³⁶

Some economists have explored the possibility that drug users are rational consumers who will recognize that they might not be able to constrain their consumption in the future, so if the price is high due to enforcement, they will refrain from initiating the use of such goods.³⁷ If addiction makes people more short-sighted, a change in

34. While this is a possible outcome, we show in the following sections that people who spend a large portion of their resources on a particular commodity are expected to be among the most, not least, responsive to price changes.

35. Punishment supposedly is designed to lower the harm of drug use, but it may also have the socially undesirable effect of causing drug users to be taken out of the labor force during their incarceration. To the extent that this loss of experience compromises future earnings, there are long-term private and social costs that should probably not be ignored when analyzing these policies. *But see* Jeffrey Grogger, *The Effect of Arrests on the Employment and Earnings of Young Men*, 110 Q.J. ECON. 51 (1995) (suggesting that these long-term effects may be modest).

36. Advocates of unconditional war on drugs appear to want to count the benefits of saving some people from drug use but are unwilling to consider the costs these policies impose on those they fail to save.

37. *See, e.g.*, Becker & Murphy, *supra* note 12, at 675-76.

preferences that will tend to make them more likely to use these drugs,³⁸ the totally rational consumer will consider this fact prior to initiating any drug use. Recognizing the power of addictive goods, the theory of rational addiction holds that individuals will refrain from using them, or engage only in limited experimentation, in order to avoid the long-term costs of being addicted. This approach suggests that consumption of potentially addictive goods will be more sensitive to price in the long run than in the short run, an implication that has been verified in the case of cigarettes.³⁹ While many scholars with expertise in addiction have been highly critical of assuming rational behavior among drug users,⁴⁰ it is nevertheless the case that a reduced incidence of experimental drug use may be another potential benefit of higher prices caused by enforcement.

Research in what has been labeled “behavioral economics” questions the assumption of rational behavior that underlies all of traditional economics. “Rational behavior,” as used by mainstream economists, means that behavior is based on stable time and risk preferences, an assumption that is not supported in various experimental settings.⁴¹ Contrary to the rational addiction hypothesis, these unstable preferences, together with limited knowledge and imperfect cognitive ability, suggest that some individuals are likely to use drugs and later regret this decision.⁴² This offers an economic ra-

38. See Gary S. Becker & Casey B. Mulligan, *The Endogenous Determination of Time Preference*, 112 Q.J. ECON. 729 (1997); Athanasios Orphanides & David Zervos, *Myopia and Addictive Behaviour*, 108 ECON. J. 75 (1998) (discussing how addiction can affect time preference).

39. The short run price elasticity of demand for cigarettes is typically about -.4 and the long run elasticity is about -.75. See Michael Grossman et al., *A Survey of Economic Models of Addictive Behavior*, 28 J. DRUG ISSUES 631, 636 (1998). It is interesting to note that cigarette demand responds much less to price than heroin and cocaine. Studies also report that youth respond more to cigarette prices than adults, no doubt because cigarette consumption accounts for a larger portion of their income than it does among adults.

40. See MACCOUN & REUTER, *supra* note 14, at 64 n.5 (stating that “Becker’s model [of rational addiction] is an intellectual *tour de force* of unknown relevance to the phenomenon of real-world addiction”).

41. See, e.g., R. Mark Isaac & Duncan James, *Just Who Are You Calling Risk Averse?* 20 J. RISK & UNCERTAINTY 177 (2000); Starmer, *supra* note 30, at 376-77; see also Shane Frederick et al., *Time Discounting and Time Preference: A Critical Review*, 40 J. ECON. LITERATURE 351 (2002).

42. Another challenge to the mainstream treatment of preferences and rational choice comes from the “Austrian” school, which has evolved from the work of Carl Menger. See CARL MENGER, *PROBLEMS OF ECONOMICS AND SOCIOLOGY* (Louis Schneider ed., Francis J. Nook trans., Univ. of Ill. Press 1963) (1883). This literature stresses the impacts of time and ignorance on decision making and behavior. See, e.g., F.A. HAYEK, *LAW, LEGISLATION AND LIBERTY* (1973); LUDWIG VON MISES, *HUMAN ACTION: A TREATISE ON ECONOMICS* (1949); GERALD P. O’DRISCOLL, JR. & MARIO J. RIZZO, *THE ECONOMICS OF TIME AND IGNORANCE* (1985); F.A. von Hayek, *Economics and Knowledge*, 4 *ECONOMICA* 33 (1937). The Austrian approach also stresses that there are significant limits on individuals’ abilities to reason and to absorb knowledge. See O’DRISCOLL & RIZZO, *supra*, at 119-22; Hayek, *Economics and Knowledge*, *supra*, at 33-34. Indeed, citing the passage of time, pervasive ignorance, and inherent uncertainty, Austrians see preferences as continually changing as

tionale for government policy that increases the costs of drug use to offset such “irrational” behavior.⁴³ Providing a cogent case against the strict rationality assumption of traditional economic analysis, the behavioral perspective provides a potential reason to reject the standard economic argument for legalization even if there are no externalities associated with drug use, but provides little additional insight into how drug policy should be implemented. After all, implementing a drug policy requires the use of scarce resources, so even if criminalization does save some people from their own irrationality, it imposes costs on other people. Indeed, the trade-offs even arise within the drug-using population, where the appropriate weights must be determined for the alleged benefits and costs that drug enforcement generates for both potential users who are “saved” and actual users who may be destroyed by this policy.

Enforcement efforts that lower demand may reduce some harms of drug use, but these policies also can have the effect of harming users and others. Some of these consequences, such as punishments, are obviously intended while others, such as increasing toxicity of drugs and violence, are probably unintended, although some drug-war zealots would no doubt consider them just deserts. Diligent enforcement of illicit drug laws creates other social harms because it is a blunt instrument that cannot distinguish between what might be called normal experimentation by youth and problem drug use. To the extent that casual use of mind-altering substances is a normal part of the adolescent experience, higher levels of enforcement may generate serious harms by increasing the probability of criminal sanctions for relatively benign behavior.⁴⁴

people undergo the experiences of life. See KAREN I. VAUGHN, AUSTRIAN ECONOMICS IN AMERICA: THE MIGRATION OF A TRADITION 80-81 (1994). Thus, a decision or action that may be rational at the time it is made, given the decision-maker's limited knowledge, can lead to regret as the individual accumulates additional experience and knowledge.

43. This would seem particularly pertinent for youth, who are likely to be more prone to immediate gratification and to take risks. See Ted O'Donoghue & Matthew Rabin, *Risky Behavior Among Youths: Some Issues from Behavioral Economics*, in RISKY BEHAVIOR AMONG YOUTHS: AN ECONOMIC ANALYSIS 29-68 (Jonathan Gruber ed., 2001).

44. The relationship between psychological characteristics and drug use suggests that adolescents who engage in some drug experimentation, primarily with marijuana, are better adjusted than individuals who entirely abstain from use. Jonathan Shedler & Jack Block, *Adolescent Drug Use and Psychological Health: A Longitudinal Inquiry*, 45 AM. PSYCHOLOGIST 612 (1990), followed their subjects from preschool through age eighteen and conclude that heavy users of drugs are maladjusted, with poor impulse control. Youth who never experiment with any drug are less well-adjusted than those who do, and are described as anxious, emotionally constricted, and having impaired social skills. A review of the medical effects of extended daily use of cannabis reveals uncertain but potentially serious consequences, with the implication that occasional use does not constitute a health hazard. See Wayne Hall & Nadia Solowij, *Adverse Effects of Cannabis*, 352 LANCET 1611 (1998).

III. ENFORCEMENT CAN CHANGE RELATIVE PRICES AND CONSUMPTION PATTERNS

In the previous Section we saw that enforcement might reduce the quantity of illicit drugs demanded, but this potential benefit is much more elusive than our analysis of the direct impact of raising price (and even full price) suggests. Economic theory is based on the proposition that individuals respond to incentives and that, on the margin, prices play an important role in guiding individual choice. Advocates of the drug war often seem to believe that drug users will only respond to the rising price by reducing or stopping use, but in this Section we show that there is no reliable evidence that this earnest hope is warranted.

A. Persistence of Demand

The demand for mind-altering substances seems to be persistent; in fact, it is alleged to be common among many species.⁴⁵ If individuals consume drugs to achieve an altered mental state⁴⁶ then anything that raises the full price of the drug of choice will give consumers an incentive to seek alternative, relatively low-priced drugs that provide a similar effect.⁴⁷ This tendency can also explain the life cycle of individual drugs. New drugs are often attractive to users because their intoxication effects are immediately apparent while the consequences of using them are not. As experience of adverse consequences accumulates, the full price of use becomes more apparent and the drug loses popularity.⁴⁸ Similarly, if enforcement increases the price of an

45. See RONALD K. SIEGEL, *INTOXICATION: LIFE IN PURSUIT OF ARTIFICIAL PARADISE* 207-27 (1989) (asserting that there is a powerful natural force, which he calls the "fourth drive," that motivates the pursuit of intoxication). For a discussion of the idea that the "fourth drive" is common to many species, see *id.* at 10.

46. Microeconomic theory suggests that people purchase items with particular characteristics rather than a specific product, and therefore goods with similar characteristics are substitutes for one another. See Kelvin J. Lancaster, *A New Approach to Consumer Theory*, 74 J. POL. ECON. 132 (1966). This suggests that drug users may not demand a particular drug, say cocaine; instead, they can have a generic demand for an altered mental state that can be satisfied to varying degrees by alternative substances.

47. A closely related issue deals with attempts to reduce beer consumption among youth. There has been a lively debate in the economics literature on whether raising the excise tax on beer is an effective policy to reduce alcohol-related traffic fatalities. Until recently, the evidence suggested that taxes were the most effective policy to reduce these deaths, but recent evidence has challenged the prevailing view. One reason why taxes are not expected to influence beer consumption that leads to traffic fatalities is that beer drinkers can buy a very close substitute without increasing their expenditures, to wit, they can buy a cheaper brand of beer and thereby offset the impact of the tax by this product substitution. For a discussion of this literature, see Brent D. Mast, Bruce L. Benson & David W. Rasmussen, *Beer Taxation and Alcohol-Related Traffic Fatalities*, 66 S. ECON. J. 214 (1999).

48. KLEIMAN, *supra* note 28, at 42-45.

illicit drug, consumers often can shift to alternative illegal substances or to new products that have not yet been declared illegal.

Persistence of demand for mind-altering substances can be responsible for substantial unintended consequences of enforcement that undermine efforts to reduce the harms of drug use. When a specific drug is viewed as a particular problem, a policy of increased enforcement to combat its use may appear attractive because the resulting higher price will curtail its use.⁴⁹ However, users of this drug are likely to adjust their consumption patterns by looking for alternative psychoactive substances, and there can be no presumption that the alternative is less harmful than the substance being targeted for increased enforcement.⁵⁰

B. Persistence Leads to Substitution

Critical to understanding the impact of enforcement on drug use is determining the extent to which various drugs are substitutes for one another.⁵¹ Unfortunately, the literature on this point is not definitive due to data limitations⁵² and the fact that these relationships almost surely vary by type of drug and characteristics of users.⁵³

49. The appeal of this policy is rooted in the mistaken assumption that users will not change their behavior and that they are limited in their response to the first order effect, i.e., lower consumption of the drug targeted by the policy. Thus, an unsophisticated approach to drug enforcement suggests that when users of marijuana face a higher full price they will lower consumption and use the savings to buy legal products, such as caffeinated soft drinks. Those committed to a war on drugs all too often believe the only conceivable response by drug consumers is the one desired by the policy-maker. In fact, consumers have a myriad of options, including not responding to the policy, reducing the frequency of consumption, switching to another illegal substance that now has a relatively lower full price, as well as the desired response of complete abstinence from the targeted drug and all its close substitutes.

50. Such a case is suggested by one study where it is reported that lower marijuana prices, which reduces consumption of a substitute, alcohol, leads to a significant drop in the probability of a non-fatal automobile accident. See Frank J. Chaloupka & Adit Laixuthai, *Do Youths Substitute Alcohol and Marijuana? Some Econometric Evidence*, 23 E. ECON. J. 253, 265-66 (1997). Assuming that the consequences of marijuana use are not as severe as the expected losses associated with an automobile accident, it appears that increasing enforcement against marijuana is harm enhancing. Additional discussion of the alcohol-marijuana relationship is provided below.

51. If two drugs are substitutes, increasing the price of one will cause an increase in the demand for the other. Some drugs could also be complements, meaning that a reduced price and rising consumption of one drug will be accompanied by more consumption of the other.

52. Most studies exploring the relationship between marijuana and other drugs are compromised because they do not have reliable measures of the money or full prices of any drugs. For a brief review of the literature on the demand for marijuana among youth, see Rosalie Liccardo Pacula et al., *Marijuana and Youth*, in RISKY BEHAVIOR AMONG YOUTHS, *supra* note 43, at 283-88.

53. There is some evidence that the demand for drugs among persons under 21 is different from demand among young adults aged 21-30, in that the latter are more responsive to punishments for marijuana possession and less responsive to beer taxes. See MATTHEW C. FARRELLY ET AL., THE EFFECTS OF PRICES AND POLICIES ON THE DEMAND FOR

Given that the absolute value of the price elasticity of demand is inversely related to the percent of income spent on a good, we would expect heavy drug users who spend most of their income on drugs to be very sensitive to changes in relative drug prices while young, infrequent experimenters' drug of choice may not be very sensitive to such changes.⁵⁴ For most youth, the relevant choice among drugs is between alcohol, marijuana, and hashish.⁵⁵ Recognizing that it is not realistic to expect social policy to ever get youth to "just say no" to all mind-altering substances,⁵⁶ it follows that a crucial dimension of this policy debate rests in how we assess the relative costs of using and abusing alcohol and cannabis. Current policy obviously favors the former over the latter, but it is not clear that an objective evaluation would support policies that increase the full price of cannabis relative to alcohol.

C. Alcohol and Cannabis

According to a leading think-tank on substance abuse, "research has not established a direct causal relationship between substance abuse and . . . social problems" related to criminal justice, social service expenditures, and business.⁵⁷ An estimate of the economic costs of alcohol in terms of direct healthcare costs and the indirect burden of productivity losses shows that in Canada they are about six times

MARIJUANA: EVIDENCE FROM THE NATIONAL HOUSEHOLD SURVEYS ON DRUG ABUSE 12-15 (Nat'l Bureau of Econ. Research, Working Paper No. 6940, 1999). More generally, long-term poly-drug users no doubt are more willing to substitute one drug for another than relatively inexperienced casual young users experimenting with drugs. Economists have generally used nationally available surveys to estimate the extent to which drugs are substitutes, but given the low rates of use of hard drugs such as heroin and cocaine compared to marijuana and alcohol, reliable estimates are not likely to be forthcoming. Ethnographic evidence might be more useful in discerning the extent to which various types of users substitute drugs in response to price changes. Experimental evidence suggests that marijuana and alcohol are substitutes for heroin addicts. See Nancy M. Petry & Warren K. Bickel, *Polydrug Abuse in Heroin Addicts: A Behavioral Economic Analysis*, 93 ADDICTION 321 (1998).

54. Consistent with this interpretation is evidence from a study of emergency room episodes that marijuana is a substitute for other illicit drugs. See Karyn E. Model, *The Effect of Marijuana Decriminalization on Hospital Emergency Room Drug Episodes: 1975-1978*, 88 J. AM. STAT. ASS'N 737 (1993).

55. Over 23% of high school seniors in 1999 reported using marijuana in the last 30 days, compared to 51% reporting use of alcohol and only 2.6% using cocaine. BUREAU OF JUSTICE STATISTICS, U.S. DEPT OF JUSTICE, SOURCEBOOK OF CRIMINAL JUSTICE STATISTICS-2000 245-46 tbls. 3.71-3.72 (Kathleen Maguire & Ann L. Pastore eds., 2001) [hereinafter CJ STATISTICS 2000].

56. SIEGEL, *supra* note 45, at 207-27.

57. CTR. ON ADDICTION & SUBSTANCE ABUSE (CASA), SUBSTANCE ABUSE AND URBAN AMERICA: ITS IMPACT ON AN AMERICAN CITY, NEW YORK 84 (1996). Reflecting a frequent practice, the lack of evidence did not deter the Center on Addition and Substance Abuse, CASA, from estimating substance abuse related costs by analyzing budgets and expenditures related to substance abuse. Thus, in principle, any anti-drug program that is ineffective and wasteful is counted as a "cost" of substance abuse.

greater than the corresponding costs of illicit drugs.⁵⁸ The same study estimates that almost 98% of direct costs due to traffic accidents arising from substance abuse are associated with alcohol with the remainder attributed to illicit drugs. Since alcohol tends to impair drivers more than marijuana, the most frequently used illicit drug, this result is not surprising.⁵⁹ Adding to this evidence is the fact that there are no recorded overdose deaths associated with marijuana, while acute alcohol poisoning is a relatively common occurrence.⁶⁰ Thus substantial evidence suggests that using enforcement to raise the full price of marijuana, relative to alcohol, may enhance the harms of substance abuse.

