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Drug Policy and Organized Crime

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January 3, 1986

I. Introduction: Drug Policy, Law Enforcement and Organized Crime

Criminal laws prohibiting the production, distribution, and possession of narcotics and dangerous drugs anchor drug policy in the United States. The most prominent targets of these laws are the drugs that have no recognized legitimate medical uses: heroin, cocaine, marihuana, and hallucinogens. With respect to these drugs, the enforcement effort can be uncompromising for there are no legitimate uses or users to be protected.

There are other drugs, however, which pose similar threats to public health and welfare, but which do have recognized legitimate uses. These drugs include morphine, methadone, barbiturates, amphetamines, and tranquilizers. With respect to these drugs, the aim of the legal regime (and associated enforcement strategies) is more complex. It is not simply to eliminate the drugs, but to preserve a legitimate sector in which the benefits of these drugs may be enjoyed, while minimizing illicit use. Towards this end, the laws license a limited number of people to produce, import, sell, distribute and use these drugs. To prevent the drugs from leaking from to illicit distributors and users, the licensees are obliged to secure their inventories, and to deal only with other licensees. To make sure that the licensees meet these responsibilities, they must keep records, and make them available to investigators for inspection. Failures to meet their responsibilities expose the licensees to both civil and criminal penalties. And to make sure that no one can operate outside the boundaries of the legitimate system, the unlicensed production, distribution or use of these legitimate drugs is prohibited.

It has become customary to think of the drug laws as operating

principally on the "supply side" of illegal drug markets. For most practical purposes, this is appropriate, for it is true that these laws are the principal policy instruments directed at the supply of illicit drugs, and that the principal targets of enforcement are suppliers rather than users. It is worth noting, however, that these laws attach criminal liability to the illicit possession and use of drugs as well as to illicit production and distribution. Thus, they are designed to affect the "demand side" of illicit drug use as well as the "supply side." To the extent that these laws attack both the supply and the demand for illicit drugs, they can be understood as a complete drug abuse policy designed to distinguish legitimate and useful drug use from illicit use, and to minimize illicit use in the society.

To produce this result, three different mechanisms are relied on. One is the moral force of the law itself. To the extent that individual citizens are guided in their decisions about drug use by the explicit instruction provided by the law, or to the extent that the existence of the