Advocates of marijuana prohibition reject such arguments, primarily by evoking the gateway hypothesis: the proposition that marijuana use precedes and leads to hard drug use.⁶¹ Scientific evidence of such a causal relationship is sparse;⁶² this is not surprising since the gateway hypothesis is based on a fundamental error of logic. Early delinquent behavior, including use of tobacco, alcohol and marijuana, does appear to be correlated with subsequent use of hard drugs, but not by way of causation. Frequent drug users have a multitude of maladies, reflecting a broad array of problems that are not related to drug use per se.

58. See Eric Single et al., *The Economic Costs of Alcohol, Tobacco and Illicit Drugs in Canada, 1992*, 93 ADDICTION 991, 1000 (1998). Use rates of alcohol and illicit drugs in the U.S. in 1992 are consistent with these data. The National Household Survey on Drug Abuse reported that, in 1992, 34.2% of young adults had engaged in binge drinking in the last two weeks. By comparison, only 1.8% of this population reported having used cocaine in the last thirty days. By any calculus, the frequency of binge drinking is many times the rate of non-cannabis drug use. CJ STATISTICS 2000, *supra* note 55, at 254-55 tbls. 3.80-3.81.

59. Drivers under the influence of marijuana make mistakes, but are more cautious than sober drivers in that they keep a greater distance from the car in front of them and drive more slowly. HENDRIK W.J. ROBBE & JAMES F. O'HANLON, NAT'L HIGHWAY TRAFFIC SAFETY ADMIN., MARIJUANA, ALCOHOL AND ACTUAL DRIVING PERFORMANCE (1999); Alison Smiley, *Marijuana: On-Road and Driving Simulator Studies*, 2 ALCOHOL, DRUGS, AND DRIVING: ABSTRACTS AND REVIEWS 121 (1986). In 1999, alcohol was implicated in 38% of traffic fatalities. CJ STATISTICS 2000, *supra* note 55, at 275 tbl. 3.117.

60. See Michalis P. Charalambous, *Alcohol and the Accident and Emergency Department: A Current Review*, 37 ALCOHOL & ALCOHOLISM 307 (2002); Hall & Solowij, *supra* note 44, at 1612.

61. Most users of hard drugs have prior experience with tobacco, alcohol, and marijuana, a relationship that appears to support the gateway hypothesis. See Robert J. Kane & George S. Yacoubian, Jr., *Patterns of Drug Escalation Among Philadelphia Arrestees: An Assessment of the Gateway Theory*, 29 J. DRUG ISSUES 107 (1999).

62. See MACCOUN & REUTER, *supra* note 14, at 351, for the most sympathetic yet rigorous interpretation of the gateway hypothesis, claiming that while one can present a coherent argument for the gateway hypothesis (but not one that necessarily implies the criminalization of marijuana), "[i]n the absence of better causal evidence, a strong allegiance to any particular gateway theory would seem to reflect ideology or politics rather than science."

Relative to experimenters, frequent users are described as not dependable or responsible, not productive or able to get things done, guileful and deceitful, opportunistic, unpredictable and changeable in attitudes and behavior, unable to delay gratification, rebellious and nonconforming, prone to push and stretch limits, self-indulgent, not ethically consistent, not having high aspirations, and prone to express hostile feeling directly.⁶³

These characteristics, like those of adolescents who abstain or experiment with drugs, are traced to the early years of childhood. Thus, the timing and extent of drug use are a symptom of these underlying conditions and probably not a consequence of earlier marijuana use.⁶⁴ Indeed, many more young people experiment with alcohol and marijuana but not with hard drugs, than those who experiment with marijuana and then become regular users of hard drugs.⁶⁵ The bankruptcy of the gateway hypothesis is also reflected in the evidence that youth who just experiment with drugs are better adjusted than both abstainers and frequent users.⁶⁶

IV. IMPACT OF ENFORCEMENT ON SUPPLY

That drug enforcement is effective in lowering the harms of drug use can be characterized as a “faith-based” proposition, i.e., in the absence of substantive evidence it is believed that the substance abuse “problem” will decline when a specific drug price rises due to enforcement. The previous Section suggests there is no evidence to support this belief, and the present Section shows that enforcement efforts can also lead to unintended adverse consequences if dealers and suppliers respond to relative prices as economic theory suggests.

A. *Enforcement Can Reduce the Supply of a Drug*

Effective enforcement that raises the probability of arrest and the severity of expected punishment of drug suppliers increases the cost

63. Shedler & Block, *supra* note 44, at 617.

64. *Id.* at 626.

65. Despite the relatively high rate of marijuana use reported among high school seniors, *supra* note 55 and accompanying text, only 1.7% of young adults in 2000 reported cocaine use in the last thirty days. CJ STATISTICS 2000, *supra* note 55, at 254 tbl. 3.80.

66. Studies by economists implicitly support this finding in that there seems to be a mild positive effect of marijuana use on labor market outcomes that erodes with age. Hard drug use is associated with higher unemployment. These studies, however, inevitably suffer from measurement error since the indicator of most intense use is only use in the past month. In any event, existing evidence suggests that casual marijuana use is not associated with diminished labor market success. See Robert Kaestner, *New Estimates of the Effect of Marijuana and Cocaine Use on Wages*, 47 INDUS. & LAB. REL. REV. 454, 454-55 (1994); Ziggy MacDonald & Stephen Pudney, *Illicit Drug Use and Labour Market Achievement: Evidence from the UK*, 33 APPLIED ECON. 1655 (2001).

of doing business, and therefore reduces supply and increases price.⁶⁷ Current enforcement directed against suppliers is obviously effective, since the street prices of these agricultural products are very high relative to what they would be if they were legal.⁶⁸

Enforcement increases the cost of supplying drugs primarily because workers engaged in the production and distribution of drugs demand more pay to offset the greater risks of arrest and punishment.⁶⁹ Many advocates of enforcement earnestly hope that suppliers will reduce or cease activity in an illicit drug market when faced with rising costs due to enforcement. But for many relatively unskilled persons supplying drugs, the opportunity cost of their time is probably minimum-wage employment.⁷⁰ Even if some drop out of the business due to rising enforcement, there is no scarcity of people prepared to enter the drug business to replenish the personnel needs of suppliers.⁷¹ But the impact of rising enforcement will unquestionably increase production costs and raise the street price of the drugs targeted by police agencies, all other things constant, thereby reducing the quantity demanded of these substances.⁷² The net impact of rising enforcement on drug consumption, however, will be determined by the degree to which drug suppliers can successfully counteract enforcement efforts by changing the methods of operation and by altering the composition of drugs supplied.

67. Economic analysis is designed to discern how economic agents respond to marginal changes and our discussion here is in this tradition. The impacts of draconian changes in enforcement, such as imposing the death penalty for relatively minor drug offenses, cannot be considered in the framework employed here. Since such a policy clearly violates the tenet that penalties be proportional to harms, this limitation of our analysis seems to be appropriate.

68. See Caulkins & Reuter, *supra* note 18, at 593-95.

69. See RASMUSSEN & BENSON, *ECONOMIC ANATOMY*, *supra* note 11, at 78; REUTER ET AL., *MONEY FROM CRIME*, *supra* note 12, at 104-05 (reporting significant annual risks of death, injury and incarceration).

70. REUTER ET AL., *MONEY FROM CRIME*, *supra* note 12, at viii (noting that the gross return per hour for drug dealing in the Washington D.C. area is about \$30, slightly over four times the average legal hourly wage among this population). Drug dealing is complementary to legal employment because most trading is conducted in the evening and on weekends. As Reuter et al. also note, dealers with legal jobs report making the most money from dealing. *Id.* at 67. Their greater earnings could be the result of having better connections because their co-workers are potential customers with a steady flow of income. A not-mutually-exclusive alternative explanation for their higher earnings is that legally employed dealers are simply more ambitious and/or skilled in the pursuit of both legal and illegal earnings.

71. See Moore, *Supply Reduction*, *supra* note 12, at 137-38.

72. This statement assumes that the drug suppliers are operating efficiently prior to the increase in enforcement in that they maximize profits by using the most productive set of inputs. If this assumption is rejected, a rise in enforcement that lowered profits could stimulate drug suppliers to choose a more optimal set of inputs. Under this scenario, a rise in enforcement does not necessarily result in a reduction in the amount of drugs supplied. Similarly, as noted in the following Section, increased enforcement can lead suppliers to innovate in ways that, in theory, might actually lower costs and prices.

B. Suppliers Act to Offset the Effects of Enforcement

A fundamental premise in the economic theory of the firm is that employers will change the combination of inputs when their relative prices change.⁷³ For example, California's use of aerial surveillance to thwart marijuana growers stimulated indoor production that was highly capital intensive, thus substituting capital for land, but was nonetheless profitable because the technology could annually produce four crops of a more potent strain.⁷⁴ The mix of labor resources used in drug selling is also responsive to enforcement policy. Suppose a change in policy increases the expected punishment for all drug dealers but that the expected impact on adults is more severe than for juveniles, because punishment of juveniles is less severe than punishment of adults.⁷⁵ To reduce their own risk of arrest in the face of increased threats from enforcement, drug entrepreneurs have an incentive to lengthen the distribution chain, thereby personally dealing directly with a smaller number of individuals. Furthermore, since the change in enforcement raises the price of adult workers relative to juveniles, suppliers have an incentive to substitute youth for adults in the distribution chain. Rising enforcement in this instance is likely to have the intended effect of raising the cost of production, and therefore discouraging use since the street price will be higher. However, the unintended consequences of the rising enforcement are that more people are engaged in supplying a smaller amount of drugs and more juveniles have been lured into the drug trade.⁷⁶

Geographic substitution effects are also likely. As drug enforcement efforts become effective against producers in one geographic area, production will shift to other areas. In the international arena, successful control of Turkish heroin in 1973-1974, discussed in the famous "French Connection" case,

resulted in a significant reduction in the flow of heroin into the United States. Heroin prices rose sharply in this country, reducing use but also giving other suppliers an incentive to enter the mar-

73. See RASMUSSEN & BENSON, *ECONOMIC ANATOMY*, *supra* note 11, at 77-81 (discussing input substitution in this context).

74. *The Pothouse Effect*, *ECONOMIST*, Dec. 15, 1990, at 24.

75. Juveniles face less severe and shorter sentences for most crimes than adults do, but even if the sentences were identical in length, juveniles are likely to perceive the potential sentence as less severe. After all, a two-year prison term may appear very severe if an individual is sixty-five since it is a substantial part of his expected remaining life, while it is much less significant to someone who is fifteen. In addition, juveniles are likely to be more myopic (i.e., put less weight on future possible costs and benefits) than adults, and/or less risk averse (i.e., they put less weight on the potential negative consequences of decisions).

76. This suggests that increased enforcement can cause one measure of the drug problem, the number of people engaged in the drug trade, to rise while another measure, the quantity sold, falls.

ket. The [supply-reducing effects] of breaking the French [C]onnection lasted for two to three years before there was an expansion in heroin supplie[d] from Mexico and Southeast Asia.⁷⁷

This is an instructive example because it demonstrates that the effect of law enforcement focused in one direction can be completely mitigated by drug market entrepreneurs within a relatively short period of time and, of course, even the short-term benefits of the lower supply of heroin can be at least partially offset by consumers shifting to other psychoactive substances. Further, the very success of the attack on Turkish heroin resulted in a more diversified supply system that made future control of this drug even more difficult.⁷⁸

Efforts to stop the importation of cocaine into the U.S. that were directed against the Medellin cartel in Colombia reveal impacts that are similar to the French Connection effort. In damaging the cartel, the enforcement efforts led to a much more dispersed processing and shipping network for cocaine. Suppliers created labs processing cocaine in many Latin American countries, and greatly increased the number of transshipment points, effectively emasculating enforcement by making subsequent interdiction efforts much more costly and ineffective.⁷⁹ A long history of drug enforcement efforts suggests that elimination of supplies coming from one area will soon lead to increased cultivation elsewhere.⁸⁰

Drug suppliers can also shift to the production and distribution of other drugs when faced with effective enforcement, a response called "output substitution."⁸¹ Such changes in output can increase the harms associated with drug use rather than reduce them. Efforts to intercept drugs in the Miami area in 1984 were highly successful against the importation of marijuana, no doubt because this product is bulky and relatively difficult to conceal. Smugglers did not change their occupation. Instead they simply changed the product being smuggled, shifting to a lower risk commodity, cocaine.⁸² Successful

77. RASMUSSEN & BENSON, *ECONOMIC ANATOMY*, *supra* note 11, at 80. In Moore, *Supply Reduction*, *supra* note 12, at 136, it is argued that such a temporary increase in price significantly lowers the harms of drug use by reducing the prevalence of use and intensity of use among a number of age cohorts. This is plausible, but the net harm reduction is likely to be less than the decline in heroin use if the discouraged users shift to other mind altering substances, as discussed in Section III.

78. RASMUSSEN & BENSON, *ECONOMIC ANATOMY*, *supra* note 11, at 80.

79. *Id.* at 79-81.

80. See Reuter, *Eternal Hope*, *supra* note 12, at 87; see also KLEIMAN, *supra* note 28, at 284 (providing an interesting domestic example of a shift in marijuana production from Northern California to the mountains of Kentucky as a result of increasing enforcement). An unintended consequence of this shift, aside from circumventing enforcement, was to involve people whose cultural roots include moonshining and a history of violence, making the trade rougher than it had been before.

81. RASMUSSEN & BENSON, *ECONOMIC ANATOMY*, *supra* note 11, at 81-82.

82. *Id.*; see THORNTON, *supra* note 11, at 109.

interdiction of marijuana thus increased the supply of cocaine, and youth correspondingly reported that this drug was more readily available.⁸³ The higher price of marijuana relative to cocaine probably increased the use of cocaine, and this effect was reinforced as the increased availability of cocaine lowered its price and increased the quantity demanded.⁸⁴ Higher demand for cocaine will tend to push its price up, resulting in higher profits in the short run that further encourage suppliers to increase the amount of cocaine brought to market. The U.S. drug war of 1984-1989⁸⁵ was more successful against marijuana than cocaine, with the expected result of increased supplies of cocaine.⁸⁶

Entrepreneurs in all industries face strong incentives to find ways to produce or distribute existing products at lower costs, and to offer new products that will attract consumer demand. Broadly described as technological change and product development, there is no reason to believe that entrepreneurs in illicit drug markets are any less likely than those in legal markets to engage in these efforts. In fact, drug entrepreneurs may have added incentives to increase revenues since they must offset the higher costs associated with the risk of arrest and punishment. If a drug entrepreneur can find a way to either lower production or distribution costs or to lower the probability of arrest, the business will be more profitable. Synthetic drugs (such as LSD and Ecstasy), product "improvements" such as crack cocaine, and introduction on the street of long known drugs such as MDMA, are representative of a long history of entrepreneurship in the illicit drug industry.

C. Enforcement Can Increase Potency

Increasing enforcement against the illicit drug industry also has a tendency to increase the potency of mind-altering substances. This first became apparent during America's alcohol prohibition experiment. During Prohibition, consumption of high-alcohol content spirits rose sharply relative to beer because spirits were relatively easy to conceal and transport, thereby making them more attractive to

83. Survey data indicate that the percentage of high school seniors reporting that it was "fairly easy" or "very easy" to get cocaine rose continuously from 1983 to 1989, rising from 43.1% to 58.7%. BUREAU OF JUSTICE STATISTICS, U.S. DEP'T OF JUSTICE, SOURCEBOOK OF CRIMINAL JUSTICE STATISTICS-1991, at 230 tbl. 3.65 (Timothy J. Flanagan & Kathleen Maguire eds., 1992) [hereinafter CJ STATISTICS 1991].

84. Since marijuana can be grown throughout the U.S., successful interdiction of marijuana can be offset within a relatively short time by increasing domestic production. See RALPH A. WEISHEIT, DOMESTIC MARIJUANA: A NEGLECTED INDUSTRY 36 (1992).

85. Drug arrests per 100,000 population rose from 312 in 1984 to 538 in 1989. During 1990 and 1991 drug arrests per capita fell almost 24%, to 411. RASMUSSEN & BENSON, ECONOMIC ANATOMY, *supra* note 11, at 7.

86. CJ STATISTICS 1991, *supra* note 83, at 230 tbl. 3.65.

consumers and producers alike.⁸⁷ Prior to Prohibition (from 1911 to 1916), the ratio of expenditures on spirits to expenditures on beer was fairly stable, ranging from 0.70 to 0.78,⁸⁸ but there was a dramatic shift in these spending patterns with Prohibition. It is estimated that by 1925 consumers spent about seven times as much on spirits as they did on beer.⁸⁹ Furthermore, some of the bootleg whiskey contained as much as twice the alcohol found in commercial brands.⁹⁰

The incentives to produce and consume more powerful alcohol during Prohibition are also inherent in our current drug laws. Low dosage drugs such as marijuana are bulkier and more easily detected than harder drugs, providing the incentives already noted to increase the supply of more potent drugs. Furthermore, because the penalties for possessing and selling drugs are related to weight rather than strength, the legal system provides a strong incentive to avoid handling low-dose products that have been cut.⁹¹ But beyond this, drug entrepreneurs can produce stronger drugs just as more potent alcohol emerged during Prohibition. This possibility has long been recognized, as reflected in a 1967 Report to the President's Commission on Law Enforcement and Administration of Justice:

If United States law-enforcement policies become so efficient as to prevent altogether the smuggling of heroin, the black market can readily convert to narcotic concentrates that are a thousand or even ten thousand times more potent, milligram for milligram. . . . A few pounds of these concentrates might supply the entire United States addict market for a year. . . . The skills required are not beyond those possessed by the clandestine chemists who now extract morphine from opium and convert the morphine to heroin, or of better chemists who might be recruited.⁹²

87. As a consequence of the increased supply of spirits relative to beer, beer prices rose sharply relative to the price of spirits between 1916 and 1928: 700% compared to 310% for rye whiskey. IRVING FISHER, PROHIBITION STILL AT ITS WORST 91 (1928).

88. CLARK WARBURTON, THE ECONOMIC RESULTS OF PROHIBITION 114-15 tbl.50 (AMS Press 1969) (1932).

89. By 1930 beer consumption was rising and Warburton estimates that expenditure on spirits had fallen to about three times the amount spent on beer. *Id.* at 170 tbl. 83. After Prohibition, expenditure on spirits declined, accounting for about half of alcohol expenditures between 1939-1960. *See* THORNTON, *supra* note 11, at 103.

90. *See* THORNTON, *supra* note 11, at 103.

91. As in the case of heroin, a product containing any detectable amount is illegal, but the weight of the entire product is used to determine the penalty. Thus, at all levels of production and even among consumers, there is an incentive to use a purer product. Smaller bundles are also easier to conceal, giving smugglers and sellers a similar incentive to sell uncut substances.

92. EDWARD M. BRECHER, LICIT AND ILLICIT DRUGS 96 (1972) (quoting ARTHUR D. LITTLE, INC., DRUG ABUSE AND LAW ENFORCEMENT, A REPORT TO THE PRESIDENT'S COMMISSION ON LAW ENFORCEMENT AND ADMINISTRATION OF JUSTICE (Jan. 18, 1967)).

Trends in the potency of marijuana are consistent with the proposition that greater enforcement efforts lead to increased potency. Thornton reports that the average potency of marijuana increased by a factor of eight between 1974 and 1984, and he provides evidence suggesting that marijuana potency is positively correlated with law enforcement expenditures.⁹³ The U.S. Drug Enforcement Administration (DEA) also provides evidence that increasing potency can be an unintended consequence of rising enforcement. For instance, a program designed to eradicate marijuana production was targeted at indoor and outdoor cultivation, but since it is easier to detect large outdoor growers, relatively more marijuana reaching the market came from indoor growers.⁹⁴ The DEA speculated that since indoor production is more capital intensive and allows for a more controlled growing environment, more potent marijuana was the consequence of this attempt to control supply.⁹⁵

Clearly, unintended negative consequences of drug enforcement are common as both drug users and suppliers respond to relative prices in hopes of limiting its impact on their activities. Furthermore, the magnitude of the alleged harms of some drug use is probably substantially less than is popularly perceived, while the hidden costs of criminal justice drug control efforts are substantially greater than a simple summation of the budgetary outlays for drug enforcement suggests.⁹⁶ We now turn to a discussion of the impact of drug enforcement on public safety.

93. THORNTON, *supra* note 11, at 105-08, regressed marijuana potency data on a measure of enforcement and estimated that a \$1 million (1972 dollars) increase in federal drug law enforcement expenditures results in a 0.01% increase in potency. This simple regression does not provide conclusive evidence, but this time-series analysis is consistent with the expectation that drug suppliers will tend to increase potency when they face rising enforcement efforts.

94. The Domestic Cannabis Eradication and Suppression Program began in 1979, but it was not until 1985 that all states received funding for the program. See Pacula et al., *supra* note 52, at 294.

95. See *The Pothouse Effect*, *supra* note 74.

96. The actual monetary expenditures on drug control are also largely hidden since they are dispersed across so many federal, state, and local agencies that generally have many other functions as well. It might be possible to determine the budget allocated to the vice squad of a local police department, for instance, but even the vice squad deals with more than just drugs, and furthermore, many other units in a police department are also involved in drug control efforts (e.g., the uniformed officers on patrol, those involved in administration, dispatch, and so on). It may be possible to estimate the cost that a state corrections department spends on controlling and supervising individuals convicted for drug crimes (although published estimates of average per inmate costs are often questionable and vary considerably across prisons and probation systems), but there are also a wide range of criminal justice system "diversion programs" supervised by other agencies (e.g., drug courts, local "boot camps") that would have to be counted. And of course, agencies such as the Coast Guard, State Police, the United States Army and Air Force (with planes and other equipment along with advisers, pilots, and other personnel in places like Columbia and Peru), the FBI, the Border Patrol, and numerous other federal, state, and local agencies allocate substantial resources to drug enforcement. Accounting of these

V. DRUG ENFORCEMENT AND PUBLIC SAFETY

A. Do Drugs Cause Crime?

Drug enforcement is often defended as a crime-fighting weapon because drug users allegedly commit most of the property crimes in order to support their habits.⁹⁷ Crimes such as selling drugs and prostitution are commonly committed by drug users,⁹⁸ but these are offenses against social norms and morals; thus, they are not reported in usual crime rate statistics.⁹⁹ Hence, these crimes are more directly related to issues of personal freedom rather than social order, while drug enforcement is sometimes justified by its capacity to reduce crimes against persons and property.¹⁰⁰

The fact that many criminals convicted for property and violent offenses are also drug users is well documented,¹⁰¹ and this fact has

budgetary costs is likely to be inaccurate due to the myriad of departments involved in drug control. Estimates of federal expenditures are \$18 billion in 2000, CJ STATISTICS 2000, *supra* note 55, at 15 tbl. 1.12, a figure that is no doubt a fraction of the total given that most drug offenders are arrested and prosecuted in state and local jurisdictions.

97. Blaming drug users for crimes against property occasionally takes on bizarre proportions, as in the case where users were blamed for more crime in New York City than was being reported. Peter Reuter, *The (Continued) Vitality of Mythical Numbers*, PUB. INT., Spring 1984, at 135-36.

98. Bruce D. Johnson et al., *Careers in Crack, Drug Use, Drug Distribution, and Nondrug Criminality*, 41 CRIME & DELINQ. 275, 281 (1995) (reporting that the crack epidemic in New York City did not substantially increase non-drug criminality with the exception of prostitution). REUTER ET AL., MONEY FROM CRIME, *supra* note 12, at 65, indicate that drug selling dominates non-drug crime as a source of income. Studies of the heroin market also indicate that users are likely to turn to dealing for income. See LEROY C. GOULD ET AL., CONNECTIONS: NOTES FROM THE HEROIN WORLD 49 (1974); MOORE, BUY AND BUST, *supra* note 12, at 52.

99. Crime rates are calculated for Index I crimes, the crimes against persons and property that are routinely reported to the police. Drug transactions and prostitution are not usually reported to the police and are therefore often called "victimless" due to their consensual nature.

100. DAVID F. MUSTO, THE AMERICAN DISEASE: ORIGINS OF NARCOTIC CONTROL 273 (3d ed. 1999), claims that there was a parents' movement that clamored for rising enforcement because such a policy would assist parents in discouraging middle and upper class children from using drugs. While such a movement could rationally support continued illegality of drugs, advocating zero tolerance puts the most well balanced of youth at risk of punishment for an activity that is described as normal youthful experimentation without long-term consequences. Shedler & Block, *supra* note 44, at 625. We will examine the impact of drug enforcement on public safety and not address the social norms and moral questions here.

101. During 1999, for instance, between 49.5 and 76.7% of male arrestees in thirty-four U.S. cities tested positive for the use of an illicit drug. CJ STATISTICS 2000, *supra* note 55, at 394 tbl. 4.30. A Bureau of Justice survey of 12,000 inmates indicated that over 75% had used drugs, 56% had used drugs in the month prior to their incarceration, and one-third admitted to being under the influence of drugs at the time of their offenses. Harry K. Wexler et al., *Outcome Evaluation of a Prison Therapeutic Community for Substance Abuse Treatment*, 17 CRIM. JUST. & BEHAV. 71-72 (1990). Similarly, a survey of jail inmates found that 77.7% of the inmates admitted using some illicit drug and that 55.4% had used a major drug. HARLOW, *supra* note 33, at 4 tbl. 6. Furthermore, 43.9% had used some drug in the month prior to the offense for which they were admitted, and 27.7% had used a major

contributed to the claim that drug use is a primary cause of crime, which, in turn, has led to increasing emphasis on the control of illicit drugs as a means of general crime prevention. Despite the high rate of drug use among persons arrested for other criminal activity, however, most research suggests only a loose connection between drug use and criminal activity. Chaiken and Chaiken summarize such research and conclude that “[t]here appears to be no simple general relation between high rates of drug use and high rates of crime.”¹⁰² A detailed study of the arrest history of persons having at least one misdemeanor or felony drug arrest in Florida indicates that there is only a modest link between drugs and other crime, suggesting that most drug offenders have no violent criminal record and that many have few previous arrests for nonviolent crimes.¹⁰³ The vast majority of persons arrested for sale or possession of drugs also had no prior arrests for property crimes. Among persons arrested for the sale of drugs, a group more inclined to property crime than persons arrested for possession, 61.9% had no previous arrest for a property crime. Among the 45,906 persons arrested in 1987 for possession, over

drug during that period. *Id.* Twenty-seven percent admitted being under the influence of a drug at the time of the offense, and 18.2% said that they were under the influence of a major drug. *Id.* Since the crime for which 23% of this jail inmate population was charged was a drug offense, that could account for a large portion of those under the influence when charged. *Id.* at 3 tbl. 3. Indeed, a disproportionate number of the drug offenders in the jail survey were under the influence, but substantial percentages of the non-drug offenders were as well: 24.5% of the violent offenders admitted to being under the influence of an illicit drug at the time of the offense, as did 30.9% of the property offenders, as compared to 38.9% of the drug offenders. *Id.* at 9 tbl. 15. Furthermore, research has established a correlation between daily drug use and criminal activities, and documents that drug offenders are responsible for a great deal of the crime committed in American cities. See generally BERNARD A. GROPPER, U.S. DEPT’ OF JUSTICE, PROBING THE LINKS BETWEEN DRUGS AND CRIME (1985); BRUCE D. JOHNSON ET AL., TAKING CARE OF BUSINESS: THE ECONOMICS OF CRIME BY HEROIN ABUSERS (1985); John C. Ball et al., *The Day-to-Day Criminality of Heroin Addicts in Baltimore—A Study in the Continuity of Offence Rates*, 12 DRUG & ALCOHOL DEPENDENCE 119, 119-42 (1983).

102. Jan M. Chaiken & Marcia R. Chaiken, *Drugs and Predatory Crime*, in DRUGS AND CRIME, *supra* note 12, at 210. Similar conclusions are reached after literature surveys by David N. Nurco et al., *Recent Research on the Relationship Between Illicit Drug Use and Crime*, 9 BEHAV. SCI. & L. 221, 237 (1991), and Jeffrey Fagan, *Intoxication and Aggression*, in DRUGS AND CRIME, *supra* note 12, at 241, 243.

103. See RASMUSSEN & BENSON, ECONOMIC ANATOMY, *supra* note 11, at 61 tbl. 3.2. Consider the distribution of violent crime arrests among 1987 drug arrestees. The 45,906 persons who had been arrested for at least one drug possession offense in 1987 had a history of 19,436 violent crime arrests, an average of 0.42 violent crimes per arrestee, but 76% had no prior arrests for violent crimes. Among those arrested for drug possession, 2.3% of the arrested population accounted for 6,687 violent felony arrests—34.4% of the total. This group included 1,066 offenders who averaged 6.27 violent arrests in their past. The raw data is found in FLA. DEPT’ LAW ENFORCEMENT, FLORIDA DRUG OFFENDER PROFILE: ANALYSIS OF ALL OFFENDERS HAVING AT LEAST ONE MISDEMEANOR AND/OR FELONY DRUG ARREST IN CALENDAR YEAR 1987, at 2-5, 16-22 (1989).

80% had never been arrested for burglary, and almost 71% had never been arrested for any property offenses.¹⁰⁴

Thus, the evidence suggests that most drug offenders are not active participants in non-drug related crime. And surprisingly, given popular and political perceptions, drug consumers appear to be relatively less likely to be involved in property crime than drug sellers. These statistics and others that corroborate them,¹⁰⁵ combined with survey data on drug use among persons arrested and convicted of Index I crimes, suggest that two distinct types of drug users exist. First, a substantial portion of drug offenders apparently do not commit property or violent crimes. Second, many offenders arrested for violent and property crimes also use drugs. The Florida data presented above suggests that there are relatively few habitual offenders who are heavily involved in both drugs and other crime, so the overall population of arrested and convicted drug offenders is probably not a population of hardened criminals, whose immersion in lives of crime has left them unresponsive to incentives. Thus, an expectation that a successful drug arrest and prosecution will simultaneously take a non-drug criminal out of circulation is likely to be disappointed. A war on drugs is not synonymous with a war on property or violent crimes.

There is some evidence that periods of heavy use of hard drugs is positively correlated with reported crime,¹⁰⁶ a correlation that supports the idea that enforcement reduces the harms of drug use. Correlation does not necessarily imply causation, however. Studies of the temporal sequencing of drug abuse and non-drug crime (e.g., property crime) suggest that non-drug related criminal activities generally precede drug use. Indeed, the evidence seems consistent with the hypothesis that delinquency is not caused by drug abuse.¹⁰⁷ If any-

104. Data summarized in RASMUSSEN & BENSON, *ECONOMIC ANATOMY*, *supra* note 11, at 62 tbl. 3.3.

105. A Bureau of Justice Statistics report on recidivism of felons on probation suggests that the characteristics of the Florida drug-using criminal population just described also apply to the nation as a whole. This report found that drug offenders are far more likely to recidivate for a drug offense than for a violent or property offense. Furthermore, violent offenders who are rearrested tend to recidivate most often for a new violent crime, and property offenders are most likely to recidivate for another property crime. See PATRICK A. LANGAN & MARK A. CUNNIFF, U.S. DEP'T OF JUSTICE, BUREAU OF JUSTICE STATISTICS SPECIAL REPORT: RECIDIVISM OF FELONS ON PROBATION, 1986-89 (1992).

106. See John C. Ball et al., *Lifetime Criminality of Heroin Addicts in the United States*, 3 J. DRUG ISSUES 225 (1982); Silverman & Spruill, *supra* note 12, at 101.

107. ISIDOR CHEIN ET AL., *THE ROAD TO H: NARCOTICS, DELINQUENCY, AND SOCIAL POLICY* 64-65 (1964), argue that "the varieties of delinquency tend to change to those most functional for drug use; the total amount of delinquency is independent of the drug use." Shedler & Block, *supra* note 44, strongly reaffirm the view that substance abuse is a symptom of more deeply rooted psychological problems. For a review of the temporal sequencing of drug use and crime, see RASMUSSEN & BENSON, *ECONOMIC ANATOMY*, *supra* note 11, at 57-58.

thing, it is more likely that crime leads to drug use, although both drug use and delinquency are likely to be caused by other factors.¹⁰⁸ Once individuals turn to crime as a source of income, they may find that drugs are more easily obtained in the criminal subculture. Under this scenario, crime leads to drug use, but once an individual gets addicted preferences may change and the drugs-crime relationship may then become salient.¹⁰⁹ But if this is the case, it appears to apply to only a small portion of the population engaged in drug market activity, as suggested above.

B. Drug Enforcement Can Cause Violence

Even if drug use is related to crime for only a portion of the drug consuming population, the suggestion that drug enforcement enhances public safety remains plausible. The evidence is not compelling, however, because a substantial part of the causation merely reflects the illegality of drugs, rather than their use per se. Violence in drug markets is often used as an argument for enforcement,¹¹⁰ but the fact that drug markets are illegal means that commercial disputes must be resolved outside the courts, with threatened or actual violence being the principal means for resolution.¹¹¹ In fact, the use of violence to settle disputes in these markets appears to be an inevitable consequence of any policy except legalization.¹¹² This effect of pro-

108. See RASMUSSEN & BENSON, *ECONOMIC ANATOMY*, *supra* note 11, at 57. Also, CHRISTOPHER INNES, U.S. DEPT OF JUSTICE, BUREAU OF JUSTICE STATISTICS SPECIAL REPORT: STATE PRISON INMATE SURVEY, 1986: DRUG USE AND CRIME 1-3 (1988), reports that about half of the prison inmates who had ever used a major drug, and roughly three-fifths of those who used a major drug regularly, did not do so until after their first arrest for some non-drug crime—that is “after their criminal careers had already started.”

109. Orphanides & Zervos, *supra* note 38, present a model in which addiction makes people more myopic, a change in preferences that would likely increase criminal involvement.

110. See OFFICE OF NAT'L DRUG CONTROL POLICY, EXECUTIVE OFFICE OF THE PRESIDENT, NATIONAL DRUG CONTROL STRATEGY: STRENGTHENING COMMUNITIES' RESPONSE TO DRUGS AND CRIME 29 (Feb. 1995) (stating that “Drugs=Crime=Violence . . .”), available at <http://www.ncjrs.org/pdffiles/strat95b.pdf> (last visited Mar. 5, 2003).

111. See OFFICE OF THE ATTORNEY GEN., U.S. JUSTICE DEPT, DRUG TRAFFICKING: A REPORT TO THE PRESIDENT OF THE UNITED STATES 16 (1989) (noting that “the normal commercial concept of contracts, in which disputes are adjudicated by an impartial judiciary and restitution is almost always of a financial nature, is twisted, in the world of drug trafficking, into a system where the rule of law is replaced by the threat of violence.”).

112. Goldstein, *supra* note 29, at 24-36, argues that the illegal status of drugs generates three types of violence: (1) disputes among sellers, (2) robbery of drug market participants, and (3) disputes among users over drugs. Goldstein is skeptical of the notion that the pharmacological attributes of illegal drugs causes violence. This suspicion is confirmed by data presented by Paul J. Goldstein et al., *Drug-Related Homicide in New York: 1984 and 1988*, 38 CRIME & DELINQ. 459 (1992). Resignato also confirms Goldstein's doubts after employing a data sample drawn from the National Institute of Justice's “Drug Use Forecasting” cities to test Goldstein's hypothesis. Resignato, *supra* note 11, at 685. The National Institute of Justice has been testing arrestees for drug use in twenty-four cities for several years, so a measure of drug use (at least among the criminal population) is avail-

hibition is exacerbated when enforcement is more effective against relatively benign and inexperienced drug dealers, leaving the trade with better organized and more violent organizations.¹¹³ Furthermore, the tools of competition that are available to firms in legal markets as they attempt to increase market share and profits (e.g., media advertising and investments in reputation by, for instance, building brand names protected by trademark laws), are not available in illicit drug markets. The use or threat of violence, however, is also a “competitive” tool that can be used to increase market share. Finally, drug users and dealers make attractive targets for robbery since they are generally carrying cash or drugs and are not likely to report their victimization.¹¹⁴ When such robberies result in physical harm, they come to the attention of police as “drug-related” assault or murder, which many observers inaccurately interpret as being caused by drug use per se.

Prohibition itself breeds violence, but there also is substantial evidence that the intensity of law enforcement influences the level of both violent and property crime.¹¹⁵ When a relative increase in enforcement disrupts local drug markets, dealers in the affected areas seek new market niches where they can ply their trade. When they

able for this sample. *See id.* These data allowed Resignato to test the relationships between drug use, the intensity of drug enforcement efforts, and violent crime. *Id.* at 685-86. He found that drug use itself is not strongly related with violence when other determinants, including the intensity of drug enforcement efforts, are controlled for, and concluded that neither psychopharmacological nor economic compulsive hypotheses were supported. *Id.* at 687-88. Instead, more intense drug-law enforcement efforts appear to cause violent crime, presumably by disrupting drug markets; leading dealers to relocate and engage in conflict over turf; perhaps generating contract disputes due to interrupted deliveries; and causing buyers to search for drugs in unfamiliar places, making them more vulnerable targets for robbery (participants in illegal drug markets are attractive targets for robbery because they generally carry cash or drugs and they are not as likely to report the crime as victims who are engaged in legal activities). *See* Goldstein, *supra* note 29, at 30-31. The U.S. experience with the prohibition of alcohol also confirms the notion that illegal markets breed violence. *See* THORNTON, *supra* note 11, at 120-26; Miron & Zwiebel, *supra* note 11, at 178-79. Also recall the black market in Canadian cigarettes that developed following the imposition of high taxes. *See* Benson & Rasmussen, *Predatory Public Finance*, *supra* note 11, at 197-98. Smuggling was accompanied by violent confrontations between police and smugglers and between rival smuggling organizations. *Id.* Thus, even legalization will not eliminate all violence if high taxes are imposed.

113. KLEIMAN, *supra* note 28, at 20.

114. *See* Goldstein, *supra* note 29, at 30.

115. It needs to be emphasized that there are other important consequences of rising enforcement that are not discussed here aside from those rights issues that we explicitly ignore. An obvious example is the constitutional issues relating to the relaxation of the Fourth Amendment standards for reasonable search and seizure. *See, e.g.,* Paul Finkelman, *The Second Casualty of War: Civil Liberties and the War on Drugs*, 66 S. CAL. L. REV. 1389 (1993); Stephen A. Saltzburg, *Another Victim of Illegal Narcotics: The Fourth Amendment (As Illustrated by the Open Fields Doctrine)*, 48 U. PITT. L. REV. 1 (1986); Silas J. Wasserstrom, *The Incredible Shrinking Fourth Amendment*, 21 AM. CRIM. L. REV. 257 (1984); Steven Wisotsky, *Crackdown: The Emerging “Drug Exception” to the Bill of Rights*, 38 HASTINGS L.J. 889 (1987).

enter markets that are already served by other dealers, the resulting competition will involve violence, as disputes over market share and service areas, or “turf,” arise.¹¹⁶ Buyers who must search for new suppliers in areas that they are not familiar with also may be more vulnerable to robbery.

C. *Do Drugs or Drug Enforcement Cause Property Crime?*

Rising property crime can also accompany increased drug enforcement. Because police resources are limited, increased drug enforcement implies reduced attention to other police responsibilities that represent what economists call the “opportunity cost” of drug enforcement. Scarce police resources must be diverted from the solution of violent crimes, combating property crimes, and/or the myriad of other activities that occupy law enforcement officers.¹¹⁷ The evidence from several studies in a variety of jurisdictions suggests that drug enforcement tends to draw police resources away from the solution of property crimes, thereby reducing deterrence and increasing property crime rates.¹¹⁸

116. See Rasmussen et al., *Spatial Competition*, *supra* note 11, at 228-30 (providing statistical evidence of a direct law enforcement effect on such violence). As law enforcement efforts against drug markets increase in a Florida jurisdiction, the level of violent crime in neighboring jurisdictions rises. See also Resignato, *supra* note 11, at 683-88.

117. Only about 17% of all arrests by police are for crimes against persons or property. See CJ STATISTICS 2000, *supra* note 55, at 362 tbl. 4.7. For a catalog of the myriad of police activities that are not related to the solution of these crimes, see Benson et al., *Estimating Deterrence Effects*, *supra* note 10, at 164 n.6. Jonathan P. Caulkins et al., *Price Raising Drug Enforcement and Property Crime: A Dynamic Model*, 71 J. ECON. 593 (2000), point out that jurisdictions can avoid this trade-off by raising police budgets. This can only be accomplished by lowering expenditures on other government functions and/or raising taxes. The opportunity cost of increasing drug enforcement under this scenario is, for example, lower educational spending or less private consumption. RASMUSSEN & BENSON, *ECONOMIC ANATOMY*, *supra* note 11, at 21, note that voters tend to resist tax increases and public bureaucracies resist budget cuts, so the opportunity cost of increasing drug arrests is likely, at least in part, to be in the form of a reduction of other police services.

118. Support for this trade-off hypothesis is found in several studies using data on Florida jurisdictions for various time periods. See, e.g., Benson et al., *Deterrence and Public Policy*, *supra* note 11; Bruce L. Benson et al., *Is Property Crime Caused by Drug Use or Drug Enforcement Policy?* 24 APPLIED ECON. 679 (1992) [hereinafter Benson et al., *Property Crime*]; Bruce L. Benson, Ian S. Leburn, & David W. Rasmussen, *The Impact of Drug Enforcement on Crime: An Investigation of the Opportunity Cost of Police Resources*, 31 J. DRUG ISSUES 987 (2001); Hope Corman & H. Naci Mocan, *A Time-Series Analysis of Crime, Deterrence, and Drug Abuse in New York City*, 90 AM. ECON. REV., 584 (2000) (reporting corroborative evidence in a study using New York City data); Silvia M. Mendes, *Property Crime and Drug Enforcement in Portugal*, 11 CRIM. JUST. POL'Y REV. 195 (2000) (replicating the Sollars et al., *Drug Enforcement and Deterrence*, *infra*, results using data on jurisdictions in Portugal); David L. Sollars, Bruce L. Benson, & David W. Rasmussen, *Drug Enforcement and the Deterrence of Property Crime Among Local Jurisdictions*, 22 PUB. FIN. Q. 22 (1994) [hereinafter Sollars et al., *Drug Enforcement and Deterrence*]. Given scarcity, some trade-off is inevitable, although police decision-makers may choose the policy objective to sacrifice. Thus, for instance, BRUCE L. BENSON & DAVID W. RASMUSSEN, *ILLINOIS' WAR ON DRUGS: SOME UNINTENDED CONSEQUENCES* 1, 12 (Heartland Policy Study No. 48, 1992), find that scarce police resources were diverted from traffic enforcement rather than

D. Corruption

Handicapped by its limited effectiveness and its tendency to reduce public safety by reallocating police resources from other endeavors, enforcement aimed against high-profit, cash-laden drug enterprises also leads to another crime: corruption of law enforcement officials. Government can be viewed as an entity that assigns and enforces property rights.¹¹⁹ In this light, one avenue for corruption is the illegal (or black market) “sale” of property rights.¹²⁰ The illegality of drug markets gives police a valuable asset that can be sold—that is, agreeing to selective law enforcement where police clients are allowed to operate illegally, while the police harass other potential drug dealers, discouraging them from entering the market. Corruption is likely to be selective, serving to reinforce the most profitable drug suppliers who bribe police to focus their enforcement efforts on potential competitors entering the market.¹²¹ Under this scenario, it is expected that there will be a large number of drug arrests that have little impact on the market. As Moore and Kleiman note:

property crime enforcement, leading to a dramatic rise in traffic fatalities. Rising crime against persons and property could also accompany increasing drug arrests if it causes prison overcrowding and the subsequent release of non-drug felons. This was the case in Florida during the rapid escalation of drug arrests from 1984 to 1989. Since Florida was under a federal court order to reduce prison overcrowding, increasing drug arrests and convictions meant early release for prisoners. By the end of 1989, the average portion of sentence served among released Florida prisoners fell to 33%, down from the norm of about 50%. See RASMUSSEN & BENSON, *ECONOMIC ANATOMY*, *supra* note 11, at 22-23. Both property and violent felons were released early. Perhaps the most famous case of early release was that of Charles H. Street, who had been sentenced to fifteen years for attempted murder. After serving half his sentence he was released in November 1988. Ten days after his release he murdered two Metro-Dade (Miami) police officers. See David Dahl, *Why Was He Freed? Prisons Too Full to Hold Man Now Accused of Killing 2 Police*, ST. PETERSBURG TIMES, Dec. 1, 1988, at 1A. Thus, prison overcrowding due to more drug arrests put criminals back on the street earlier, and since expected punishments fell, deterrence of crime fell to the extent that the severity of punishment discourages criminal behavior. See RASMUSSEN & BENSON, *ECONOMIC ANATOMY*, *supra* note 11, at 22-23.

119. See Bruce L. Benson & John Baden, *The Political Economy of Governmental Corruption: The Logic of Underground Government*, 14 J. LEGAL STUD. 391, 392 (1985); Benson, *Corruption in Law Enforcement*, *supra* note 10.

120. Benson & Baden, *supra* note 119; Benson, *Corruption in Law Enforcement*, *supra* note 10.

121. In effect, the police can sell monopoly rights to a private sector underground market and then enforce that rights allocation. Thus, organized crime and corruption tend to go hand in hand. Indeed, Thomas Schelling, *What is the Business of Organized Crime?*, 40 AM. SCHOLAR 643 (1971), argues that organized crime is really monopolized crime, and both Paul H. Rubin, *The Economic Theory of the Criminal Firm*, in *THE ECONOMICS OF CRIME AND PUNISHMENT* 155 (Simon Rottenberg ed., 1973), and ANNE G. ANDERSON, *THE BUSINESS OF ORGANIZED CRIME* 58 (1979), contend that such criminal firms possess monopoly power because there are economies of scale in buying corruption from police and other government officials. CAVE & REUTER, *INTERDICTOR'S LOT*, *supra* note 12, present a model that raises the possibility of selective enforcement against novice rather than experienced drug smugglers that is also consistent with systematic corrupt enforcement practices.

[T]he police executive knows from bitter experience that in committing his force to attack drug trafficking and drug use, he risks corruption and abuses of authority. Informants and undercover operations—so essential to effective drug enforcement—inevitably draw police officers into close, potentially corrupting relationships with the offenders they are pledged to control.¹²²

Prohibition policies and intense law enforcement efforts breed crime, so even if there is a criminogenic consequence of drug use per se, such policies may not reduce overall levels of crime. Indeed, the increased crime that arises when activities are carried out in black markets, and when criminal justice resources are reallocated to control that market, could easily outweigh any crime reducing impact of limiting drug consumption.¹²³

VI. SUPPLIERS OF DRUG POLICY: THE ROLE OF BUREAUCRATIC SELF-INTEREST

Our story so far shows that the effectiveness of enforcement policy is undermined by the fact that drug users and suppliers will adjust their behavior to offset the effectiveness of enforcement, and that increasing enforcement appears to compromise public safety and foster corruption. Furthermore, growing evidence suggests a more cost-effective approach is available.¹²⁴ A widely cited RAND study by Rydell and Everingham estimates that another dollar spent on drug treatment is seven times more cost-effective than another dollar spent on drug enforcement—if the objective is to reduce cocaine

122. MARK H. MOORE & MARK A.R. KLEIMAN, U.S. DEP'T OF JUSTICE, THE POLICE AND DRUGS 2 (Perspectives on Policing No. 11, Sept. 1989). It would be useful to add the adjective "low-wage" to police officers in this quotation. In 1990 the mark-up on one kilogram of cocaine at the wholesale level was about five times the entry-level salary in large police departments and about 1.5 times the police chief's salary. For a discussion of police salary structures and drug mark-ups, see RASMUSSEN & BENSON, ECONOMIC ANATOMY, *supra* note 11, at 117.

123. Resignato, *supra* note 11, at 686-87, finds that the primary cause of drug-related violence is that drugs must be sold in illegal markets, as explained above, *supra* note 112. His results show no important relationships between drug use and violence, but as drug enforcement increases, violent crime also increases. Furthermore, the study in Benson et al., *Property Crime*, *supra* note 118, includes a control for the size of the drug market in their trade-off model of property crime. The authors find that there is, in fact, a significant relationship between the size of the drug market and property crime, but that a reallocation of policing resources to reduce drug crime still leads to an increase in property crime. The reduction in property crime due to a reduction in drug market size is more than offset by the effects of reduced deterrence for property crime due to the reallocation of policing effort.

124. Using an innovative dynamic control model, Jonathan P. Caulkins et al., *Price-Raising Drug Enforcement and Property Crime: A Dynamic Model*, 71 J. ECON. 227 (2000), ignore the opportunity costs of police resources; but their estimates based on U.S. cocaine use suggest that, contrary to U.S. policy, "as use grows toward a steady state, enforcement intensity should decline." *Id.* at 248. Nevertheless, they indicate that the optimum level of enforcement is "fairly sensitive" to what parameters are chosen for the model.

use.¹²⁵ They conclude that criminal justice expenditures could be reduced by twenty-five percent, which would allow for a doubling of expenditures on treatment and a reduction of total expenditures on drug control of approximately \$2 billion.¹²⁶

From 1960 to 1998, drug arrests per capita rose 22-fold, from 26 per 100,000 population to 615 per 100,000.¹²⁷ Given the apparent ineffectiveness of the war on drugs, its unintended consequences, and the availability of alternative strategies, what accounts for the substantial enforcement bias in U.S. drug policy?

A. *Bureaucratic and Political Interests*

In a representative democracy there is a tendency to expect that public opinion drives drug policy. This is not the case, as “every detailed study of the emergence of legal norms has consistently shown the immense importance of interest-group activity, *not the ‘public interest,’* as the critical variable.”¹²⁸ Drug war, the excessive application of enforcement that aggravates rather than mitigates the social consequences of drug use, is waged because it is in the interests of particular politically influential groups, including law enforcement bureaucracies and public officials.¹²⁹ According to this view, legislators can act as moral entrepreneurs, but they are more generally “middlemen” whose actions are largely determined by interest groups, in-

125. C. PETER RYDELL & SUSAN S. EVERINGHAM, RAND, CONTROLLING COCAINE: SUPPLY VERSUS DEMAND PROGRAMS xiii-xiv (1994).

126. *Id.* at xviii. Treatment is not a panacea, however, as Rydell and Everingham estimate that this reallocation of resources would change the total social costs (including enforcement) by about \$2 billion, to about \$36.7 billion per year, a 12.6% decline. *Id.* An alternative policy of providing treatment for all heavy users reduces the total social costs to \$31.7 billion from an estimated \$42 billion under the current policy, a 24.5% decline. *Id.*

127. This was not a slow, steady shift toward more drug arrests: the periods from 1965-70 and 1984-89 account for 68% of the total increase. See RASMUSSEN & BENSON, ECONOMIC ANATOMY, *supra* note 11, at 7.

128. WILLIAM J. CHAMBLISS & ROBERT B. SEIDMAN, LAW, ORDER, AND POWER 73 (1971). ROBERT P. RHODES, THE INSOLUBLE PROBLEMS OF CRIME 13 (1977) argues that “as far as crime policy and legislation are concerned, public opinion and attitudes are generally irrelevant.” This contention is confirmed in RASMUSSEN & BENSON, ECONOMIC ANATOMY, *supra* note 11, at 122-27, for the 1984-1989 drug war. Drug arrests rose from 312 per 100,000 in 1984 to 538 in 1989. *Id.* at 6. Only 2% of Gallup Poll respondents thought drug abuse was the nation’s most important problem in January 1985. *Id.* at 123-24. By September 1988, this figure was 11%. After the Drug Czar position was created by the Anti-Drug Abuse Act of 1988, Pub. L. No. 100-690, 102 Stat. 4181 (codified as amended in scattered sections of 18 U.S.C.), polls reported a rapid rise in concern over drugs that peaked in November 1989 at 38%. *Id.* at 124. The level of concern eroded quickly and was 11% by March 1991. *Id.* at 125 fig. 6.1.

129. There are many models of bureaucratic behavior based on self-interest assumptions that have been developed by economists and political scientists. For a review of these models in the context of drug policy, see RASMUSSEN & BENSON, ECONOMIC ANATOMY, *supra* note 11, at 127-32.

cluding those engaged in the law enforcement process—police chiefs, sheriffs, and prosecutors.¹³⁰

A number of motivations for demanding drug legislation have actually been identified for both bureaucratic and non-bureaucratic interest groups. Some studies have noted the incentives of professional organizations such as the American Pharmaceutical Association to create legal limits on the distribution of drugs (historically there was significant competition between pharmacists and physicians for the legal right to dispense drugs, for example),¹³¹ while others have focused on the disparate racial impacts of illicit drug laws and the desire by some groups to control racial minorities through the enforcement of such laws.¹³² More importantly, from the perspective stressed here, still other studies have emphasized that law enforcement bureaucrats have been a major source of demand for the criminalization of narcotics. After the Harrison Act of 1914,¹³³ these same groups lobbied for passage of the Marihuana Tax Act of 1937¹³⁴ and played an important role in the subsequent criminalization of this illicit drug.¹³⁵

130. Countervailing interests include civil libertarian groups, defense attorneys, and groups such as the National Organization for the Reform of Marijuana Laws (NORML) and Families Against Mandatory Minimums (FAMM) that lobby for policy reform. The continuity of enforcement policy suggests that these forces do not prevail, in part because support of these groups would naturally expose lawmakers to competition claiming they were soft on drugs.

131. See MUSTO, *supra* note 100, at 13-14, 21-23; THORNTON, *supra* note 11, at 56-60; Dorie Klein, *Ill and Against the Law: The Social and Medical Control of Heroin Users*, 13 J. DRUG ISSUES 31 (1983).

132. See RICHARD J. BONNIE & CHARLES H. WHITEBREAD II, *THE MARIHUANA CONVICTION: A HISTORY OF MARIHUANA PROHIBITION IN THE UNITED STATES* (1974); JOHN HELMER, *DRUGS AND MINORITY OPPRESSION* (1975); MUSTO, *supra* note 100; ETHAN A. NADELMANN, *COPS ACROSS BORDERS: THE INTERNATIONALIZATION OF U.S. CRIMINAL LAW ENFORCEMENT* (1993).

133. Harrison Act of 1914, ch. 1, 38 Stat. 785.

134. Marihuana Tax Act of 1937, Pub. L. No. 75-238, ch. 553, 50 Stat. 551.

135. See HOWARD S. BECKER, *OUTSIDERS: STUDIES IN THE SOCIOLOGY OF DEVIANCE* 135-45 (1963); BONNIE & WHITEBREAD II, *supra* note 132; JEROME L. HIMMELSTEIN, *THE STRANGE CAREER OF MARIHUANA: POLITICS AND IDEOLOGY OF DRUG CONTROL IN AMERICA* (1983); ALFRED R. LINDESMITH, *THE ADDICT AND THE LAW* (1965); Craig Reinerman, *Constraint, Autonomy, and State Policy: Notes Toward a Theory of Controls on Consciousness Alteration*, 13 J. DRUG ISSUES 9 (1983). In fact, as THORNTON, *supra* note 11, at 62-66, and Patricia A. Morgan, *The Political Economy of Drugs and Alcohol: An Introduction*, 13 J. DRUG ISSUES 1 (1983), have stressed, all of the various self-interests mentioned above (bureaucrats, professionals from the American Medical Association and American Pharmaceutical Association, and groups attempting to suppress certain races or classes) interacted with still more groups (e.g., temperance groups and religious groups) to produce policies against drug use. Interest groups and bureaucratic entrepreneurs continue to dominate modern drug policy as well. These groups include "civil rights, welfare rights, bureaucratic and professional interests, health, law and order, etc." *Id.* at 3. For instance, the pharmaceutical industry had a significant impact on the Comprehensive Drug Abuse Prevention and Control Act of 1970, 21 U.S.C. §§ 801-971 (2002). According to Reinerman, *supra*, at 19, "In that case as in most of the others, the state's policy-makers were buffeted by law enforcement interests and professional interests"

Breton and Wintrobe explained that one bureaucratic strategy to compete for resources is to “generate” demand for a bureau’s own services through direct lobbying, policy manipulation, and the selective release of information and misinformation to other interest groups and the media.¹³⁶ These strategies are followed because bureaus must compete with one another for the support and attention of sponsors (and individual bureaucrats must compete with other bureaucrats for benefits within a bureau) and because the control of resources is necessary before most of the subjective goals of bureaucrats can be achieved.¹³⁷

Breton and Wintrobe emphasized that bureaucratic release of both true and false information, or “selective distortion,” can play significant roles in bureaucratic policy advocacy.¹³⁸ This has clearly been the case in the evolution of drug policy. For example, the bureaucratic campaigns leading up to the 1937 marijuana legislation “included remarkable distortions of the evidence of harm caused by marijuana, ignoring the findings of empirical inquiries.”¹³⁹ The “reefer madness” scare traces to the misinformation propagated by the Bureau of Narcotics. Marijuana was alleged to cause insanity, to incite rape, and to cause users to develop delirious rages, making them irresponsible and prone to commit violent crimes. Factual distortions did not stop there, however. For instance, the bill was represented as one that was largely symbolic in that it would require no additional enforcement expenditures.¹⁴⁰ The evolution of drug policy since the initial legislation has also been, at least in part, shaped by bureaucratic competition, both between law enforcement and drug treatment bureaucrats over “ownership of the problem”—that is, over shares of federal, state, and local budgets¹⁴¹—and between law enforcement bureaucracies themselves.

136. ALBERT BRETON & RONALD WINTROBE, *THE LOGIC OF BUREAUCRATIC CONDUCT: AN ECONOMIC ANALYSIS OF COMPETITION, EXCHANGE, AND EFFICIENCY IN PRIVATE AND PUBLIC ORGANIZATIONS* 146-54 (1982).

137. See ROBERT M. STUTMAN & RICHARD ESPOSITO, *DEAD ON DELIVERY: INSIDE THE DRUG WARS, STRAIGHT FROM THE STREET* (1992), for a description of the actual activities of a DEA agent, which reveals the tremendous amount of time and effort this agent spent competing for resources. The book also shows the significant role that politics play in determining the allocation of drug enforcement resources; its entire argument could be easily set in the context of the Breton-Wintrobe model of bureaucratic entrepreneurship.

138. BRETON & WINTROBE, *supra* note 136, at 39. This is possible, in part, because of the high costs of monitoring bureaus.

139. DAVID A.J. RICHARDS, *SEX, DRUGS, DEATH AND THE LAW* 164 (1982). For details, see JAMES T. BENNETT & THOMAS J. DILORENZO, *OFFICIAL LIES: HOW WASHINGTON MISLEADS US* 237-39 (1992); HIMMELSTEIN, *supra* note 135, at 60-62; JOHN KAPLAN, *MARIJUANA—THE NEW PROHIBITION* 88-136 (1970); LINDSMITH, *supra* note 135, at 25-34.

140. See John F. Galliher & Allynn Walker, *The Puzzle of the Social Origins of the Marijuana Tax Act of 1937*, 24 *SOC. PROBS.* 367, 373 (1977).

141. See *supra* note 135 and accompanying text.

As the perceived responsibility for some social ill (e.g., crime) is shifted from outside forces to the government and to the bureaucracy, bureaucrats seek to shift the blame elsewhere.¹⁴² Blaming crime on people crazed by drugs takes advantage of such an opportunity. As a consequence, a good deal of false or misleading information emanating from police bureaucrats about the relationship between drugs and crime has clearly characterized the evolution of drug policy.¹⁴³ In fact, it was chiefly as a result of information promulgated by police¹⁴⁴ that drug crime came to be widely held as the root cause of much of what is wrong with society.¹⁴⁵ In particular, the contention that property crime is a major source of income for drug users (i.e., so drug use is thus the leading cause of property crime) has been made to justify political demands for the criminal justice system to “do something” about the drug/crime problem, demands that largely emanate from the police lobbies.¹⁴⁶ In turn, that contention has been used to justify an emphasis on the control of illicit drug traffic as a means of general crime prevention. With these arguments as justification, state and federal legislators have been passing increasingly strict sentencing requirements for drug offenders, police have reallocated resources to make more drug arrests, and judges have sentenced increasingly large numbers of drug offenders to prison.¹⁴⁷

142. See BRETON & WINTROBE, *supra* note 136, at 149-51.

143. KAPLAN, *supra* note 139; see KAPLAN, *supra* note 21; LINDESMITH, *supra* note 135; RASMUSSEN & BENSON, *ECONOMIC ANATOMY*, *supra* note 11, at 119-50; RICHARDS, *supra* note 139; Robert J. Michaels, *The Market for Heroin Before and After Legalization*, in *DEALING WITH DRUGS: CONSEQUENCES OF GOVERNMENT CONTROL* 289 (Ronald Hamowy ed., 1987).

144. See Randy E. Barnett, *Public Decisions and Private Rights*, 3 *CRIM. JUST. ETHICS* 50, 56 (1984) (book review) (explaining that specialists are not reliable guides for effective drug policy); *supra* notes 128 & 137 and accompanying text.

145. For instance, see the OFFICE OF NAT'L DRUG CONTROL POLICY, EXECUTIVE OFFICE OF THE PRESIDENT, *NATIONAL DRUG CONTROL STRATEGY 2* (Jan. 1990).

146. See BRUCE L. BENSON, *THE ENTERPRISE OF LAW: JUSTICE WITHOUT THE STATE* 105-27 (1990); RICHARD A. BERK ET AL., *A MEASURE OF JUSTICE: AN EMPIRICAL STUDY OF CHANGES IN THE CALIFORNIA PENAL CODE, 1955-1971*, at 41-49 (1977); RASMUSSEN & BENSON, *ECONOMIC ANATOMY*, *supra* note 11, at 121-23; Barnett, *supra* note 144.

147. BRETON & WINTROBE, *supra* note 136, at 150-51, offer two reasons to explain why bureaucrats advocate policies of directly controlling “a source of blame” for a problem such as crime (e.g., alcohol prohibition, criminalization and prohibition of various drugs after 1914 and 1937, increased emphasis on drug control in the mid-1960s, and then again in the mid-1980s), even though such policies have a history of failure. First, there is always opposition to such policies, so when they fail, opponents can be blamed for not allocating sufficient resources to combat the problem. Second, because policy outcomes depend jointly on the inputs of several different groups and bureaus and the set of possible control methods is very large, when the subset selected fails, the bureaucrats can argue that: (1) while they advocated a control policy they favored a different subset of control tools (e.g., more severe punishment of drug offenders or greater spending on supply interdiction efforts) so they are not responsible for the failure, and/or (2) the other groups whose contributions were necessary to make the effort successful (e.g., witnesses, judges, legislators who approve prison budgets, other law enforcement agencies) did not do their share. Indeed, a policy can fail completely, while at the same time entrepreneurial bureaucrats expand their

B. Civil Asset Forfeiture

Civil asset forfeiture procedures also provide a powerful motivation for law enforcement at all levels to increase drug arrests.¹⁴⁸ Asset forfeiture laws provide law enforcement with a weapon to deter drug offenders, but they encourage more drug enforcement because, since the Federal Comprehensive Crime Act of 1984, most of the proceeds of these *in rem* proceedings go to the agency.¹⁴⁹ Before discussing the implications of the allocation of seizures, note that the 1984 Crime Bill's change in asset forfeiture law was a bureaucratically-demanded innovation that was justified as a means of achieving expanded inter-bureau cooperation.¹⁵⁰ Forfeiture policies were also jus-

reputations and end up being substantially better off. As Breton and Wintrobe suggest, however, "[o]ne need not assume Machiavellian behavior, deceit, or dishonesty on the part of bureaucrats, because in all likelihood the pursuit of their own interest will be, as it is for everyone else, veiled in a self-perception of dedication and altruism." *Id.* at 152.

148. See RASMUSSEN & BENSON, *ECONOMIC ANATOMY*, *supra* note 11, at 132-39; Mast et al., *supra* note 11.

149. The asset forfeiture section of this statute specified that state and local police who cooperate with a federal agency in a drug investigation would share in the assets seized. See Benson et al., *Police Bureaucracies*, *supra* note 11, at 29. This was in conflict with many state laws that directed seizures into general funds, or toward other specific purposes such as education. *Id.* at 30. Furthermore, the Department of Justice went a step further, by "adopting" local police seizures even when no federal agency was involved and treating the seizures as if they arose through a cooperative investigation. See Mast et al., *supra* note 11, at 287. This practice coincides with the rise in drug enforcement across the country that began in late 1984 and early 1985. *Id.* at 287-88. The Department of Justice charges twenty percent to adopt a seizure and does not deal with small cases, but many states have emulated the 1984 federal law so local law enforcement agencies now generally reap benefits from seizing the assets of alleged drug offenders. *Id.* at 288.

150. See generally RASMUSSEN & BENSON, *ECONOMIC ANATOMY*, *supra* note 11, at 134-35, 137.

For instance, in hearings on the Comprehensive Drug Penalty Act before the Subcommittee on Crime of the Committee on the Judiciary of the U.S. House of Representatives, held June 23 and October 14, 1983, much of the testimony focused exclusively on the confiscations and forfeitures issue. Among the organizations and bureaucracies presenting testimony in support of the forfeitures-sharing arrangement were the U.S. Customs Service, various police departments and sheriffs, the U.S. Attorney's Office from the Southern District of Florida, and the U.S. Drug Enforcement Administration. There was no representation of local government oversight authorities (mayors, city councils, county commissions) either supporting or [opposing] such legislation. Furthermore, when the innovation was first introduced, it appears that most non-law enforcement bureaucrats did not anticipate [its] implications, probably due to the poor "quality" of information selectively released by law enforcement bureaucracies and their congressional supporters. The only group suggesting problems with the legislation was the Criminal Justice Section of the American Bar Association. Two groups involved in drug therapy (the Therapy Committees of America, and the Alcohol and Drug Problems Association) also supported forfeitures sharing, but proposed that a share also go to drug therapy programs. The law enforcement lobbies prevailed.

Following passage of the initial law, inter-bureaucratic competition for the rights to seized assets, as defined by federal statutes, intensified. It became clear to state and local bureaucrats, who compete with the law enforcement sector for the control of resources, that the federal legislation was being used to

circumvent state laws and constitutions prohibiting certain forfeitures or limiting law enforcement use of seizures. For example, North Carolina law requires that all proceeds from [the sale of] confiscated assets go to the County School Fund. Law enforcement agencies in North Carolina, and in other [jurisdictions] where state law limited their ability to benefit from confiscations, began using the 1984 federal legislation to circumvent [the restrictions] by routinely arranging for federal "adoption" of forfeitures [so the seized assets could be repatriated to] the state and local law enforcement agencies. [Note that this adoption process raises significant doubts about the inter-agency cooperation justification for this legislation, other than the political cooperation that allowed police agencies at all levels to expand their budgets without going through the general budgeting process.] As education bureaucrats and others affected by this diversion of benefits recognized what was going on, they began to advocate a change in the federal law. They were successful, [at least initially]: the Anti-Drug Abuse Act of 1988, passed on November 18, 1988, changed the asset forfeitures provisions that had been established in 1984. Section 6077 of the 1988 [A]ct stated that the attorney general must assure that any [seized asset] transferred to a state or local law enforcement agency "Is not so transferred to circumvent any requirement of State Law that prohibits forfeiture or limits use or disposition of property forfeited to state or local agencies." This provision was designated to go into effect on October 1, 1989, and the Department of Justice interpreted it to mandate an end to all adoptive forfeitures.

State and local law enforcement officials immediately began advocating the repeal of Section 6077. Thus, the U.S. House Subcommittee on Crime heard testimony on April 24, 1989, advocating repeal of Section 6077 from such groups as the International Association of Chiefs of Police, the Florida Department of Law Enforcement, the North Carolina Department of Crime Control and Public Safety, and the U.S. Attorney General's Office. Perhaps the most impassioned plea for repeal was made by Joseph W. Dean of the North Carolina Department of Crime Control and Public Safety, who admitted both that law enforcement bureaucracies were using the federal law to circumvent the state's constitution and that without the benefits of confiscations going to those bureaus, substantially less effort would be made to control drugs.

"Currently the United States Attorney General, by policy, requires that all shared property be used by the transfer for law enforcement purposes. The conflict between state and federal law [given Section 6077 of the 1988 Act] would prevent the federal government from adopting seizures by state and local agencies.

. . . This provision would have a devastating impact on joint efforts by federal, state and local law enforcement agencies not only in North Carolina but also in other affected states

Education is any state's biggest business. The education lobby is the most powerful in the state and has taken a position against law enforcement being able to share in seized assets. The irony is that if local and state law enforcement agencies cannot share, the assets will in all likelihood not be seized and forfeited. Thus no one wins but the drug trafficker

. . . If this financial sharing stops, we will kill the goose that laid the golden egg."

This statement clearly suggests that law enforcement agencies focus resources on enforcement of drug laws because of the financial gains for the agencies arising from forfeitures.

. . . .

[P]olice lobbies won [this] battle over federal legislation. Section 6077 of the Anti-[D]rug Abuse Act of 1988 never went into effect. Its repeal was hidden in the 1990 Defense Appropriations [b]ill, and the repeal was made retroactive to October 1, 1989.

Id. Citations omitted.

tified because they imply that the proceeds from drug crime are used to recoup public monies spent combating drug crime, as emphasized in a manual designed to help jurisdictions develop a forfeiture capability.¹⁵¹ While pointing out that less tangible law-enforcement benefits (such as deterrence) should be counted as benefits, the manual emphasizes that the determining factor for pursuit of a forfeiture is the “*jurisdiction’s* best interest.”¹⁵² This interest, of course, is viewed from the perspective of law enforcement agencies, a view that might put more weight on the benefits perceived by agency heads and somewhat less weight on the uncertain community-wide benefits of deterrence. Research indicates that police department discretionary budgets rise when they seize assets and that departments respond to this incentive by increasing drug arrests relative to arrests for other offenses.¹⁵³ Thus, while civil asset forfeiture programs may be an effective tool in a war on drugs, it is clear that they provide powerful incentives for police agencies to increase drug enforcement relative to other activities. Indeed, there is no research to demonstrate that seizure activity has a major deterrent effect, and there is some evidence that, at least in some jurisdictions, a substantial amount of assets are seized from innocent people.¹⁵⁴

Consider the seizures made in Volusia County, Florida, for instance. The Sheriff’s Department had a drug squad that collected over \$8 million (an average of \$5,000 per day) from motorists on Interstate 95 during a forty-one-month period between 1989 and 1992.¹⁵⁵ These seizures were “justified” as part of the war on drugs,

151. NAT’L CRIMINAL JUSTICE ASS’N, ASSET SEIZURE & FORFEITURE: DEVELOPING AND MAINTAINING A STATE CAPABILITY 28-29 (1988).

152. *Id.* at 40 (emphasis added).

153. See Mast et al., *supra* note 11, at 287-89. Benson, Rasmussen and Sollars show that forfeiture activity raises budgets, Benson et al., *Police Bureaucracies*, *supra* note 11, at 37, refuting the possibility that these funds are fungible and offset by reduced regular budget allocations. See also Eric Blumenson & Eva Nilsen, *Policing for Profit: The Drug War’s Hidden Economic Agenda*, 65 U. CHI. L. REV. 35, 56 (1998); John L. Worrall, *Addicted to the Drug War: The Role of Civil Asset Forfeiture as a Budgetary Necessity in Contemporary Law Enforcement*, 29 J. CRIM. JUST. 171 (2001).

154. Blumenson & Nilsen, *supra* note 153, at 46-47, refer to the “ancient legal fiction” that presumes the property is guilty, thereby allowing police to seize assets even when the owner is not charged for a crime. Dramatic examples of police seizure activity can be found in an Arts and Entertainment Network investigative report on civil asset forfeiture entitled *Seized by the Law* (Kurtis Productions, Ltd. for A & E television broadcast 1996).

155. In a Pulitzer prize winning series of *Orlando Sentinel* articles printed during June 14-16, 1992, Jeff Brazil and Steve Berry describe in vivid detail the asset seizure program in Volusia County. See Jeff Brazil & Steve Berry, *Series: Tainted Cash or Easy Money?*, ORLANDO SENTINEL, June 14-16, 1992. Many other examples of abuses of police discretion in the pursuit of forfeitures can also be cited. For instance, Dennis Cauchon and Gary Fields demonstrate this in a special report titled *Abusing Forfeiture Laws in USA TODAY*, May 18, 1992. More recently, narcotics task forces in Texas were revealed to have seized more than \$194 million between 1987 and 2000. See Jim Henderson, *Big Numbers Don’t Add Up to Success in Texas War on Drugs*, HOUS. CHRON., Dec. 24, 2000, at State 1.

but most Volusia County seizures actually involved southbound rather than northbound travelers, suggesting that the drug squad was more interested in seizing money than in stopping the flow of drugs.¹⁵⁶ More significantly in this context, no criminal charges were filed in over 75% of the county's seizure cases.¹⁵⁷ Traffic citations were not even issued, let alone drug related charges. Indeed, it appears that a substantial amount of money was apparently seized from innocent victims. Three-fourths (199) of Volusia County's seizures made during this period were contested.¹⁵⁸ Money was not returned even when the seizure was challenged, no proof of wrongdoing or criminal record could be found, and the victim of the seizure presented proof that the money was legitimately earned.¹⁵⁹ The sheriff employed a forfeiture attorney at \$44,000 per year to handle settlement negotiations.¹⁶⁰ By 1992 only four people had gotten their money back, one lost at trial and was appealing, and the rest settled for 50–90% of their money after promising not to sue the sheriff's department.¹⁶¹ How many were drug traffickers? No one knows, since no charges were filed and no trials occurred; but, it is clear that several were innocent victims. Thus, asset seizures are not simply a way of using ill-gotten gains to finance criminal justice.

The Volusia County Sheriff's Department is not the only law enforcement agency that has benefited from asset seizure laws. "[O]ver 90% of the police departments serving a population of 50,000 or more, and over 90% of the sheriffs' departments serving 250,000 or more residents, received money or goods from a drug asset forfeiture program" in 1990.¹⁶² Moreover, asset forfeiture by law enforcement

156. Jeff Brazil & Steve Berry, *Series: Tainted Cash or Easy Money? Three of Every Four Drivers Were Never Charged*, ORLANDO SENTINEL, June 14, 1992, at A1, available at 1992 WL 4664796.

157. *Id.*

158. *Id.*

159. Jeff Brazil & Steve Berry, *Series: Tainted Cash or Easy Money? Seizing Cash is No Sweat for Deputies*, ORLANDO SENTINEL, June 14, 1992, at A17, available at 1992 WL 10608331.

160. *Id.*

161. A twenty-one-year-old naval reservist had \$3,989 seized in 1990, for instance, and even though he produced Navy pay stubs to show the source of the money, he ultimately settled for the return of \$2,989, with 25% of that going to his lawyer. In similar cases the sheriff's department kept \$4,750 out of \$19,000 (the lawyer got another \$1,000); \$3,750 out of \$31,000 (the attorney got about 33% of the \$27,250 returned); \$4,000 of \$19,000 (\$1,000 to the attorney); \$6,000 out of \$36,990 (the attorney's fee was 25% of the rest); and \$10,000 out of \$38,923 (the attorney got one-third of the recovery). Brazil & Berry, *supra* note 156.

162. BRIAN A. REAVES, U.S. DEP'T OF JUSTICE, DRUG ENFORCEMENT BY POLICE AND SHERIFFS' DEPARTMENTS, 1990, at 1 (May 1992). As of September 30, 2001, the ONDCP reported that its asset forfeiture fund has a total of 20,703 assets valued at \$831.5 million. OFFICE OF NAT'L DRUG CONTROL STRATEGY, EXECUTIVE OFFICE OF THE PRESIDENT, NATIONAL DRUG CONTROL STRATEGY: FY 2003 BUDGET SUMMARY 88 (Feb. 2002). Worrall, *supra* note 153, at 177-79, provides survey results indicating that local law enforcement agencies are dependent on asset seizure to supplement their budgets.

agencies has become increasingly controversial throughout the nation. Highly publicized criticism in the print and electronic media has raised constitutional issues such as the erosion of Fourth Amendment rights, protection of innocent parties, and a lack of proportionality of punishment to the crime.¹⁶³ Whether large portions of the seizures come from criminals cannot be determined because many do not involve arrests, and the costs associated with recovering wrongfully seized assets can run into thousands of dollars.

Agency interest in budget enhancement is not limited to seizing the assets of citizens; drug policy is a significant vehicle by which public and quasi-public agencies compete for resources. Police agencies actively promulgate false and misleading information about the relationship between drugs and crime, blaming unsolved crime on people under the influence of drugs in order to increase their budget allocations. Increasing drug arrests tend to raise total arrests but at the cost of less enforcement of other offenses, creating for police agencies a “virtuous cycle” of more output as measured by arrests and more need for police as measured by crime, both of which lead to higher budget allocations.¹⁶⁴ Further, innovations in drug markets are routinely presented by drug policy entrepreneurs as a new public policy problem because of the chemical, physiological, or psychological novelty of the new drug. Zimring and Hawkins note that this occurs because “allegations of a drug’s uniqueness can be used as a rhetorical device to shield proponents of a prohibitory policy from counterarguments based on the history of earlier efforts at the state regulation of other substances or of the same substance in different forms or settings.”¹⁶⁵ By alleging unique threats posed by each new drug, criminal justice interests can claim as irrelevant any references to past policy experiences with any other drug. In a stunning exposé of bureaucratic politics designed to increase his own agency’s budget, Drug Enforcement Agent Robert Stutman described how he created a media and political campaign to generate hysteria about what was alleged to be an extraordinarily destructive new drug, crack cocaine.¹⁶⁶ The “crack epidemic” would create hopelessly addicted us-

163. *E.g.*, *Seized by the Law*, *supra* note 154; *War on Drugs, a War on Ourselves* (ABC television broadcast, July 30, 2002) (emphasizing the perverse incentives generated by asset forfeiture laws); *supra* note 155 and accompanying text.

164. Police have a vested interest in keeping crime rates relatively high: if crime rates drop too much, support for more police and larger budgets wanes, and “[l]ike all bureaucracies, criminal justice agencies can hardly be expected to implement policies that would diminish their importance.” Michael E. Milakovich & Kurt Weis, *Politics and Measures of Success in the War on Crime*, 21 *CRIME & DELINQ.* 1, 10 (1975).

165. FRANKLIN E. ZIMRING & GORDON HAWKINS, *THE SEARCH FOR RATIONAL DRUG CONTROL* 51 (1992).

166. STUTMAN & ESPOSITO, *supra* note 137; see RASMUSSEN & BENSON, *ECONOMIC ANATOMY*, *supra* note 11, at 141-46, for a discussion of Stutman and Esposito’s work in the context of the rise in drug arrests between 1984 and 1989.

ers,¹⁶⁷ uneducable children,¹⁶⁸ and an unprecedented crime wave.¹⁶⁹ By the time the scientific community can evaluate such claims and demonstrate that they are either false or exaggerated, drug market entrepreneurs can introduce a new product variety that police can depict in the same fashion.

Advocacy for a war on drugs is not limited to police agencies, however. Legislators and prosecutors reap immediate political benefits by appearing tough on drugs, while the social costs of these policies are not readily apparent to their constituents and occur over a long time period that is relatively less salient to political entrepreneurs seeking re-election.¹⁷⁰ Tough sentences for drug offenders also increase the demand for prison beds,¹⁷¹ providing an incentive for contractors who build prisons and both public and private providers of prison services to advocate tough drug policies. Treatment providers also have an incentive to advocate harsh penalties for drug use, because they generate demand for their services through court ordered treatment and private spending for treatment driven by the fear of punishment.¹⁷²

167. The National Household Survey of Drug Abuse in 1998 reported that the 25-34 age group, in 1996, had the highest lifetime prevalence of crack use, 4.4%. That cohort reported a last month prevalence of 0.5% that year, about 11.4% of the lifetime rate. The same cohort reported a monthly rate of marijuana and/or hashish use that was 16.6% of the lifetime rate, suggesting that the tendency to be a regular user (as measured by use during the last 30 days) among crack users is not substantively different from that of marijuana users. CJ STATISTICS 2000, *supra* note 55, at 260, 261 tbls. 3.92-3.94.

168. There is some evidence that crack cocaine use among pregnant women poses some education problems for their children due to low birth weight because such infants are more likely to require special education. See H. Naci Mocan & Kudret Topyan, *Illicit Drug Use and Health: Analysis and Projections of New York City Birth Outcomes Using a Kalman Filter Model*, 62 S. ECON. J. 164, 164 (1995); see also BENNETT & DILORENZO, *supra* note 139, at 243-45 (arguing that pregnant crack-using mothers are less likely to get badly needed prenatal care, however, because the hysteria around crack babies may cause them to believe that their children are hopeless).

169. *But see* Goldstein, *supra* note 29; Johnson et al., *supra* note 98.

170. For discussion of and evidence about the relatively short-sighted behavior of elected politicians, see Bruce L. Benson & Ronald N. Johnson, *The Lagged Impact of State and Local Taxes on Economic Activity and Political Behavior*, 24 ECON. INQUIRY 389 (1986); James M. Buchanan & Dwight R. Lee, *Tax Rates and Tax Revenues in Political Equilibrium: Some Simple Analytics*, 20 ECON. INQUIRY 344 (1982).

In recent years many member nations of the European Community have been experimenting with drug reform. Although the sources of this emerging trend are not well researched at this time, it is worth noting that these countries, unlike the U.S., do not have elected sheriffs and prosecutors. This may reduce the incentives of some agencies to advocate high levels of drug enforcement.

171. In 1996, 36.8% of all felony defendants in the largest seventy-five counties were convicted on drug charges, so punishments for drug offenders have a significant effect on the overall demand for prison beds. CJ STATISTICS 2000, *supra* note 55, at 460 tbl. 5.47.

172. See KENNETH J. MEIER, *THE POLITICS OF SIN: DRUGS, ALCOHOL, AND PUBLIC POLICY*, at 103-34 (1994) (presenting empirical evidence supporting this contention).

C. *Tragedy in the Criminal Justice Commons*

Criminal justice resources are scarce. In fact, competing demands for their use substantially exceed their supply. This means that public law enforcement must be rationed, and since they are not rationed by price in a market setting, some other allocating method must be used.¹⁷³ Police, prosecutors, public defenders, probation services, and prisons are allocated in a common pool environment, implying that there are few incentives to use these resources efficiently.¹⁷⁴ The commons problem emerges because no individuals or institutions “own” these public resources, and therefore decision-makers do not suffer the full consequences when these resources are not put to their highest and best use. Since the best use of these public resources involves social benefits or costs that are not captured or borne by the decision-makers, there is a tendency to undervalue these benefits and costs relative to those which do accrue to the agency and its administrators.¹⁷⁵

Public officials are presumably characterized by the same utility maximizing behavior that motivates people in private markets. The institutional framework of public officials may differ from that of private sector employees, but their fundamental objectives should include many that are common to both groups such as job security, prestige, discretion, advancement, leisure, and promotion of whatever they believe is in the public interest.¹⁷⁶ Budget allocations to police agencies are likely to rise when they increase drug arrests, which is a measure of “performance” in the police budgeting process.¹⁷⁷ Furthermore, an important measure of the need for police resources in this process is the amount of crime reported in the jurisdiction.¹⁷⁸ As explained above, when police allocate more of their limited resources

173. Some might argue that criminal justice resources are “free” because everyone supposedly has equal access to them, but because all demands cannot be met in a timely fashion, there must be some rationing criteria, even if it is not explicit. See BENSON, *supra* note 146, at 97; BRUCE L. BENSON & LAURIN A. WOLLAN, JR., JAMES MADISON INST., PRISON OVERCROWDING AND JUDICIAL INCENTIVES (1989); Carl S. Shoup, *Standards for Distributing a Free Governmental Service: Crime Prevention*, 19 PUB. FIN. 383 (1964).

174. For a description of the “Tragedy of the Commons” see Garrett Hardin, *The Tragedy of the Commons*, 162 SCIENCE 1243-48 (1968). For applications of the commons analysis to the criminal justice system, see BENSON, *supra* note 146; BENSON & WOLLAN, *supra* note 173, at 2-8; RICHARD NEELY, WHY COURTS DON’T WORK, 164-86 (1982); RASMUSSEN & BENSON, ECONOMIC ANATOMY, *supra* note 11, at 17-37; Randy E. Barnett, *Pursuing Justice in a Free Society: Part Two—Crime Prevention and the Legal Order*, 5 CRIM. JUST. ETHICS 30, 31-35 (1986).

175. See *supra* note 9 for references to the “public choice” literature that emphasizes the role of incentives in bureaucratic agencies.

176. See BRETON & WINTROBE, *supra* note 136, at 27. From this list, increasing budgets would seem particularly important since many other objectives might be well served with more agency resources.

177. See Sollars et al., *Drug Enforcement and Deterrence*, *supra* note 118, at 36.

178. See Benson et al., *Property Crime*, *supra* note 118, at 679.

to drug offenses, the total number of arrests can increase and the number of property crimes also rises due to the reduced deterrent effect occurring because of the reallocation of police effort.¹⁷⁹ By allocating too many resources to drug enforcement, police agencies can increase their measured productivity (total arrests) and generate a higher measure of need for police services (reported crime), with the net effect being added political support for increased budget allocations.¹⁸⁰

Enforcement dominates drug policy not because it is the most effective policy, but because it best serves the interests of the people who work in the institutions that dominate the drug policy decision-making process.

VII. TOWARD AN OPTIMAL LEVEL OF DRUG ENFORCEMENT

Drug policy alternatives are a continuum of options ranging from complete legalization to what is commonly called a “war on drugs,” and criminal enforcement plays an increasingly important role as policy approaches the terminal state of drug war. Suspension of civil rights¹⁸¹ and confiscation of property¹⁸² have historically been domestic consequences of U.S. wars, and they are integral parts of the effort to combat drugs.¹⁸³ Drug war also involves undermining the legal principle of proportionality because punishments are often far in excess of any plausible estimate of the social harm.¹⁸⁴ Reducing such abuses of the current war on drugs, without necessarily dealing with

179. See *supra* note 118 and accompanying text.

180. Consistent with the “public choice” perspective, police agencies are the primary source of information that is used to determine agency budgets. See Barnett, *supra* note 144; Michaels, *supra* note 143.

181. The Sedition Act (1798) was probably the first example of compromising the Bill of Rights when the national security was allegedly threatened. Sedition Act, ch. 74, 1 Stat. 596 (1798).

182. LEONARD W. LEVY, A LICENSE TO STEAL: THE FORFEITURE OF PROPERTY 50-61 (1996).

183. When referring to efforts to reduce problem drug use, it might be useful to choose our words carefully. Conditions of war permit undermining of civil liberties, whereas the term campaign is a synonym without the same connotations. Another concession to clarity of purpose would eliminate the title “czar” from the drug policy lexicon—a title that connotes absolute power and is certainly not associated with enlightened public policy or even competence in serving the self-interest of the ruling institutions.

184. Harsh penalties for possession of illicit drugs have been justified, for example, because drugs allegedly impose heavy moral and welfare costs on society. James Q. Wilson, *Drugs and Crime*, in DRUGS AND CRIME, *supra* note 12, at 527 n.2, argues that these costs associated with heavy use can be “so large that society should bear the heavy burden of law enforcement, and its associated corruption and criminality, for the sake of keeping the number of people regularly using heroin and crack as small as possible.” Wilson’s view is in direct contradiction to that of harm reduction advocates, many of whom argue that the criminalization of drugs generates more social harms than drug use itself. Drug war is generally defended by an appeal to abstract costs and moral values rather than empirically grounded arguments.

the politically contentious issue of an individual's right to consume drugs if they do not affect others, is another task for drug policy reform.¹⁸⁵

Drug enforcement is clearly excessive in the efforts to reduce the harms of drug use, but this reliance on a drug war is no surprise given the institutional environment in which drug policy is formed. Most influential players in the formulation of drug policy, and all the dominant ones such as legislators, police agencies, and prosecutors, have incentives to conduct a war on drugs even though more effective policies are readily available. In the following Section we examine fundamental institutional changes that could be the foundation for a more rational drug policy. Few of our suggestions relate to specific changes in drug laws or policies; most are aimed at leveling the playing field so drug policy can be formulated in a way that better reflects objective analysis and community values, rather than the current institutional structure that favors political and bureaucratic interests.

There is no magic bullet that will solve the "drug problem," however it is defined. Eschewing the extremes of the moral positions taken by some policy advocates (i.e., those stating that people have a right to consume drugs or those claiming that any drug use is immoral because it causes great individual and social harm), reasonable people can differ as to whether the consequences of the myriad of policy options that may influence drug use are, on net, desirable. Drug war advocates may argue that better information is needed about the consequences of alternative policies before drug policy entrepreneurs and legislators will consider reforming drug policy. However, justifying current policy on the grounds that we do not know enough about the policy alternatives, of course, is circular reasoning if we are not willing to experiment and discuss the alternatives and analyze their consequences because of our commitment to enforcement-based policy. Even if the research base for assessing all options is not entirely adequate, a careful delineation of the strengths and weaknesses of the existing knowledge about the consequences of alternative drug policies leads MacCoun and Reuter to conclude that "ignoring specific proposals, the desirability of major reform has a reasonable empirical and ethical basis. To scorn discussion and analysis of such major change, in light of the extraordinary problems

185. See THOMAS SZASZ, *THE THERAPEUTIC STATE: PSYCHIATRY IN THE MIRROR OF CURRENT EVENTS* 271 (1984), for a prominent argument that the state has no legitimate interest in regulating drug use and the desire to "self medicate." For arguments that the issue is more complicated because family members are economically, socially, and spiritually impoverished by this behavior and that there are social ramifications of these individual choices, see KLEIMAN, *supra* note 28, at 48-49, and Wilson, *supra* note 184, at 523.

associated with current policies, is frivolous and uncaring.”¹⁸⁶ Given our economic analysis suggesting that increased enforcement is not likely to substantially reduce drug use in the presence of persistent demand, but that greater enforcement can increase the harms of drug use through product substitution by users and sellers and compromise public safety, a strong case can be made that alternative drug policies should be explored.

Considering the drug policy experimentation in various European countries and in some U.S. jurisdictions, a large number of options might lead to a more efficacious drug policy. Initiatives that have been tried to reduce problems associated with hard drugs such as heroin include no penalties for use, needle exchange programs, experiments with methadone maintenance and heroin maintenance, compulsory treatment, and treatment as an alternative to prison.¹⁸⁷ There is increasing appreciation in Europe of making a clear distinction between hard and soft drugs, in part because the harms of soft drugs such as marijuana and hashish are relatively modest, but also because it seems desirable to separate these markets from those for hard drugs.¹⁸⁸ Some European initiatives and experiments do not provide definitive information about their efficacy, and some might be inappropriate for some local U.S. jurisdictions given the great variation in the intensity and type of drug use among localities in the U.S.¹⁸⁹ Nevertheless, experimentation with alternative policies is clearly warranted. There have been nascent attempts at medical marijuana in the United States, and several U.S. states have experimented with the decriminalizing of possession of small amounts of marijuana. These alternative policies that have been used both here and abroad provide information and models of potential reform, but they are often scorned and rarely integrated into U.S. drug policies whose avowed purpose is to diminish significant problems of substance abuse.

The crucial question is how the U.S. can wean itself from its excessive reliance on drug enforcement policy and allow jurisdictions to at least carefully consider alternative policies. Some analysts may suggest that police agencies and legislators will not consider alterna-

186. MACCOUN & REUTER, *supra* note 14, at 409.

187. *Id.* at 209.

188. See, e.g., Lorenz Böllinger, *German Drug Law in Action: The Evolution of Drug Policy*, in CANNABIS SCIENCE: FROM PROHIBITION TO HUMAN RIGHT 153 (Lorenz Böllinger ed., 1997).

189. Dirk J. Korf et al., *Windmills in their Minds? Drug Policy and Drug Research in the Netherlands*, 29 J. DRUG ISSUES 451, 452 (1999) (emphasizing that “[i]t must be acknowledged that no . . . drug policy . . . can be appropriate for every time and place”). European countries have increasingly adopted a pragmatic approach to drug policy with more emphasis on public health and harm reduction. See Tim Boekhout van Solinge, *Dutch Drug Policy in a European Context*, 29 J. DRUG ISSUES 511 (1999).

tive policy options until public opinion is firmly behind such efforts. The fact is that escalating enforcement has led rather than followed public opinion,¹⁹⁰ however, so it does not seem plausible that policy reform must await changes in public opinion. Indeed, where public opinion clearly supports policy change, such as the medical marijuana movement and its successful referenda in several states, federal drug enforcement authorities have resisted, often with at least tacit support from state and local law enforcement. Given the incentives outlined in Section VI that encourage legislators, criminal justice officials, and police agencies to bias drug policy toward enforcement,¹⁹¹ a serious discussion of policy alternatives that might influence public opinion is not likely to occur.¹⁹² Our analysis suggests that significant drug policy reform will not emerge from a battle over policy alternatives fought in the court of public opinion because public opinion is too easily swayed by misleading information released by political and bureaucratic interests. Nor will more careful policy evaluations turn the tide. The problem to be confronted is that too many U.S. elected officials and employees of public agencies have incentives to conduct a war on drugs, to ignore or resist policy alternatives, and most assuredly not to explore alternatives that might more effectively address the problems generated by substance abuse.

A. *A Federalist Drug Policy*

A basic tenet of economic theory is that individuals in all institutional environments respond to incentives and constraints. We have seen in Section VI that the criminal justice system is a commons in which virtually every decision-maker can reap benefits from policies while not directly bearing the costs. Keys to reforming drug policy, in our view, are to be found in changing the institutional environment in such a way that agencies, bureaucrats, and legislatures can be more closely held responsible for the costs of their policies. Correspondingly, institutional reform is required to prevent drug policy moguls and criminal justice authorities from defending policies that are not just ineffective, but that also generate substantial social costs simply because they are mandated by some higher authority. Key to these reforms, in our view, is the devolution of drug policy from the federal government to state and local jurisdictions. In what follows we make no claim as to what policies should be chosen (even though we both have strongly held and sometimes conflicting opinions about

190. *Supra* note 128 and accompanying text.

191. *Supra* text accompanying note 128.

192. With the exception of New Mexico, where Republican Governor Gary Johnson has advocated drug policy reform, grass roots organizations have initiated most of the proposals for medical marijuana, treatment for drug offenders, and other “harm-reduction” measures.

the “best” policy), but argue that only by decentralizing drug policy will we stimulate policy analysis, discussion, and innovation that result in policies that will reflect anything close to their actual opportunity costs. When decision-makers are responsible for most of the costs imposed by their policies, they are more likely to choose policy options that generate the highest social benefits.

B. Reform International Drug Policy Agreements

Throughout the twentieth century, the United States has been the guiding force behind the development of an international drug policy that has heavily influenced domestic policy.¹⁹³ Three United Nations’ agreements currently compose the system of global prohibition: the Single Convention on Narcotic Drugs of 1961,¹⁹⁴ the Convention on Psychotropic Substances of 1971,¹⁹⁵ and the Convention Against Illicit Traffic in Narcotic Drugs and Psychotropic Substances of 1988.¹⁹⁶ The first of these conventions established the worldwide drug temperance ideology that characterizes U.S. drug policy by banning all non-medical uses of drugs, with particular emphasis on cannabis, cocaine, and opium.¹⁹⁷ The 1971 Convention added psychotropic substances such as LSD and peyote to the list of drugs that are to be prohibited except for research purposes but also allowed for treatment and other alternatives to criminal sanctions.¹⁹⁸

Drug war was not explicitly mandated as the policy approach for prohibition, but then the Vienna Convention, unlike the previous agreements, urged signatories to “provide for maximizing the use of criminal law and to ensure that the goal of deterrence is adequately

193. MUSTO, *supra* note 100, at 25-53.

194. U.N. ECON. & SOC. COUNCIL, SINGLE CONVENTION ON NARCOTIC DRUGS, 1961, U.N. Doc. UNE/CN.7/GP/1, U.N. Sales No. 62.XI.1 (1961).

195. U.N. ECON. & SOC. COUNCIL, CONVENTION ON PSYCHOTROPIC SUBSTANCES, 1971, U.N. Sales No. E.78.XI.3 (1977).

196. U.N., CONVENTION AGAINST ILLICIT TRAFFIC IN NARCOTIC DRUGS AND PSYCHOTROPIC SUBSTANCES, 1988 (1988); *see also* Hans-Jorg Albrecht, *The International System of Drug Control: Development and Trends*, in *DRUG WAR, AMERICAN STYLE* 49 (Jurg Gerber & Eric L. Jenson eds., 2001).

197. Article 2 of the Single Convention on Narcotic Drugs of 1961 requires total prohibition of substances such as heroin and cannabis if the signatory believes it is in the public interest to do so. SINGLE CONVENTION ON NARCOTIC DRUGS, *supra* note 194, at 13-14. *See* Alfons Noll, *Drug Abuse and Penal Provisions of the International Drug Control Treaties*, 29 BULL. ON NARCOTICS 41, 42 (1977) (observing that “[p]arties to . . . the Single Convention [are obliged to make only] ‘serious [drug] offences . . . liable to adequate punishment.’” (quoting SINGLE CONVENTION ON NARCOTIC DRUGS, *supra* note 194, at 32)). This implies that it is not required that possession for personal use be criminalized. Nevertheless, early Dutch reforms that eliminated penalties for marijuana possession were highly criticized as being inconsistent with the 1961 agreement. *See* Boekhout van Solinge, *supra* note 189, at 514-15.

198. CONVENTION ON PSYCHOTROPIC SUBSTANCES, *supra* note 195, at 1, 14, 24, 31-33.

taken care of.”¹⁹⁹ This convention is highly consistent with America’s drug war, but there is an increasing divergence from this policy among European nations as reflected in substantial experimentation with harm reduction policies and strategies to decouple soft and hard drugs.²⁰⁰ Nadelman contends that the U.S. role is of “exceptional scale and scope,” and argues that its international efforts are the product of the failure of domestic drug policy.²⁰¹ The consequence is that American drug policy has a “Catch-22” character.²⁰² Advocates of the U.S. drug war can argue that international agreements, which America engineered, require that continuation of excessive enforcement and that reform efforts abrogate these commitments. In the meantime, other industrialized nations are taking small steps toward drug policy independence.

America’s unwavering commitment to abide by the international agreements it engineered as long as four decades ago freezes drug policy in time and is, in a sense, a commitment to ignorance since it discards new evidence in favor of past prejudice. Advances in knowledge about the physiological effects of various drugs, the consequences of alternative policy regimes, and the unintended consequences of excessive enforcement cannot influence a policy that is committed to past perspectives, circumstances, and information. Similarly, new understanding of the pharmacological properties of drugs and changing socio-economic characteristics of drug users should also be integrated into a dynamic drug policy. Thus, a first step toward rationalizing U.S. drug policy is to reform its international drug treaty commitments, allowing other nations the right to determine a drug policy they deem appropriate and, in the process, free America to develop a dynamic drug policy that is appropriate for the treatment of a multi-faceted and ever changing problem.²⁰³

199. Albrecht, *supra* note 196, at 55.

200. *Supra* text accompanying note 188.

201. Ethan A. Nadelmann, *Global Prohibition Regimes: The Evolution of Norms in International Society*, 44 INT’L ORG. 479, 508 (1990) (“American promoters of the drug control regime have argued that their international efforts are necessary to reduce the extent and costs of drug abuse in the United States.”). See Bruce H. Bullington, Christopher P. Krebs & David W. Rasmussen, *Drug Policy in the Czech Republic*, in ILLICIT DRUGS IN EUROPE 73 (A. Springer & A. Uhl eds., 2000), for an example of American pressure in the drug policy of other nations. The Netherlands, Germany, Spain, Italy, and England are among the European nations that are declaring some independence from the Single Convention, despite pressure from the U.S. MACCOUN & REUTER, *supra* note 14, at 205-07.

202. Recall that the protagonist in Joseph Heller’s 1955 novel with this title would only be able to leave the army in World War II if he were declared insane, but any attempt to get out of the insane war situation would be unsuccessful because it was obviously the sane thing to do. JOSEPH HELLER, *CATCH-22* (1961).

203. The unilateral U.S. withdrawal in 2001 from the 1972 Anti-Ballistic Missile Treaty illustrates that nations often desire to change international agreements over time. Such flexibility is desirable because circumstances change over time. *See, e.g.*, Barbara Ko-

C. Decentralize National Drug Policy

Despite the commitment to a federal drug policy, the extent and type of substance abuse varies enormously among policing jurisdictions across the nation, suggesting that there is no uniform “drug problem.”²⁰⁴ In this light, federal intrusion into state and local efforts to deal with local production or use of drugs is unjustifiable, and the case for state sovereignty in regulating substance abuse is compelling.²⁰⁵ That federal drug policy has a chilling effect on state and local innovation is apparent from the federal government’s resistance to state based legalization and medical marijuana initiatives.²⁰⁶ Nor should the federal government help states enforce their drug laws through block grants. Political processes inevitably cause such funds to be widely distributed among jurisdictions, guaranteeing that the funding formula will assure that places without a serious drug problem will “find” a problem in order to receive funds.²⁰⁷ Since marijuana is the illicit drug that is most widely used, such assistance provides local law enforcement officials with an incentive to conduct their drug war against this relatively benign drug because to do otherwise is to forfeit federal grants for law enforcement.

Even in the absence of a fundamental reinterpretation of international treaty arrangements, removing marijuana and hashish from the federal list of Schedule I substances is a reform with enormous

remenos, *Loosening the Ties that Bind: A Learning Model of Agreement Flexibility*, 55 INT’L ORG. 289 (2001).

204. John G. Haaga & Peter Reuter, *The Limits of the Czar’s Ukase: Drug Policy at the Local Level*, 8 YALE L. & POL’Y REV. 36 (1990), point out that only marijuana and cocaine are used throughout the country and that most other drugs have been concentrated in isolated areas. More recent data from the Drug Arrest Monitoring System is consistent with this observation. For example, among men in the thirty-four cities in this testing program, in 1999 opiate use varies from 1.4% in Ft. Lauderdale to 20.1% in Chicago, two cities with virtually identical rates of positive tests for cocaine. Among these cities cocaine use rates among adult male arrestees varies from 13.7 to 51.3%, while the range for marijuana use is from 28% to 51.2%. CJ STATISTICS 2000, *supra* note 55, at 394 tbl. 4.30.

205. *See, e.g.*, *United States v. Lopez*, 514 U.S. 549, 564 (1995) (noting that “States historically have been sovereign” in the area of crime control); *United States v. Bass*, 404 U.S. 336, 349 (1971) (“Congress has traditionally been reluctant to define as a federal crime conduct readily denounced as criminal by the States. This congressional policy is rooted in the same concepts of American federalism that have provided the basis for judge-made doctrines.”); *see also* William H. Rehnquist, *The 1998 Year-End Report of the Federal Judiciary*, 31 THIRD BRANCH 1, 2 (1999) (“Federal courts were not created to adjudicate local crimes, no matter how sensational or heinous the crimes may be. State courts do, can, and should handle such problems.”).

206. *See United States v. Oakland Cannabis Buyers’ Coop.*, 532 U.S. 483, 498-99 (2001) (holding that medical uses of marijuana were prohibited because the legislature’s intent was clear in the Controlled Substance Abuse Act, which classifies marijuana as a Schedule I substance). Marijuana use was expressly prohibited in any way except for government approved research projects.

207. *See ZIMRING & HAWKINS, supra* note 165, at 166.

potential benefits.²⁰⁸ Accounting for 44% of all drug arrests in 1997,²⁰⁹ significant savings of police, prosecutorial, and prison resources might be achieved by changes in the criminal treatment of cannabis. Since almost all of these arrests are made by local police officers and marijuana possession is illegal to some degree in all states, the real impact of this policy change would appear only if states alter their enforcement practices or change their laws when they are empowered to do so. An atmosphere of candid policy discussion uncharacteristic of the drug war might arise, however, if politicians in localities and states are responsible for both the budgets for drug enforcement and the decision regarding how to deal with individual drugs. Furthermore, as one state experiments with an alternative policy, others may adopt innovations that are deemed successful when compared to current practices.²¹⁰ Marijuana policy reform is more likely given the enormous benefits that could accrue to citizens who can be casualties of the drug war.²¹¹ Foremost among potential casualties are the millions of high school youth who have used marijuana.²¹² Normal youth experiment with drugs,²¹³ but they are probably physically safer using marijuana than the other primary drug of choice, alcohol,²¹⁴ and drug war rhetoric about marijuana being a gateway drug²¹⁵ undermines the legitimate concerns about drug abuse.

Removing marijuana from Schedule I would allow the states to operate as “laboratories for democracy” so they can experiment with marijuana reforms that are consistent with their political climate. It is interesting that we can have a spirited debate on tobacco policy but it is currently difficult to do so with respect to drugs. It appears

208. As noted below, the most fundamental reform would have the current list of Schedule I substances as being illegal for importation into the U.S., and perhaps illegal to transport between states. State law would otherwise prevail.

209. CJ STATISTICS 2000, *supra* note 55, at 393 tbl. 4.29. Over 86% of these arrests were for possession. It is interesting to note that marijuana’s share of drug arrests has trended downward since 1982 when this drug accounted for 72% of these arrests. *Id.*

210. See DAVID OSBORNE, LABORATORIES OF DEMOCRACY (1988) (examining the proposition that decentralized policy making in the states leads to more innovative and cost effective public policy). These laboratories, in effect, provide policy demonstrations for other jurisdictions.

211. Advocates of drug war, by ignoring unintended consequences that in the rhetoric of war are called collateral damage, seem to assume that only persons directly involved in the drug trade would take casualties.

212. Over 23% of members of the high school class of 1999 used marijuana during the thirty days prior to the survey, and 49.7% had experimented with the drug at least once. CJ STATISTICS 2000, *supra* note 55, at 246 tbl. 3.72.

213. *Supra* note 44 and accompanying text.

214. Over 74% of the members of the class of 2000 drank alcohol in the last 12 months, and 50% report use during the last thirty days. CJ STATISTICS 2000, *supra* note 55, at 245 tbls. 3.70-3.71. Further, 46.7% of 1999 college students reported that they were frequent binge drinkers in high school. *Id.* at 256 tbl. 3.83. In 1998, 39% of all traffic fatalities were in alcohol-related crashes. *Id.* at 275 tbl. 3.117.

215. See MACCOUN & REUTER, *supra* note 14, at 351.

that policy makers may want harm reduction in the context of tobacco, and they certainly are willing to discuss many policy alternatives *except* criminalization of tobacco. The tendency to allow smokers to consume tobacco as long as others are not directly or indirectly harmed is in stark contrast to the treatment of marijuana smokers who make what are probably less damaging choices for themselves and others but are required to take total responsibility and suffer enforced treatment and incarceration. Once policy experimentation is allowed to flourish, careful evaluation should accompany reforms, and if the benefits of such reform prove to be as large as the preceding economic analysis suggests, reform of other illicit drug policies might be investigated. In some cases, of course, policy experimentation may reveal that the consequences of reform are unacceptable, at least in some states or communities. For example, witness the wide variety of state and local laws dealing with alcohol.

Local jurisdictions also have an important role in the search for effective drug policy because most law enforcement activity is done by local agencies and, importantly, drug problems vary markedly within states.²¹⁶ Rural communities, affluent suburban areas, and distressed central city neighborhoods within a state are likely to face very different patterns of drug use because their populations are likely to perceive long-term opportunities very differently due to family circumstances and neighborhood environment.²¹⁷ Therefore, many aspects of drug policy should be left up to local jurisdictions, and the creativity of their policy responses should not be stunted by perverse incentives imposed by state and federal law.²¹⁸

216. See Haaga & Reuter, *supra* note 204, at 38-46.

217. Relatively affluent suburban youth might use drugs for recreation, while youth in dysfunctional central cities and depressed rural areas might engage in self-medication to relieve the psychological stress caused by their environment and modest future prospects. Drug policy advocates may reject the claim that both reasons for drug use are understandable and legitimate but nevertheless recognize that the very different circumstances of communities may require alternative remedies to alleviate problem drug use.

218. Local jurisdictions could, of course, target their enforcement efforts on minorities and routinely violate civil rights. State and federal law obviously should restrain such local excess, but the problem with drug policy is that federal drug enforcement grants and asset forfeiture laws provide incentives that encourage the violation of citizens' rights.

Horror stories of local jurisdictions' drug enforcement run amok are easy to find, but the particularly egregious case of Tulia, Texas has received national attention. In a town of 4500, forty-three "drug dealers" were arrested; all were black, except for three whites that had close ties with the black community. Due process was regularly violated and all the convictions were obtained on the unsubstantiated claims of an undercover officer of suspicious character. See Jim Yardley, *The Heat Is on a Texas Town After the Arrests of 40 Blacks*, N.Y. TIMES, Oct. 7, 2000, at A1. The Tulia drug task force was just one of forty-nine narcotics task forces in Texas that have received over \$300 million in federal funds to conduct the war on drugs that between 1987 and 2000 made 189,586 arrests and seized over \$194 million in assets. Henderson, *supra* note 155. By 2002, abuses led Governor Rick Perry to order "the Department of Public Safety begin monitoring the state's forty-nine narcotics task forces following allegations that some of the drug teams were little more

Local governments obviously have the capacity for innovative drug policies. Drug courts were developed in Miami, Florida, and have spread throughout the nation, for example.²¹⁹ Furthermore, local innovations are more likely to be incremental changes that do not receive much national attention. Consider, for instance, the common problem with excessive drug enforcement that drug crackdowns in one part of town simply result in dealers moving to another part of town.²²⁰ In Tampa, Florida, rising enforcement in black neighborhoods caused dealers to move into white neighborhoods that had not experienced an active drug trade.²²¹ These and other failures of the drug war caused community leaders to pressure the police to change their tactics, to emphasize community safety rather than more easily measured outputs such as arrests. The resulting innovative program focused on community involvement, and police officials expected that “the most that would happen to the drug trade . . . would be that it moved indoors. That seemed, nonetheless, a worthy goal.”²²² When local officials are held accountable for the costs of their policies, they are more likely to implement policies that are cost effective and are somewhat less prone to engage in the drug war rhetoric that is especially appealing when the costs of policy are borne by another level of government.

D. Removing Perverse Policy Incentives and Constraints

1. Asset Forfeiture

Even if control of policy is substantively devolved to states and local jurisdictions, states need to avoid imposing incentives that bias policy toward enforcement and constraints that potentially increase the social costs of drug enforcement. Reforming the perverse incentives generated by asset forfeiture legislation at both the state and federal level, which allow police to keep the proceeds and therefore increases drug enforcement activity beyond the level they would choose in the absence of this incentive, should be high on the policy

than vigilantes run amok.” Jennifer Mathieu, *Keeping on Task: The DPS will oversee state drug forces troubled by a track record of abuses*, HOUS. PRESS, Mar. 7, 2002, at News/News. While state and federal government must restrain any local efforts to erode citizen rights, in the case of drug policy, the more immediate problem is state and federal complicity in the violation of rights by providing local authorities with strong financial incentives to engage in a war on drugs.

219. See JAMES L. NOLAN JR., *REINVENTING JUSTICE: THE AMERICAN DRUG COURT MOVEMENT* 39 (2001).

220. See Rasmussen et al., *Spatial Competition*, *supra* note 11, at 219-33 (showing that dealers move their activities in response to geographic shifts in enforcement activity).

221. David M. Kennedy, *Closing the Market: Controlling the Drug Trade in Tampa, Florida*, NAT'L INST. JUST., Mar. 1993, at 4.

222. *Id.* at 8.

reform agenda.²²³ If seizing the assets of drug offenders has a strong deterrent effect, although there is no empirical evidence to suggest that it does, and neglecting the obvious injustices that these *in rem* proceedings can engender, then a minimal reform would simply require that all forfeited assets be turned into general revenue rather than into accounts dedicated to the law enforcement agency. Such a straightforward reform would eliminate this important incentive to combat drugs at the expense of other crimes, the advantage apparently being more arrests for property offenses.²²⁴ A more thorough reform would authorize asset forfeiture only in those cases where the owner is convicted of a drug offense and the seizures do not make the punishment disproportionate to the crime.

2. *Minimum Mandatory Sentences*

Minimum mandatory sentences are a constraint that legislated drug policy places on the judicial system, often wreaking havoc with fairness in sentencing because judges are stripped of the capacity to calibrate a punishment that is proportionate to the crime.²²⁵ Aside from their tendency toward injustice, minimum mandatory sentences also tend to disproportionately increase drug enforcement because of institutional incentives that influence police and prosecutors. The output of prosecutors is convictions, and tough minimum mandatory sentences make plea bargaining easier and conviction more likely, thus providing prosecutors added impetus to conduct a war on drugs.

3. *Unintended Consequences of Well-Intentioned Reforms: Mandated Treatment and Agency Incentives*

Recognizing that incarcerating non-violent drug offenders is an expensive and ineffective way to combat substance abuse, there is increasing interest among some states and local governments in mandating treatment for first or second drug offenses.²²⁶ Although this reform is intended to reduce drug abuse and the social costs of drug enforcement, the details of implementation could actually reduce the efficacy of drug policy. In the most draconian scenario, offenders are mandated into a treatment regime and if they fail to complete it or recidivate, they are incarcerated for a longer time than they otherwise would have been. Mandating treatment also means that the demand for treatment will greatly increase relative to the supply of competent programs, putting problem drug users at further risk of

223. *Supra* text accompanying note 148.

224. *Supra* note 150.

225. For a scathing indictment of mandatory sentences, see *United States v. Hiveley*, 61 F.3d 1358, 1363-66 (8th Cir. 1995) (Bright, J., concurring).

226. RYDELL & EVERINGHAM, *supra* note 125.

being found incorrigible when they recidivate. Finally, such a law is very likely to squander valuable treatment resources by imposing treatment on casual experimenters who have no discernable drug problem.²²⁷ While the move away from incarceration toward treatment is in principle desirable, success of such programs crucially depends on how they are integrated into, or separated from, the system of punishments. Further, they are fundamentally flawed if they are predicated on the proposition that all substance use is misuse and should be punished, or treated, by law.

In the context of a decentralized experimental environment, it may turn out that centralization of some drug policy issues will still be justified for some problems that are national in scope. For instance, the central government might have a comparative advantage as a potential disinterested third party in comparing the consequences of various local experiments and providing information about what appears to work. Similarly, research on the medical and psychological consequences of various types of drug use may be needed to determine what the most effective policies should be, and the federal government could be the source or at least the disseminator of such research. If criminal justice remains the major focus of drug policy and combating the importation of illegal drugs from abroad is a desirable part of that policy, then that also falls within the purview of the federal government. Under these circumstances, a case might also be made for federal involvement in combating interstate trade of illegal drugs, but it must be recognized that if the central government is in charge of controlling the flow of drugs into a state, they are in a position to influence local policy on use in ways that may be inappropriate.

VIII. CONCLUSION

Having battle plans for a drug war drawn up in Washington D.C. by a czar has led to policies that are about as effective as those usually imposed by pre-Soviet Russian emperors. Even without resorting to first principles that would question the right of the government to regulate the use of substances when other persons are not adversely affected, it seems clear that the U.S. drug war has generated more collateral damage than can conceivably be warranted by any realistic assessment of the associated benefits. Given the great variation in drug use among jurisdictions in this country, many decisions about drug policy should devolve from Washington to states and local communities, and funding of these programs should come from local resources. When state and especially local officials are responsible for

227. See Shedler & Block, *supra* note 44.

the financial and intangible costs of drug enforcement, they are more likely to be held accountable for their actions and therefore are more likely to carefully consider the full costs of a largely ineffective drug policy.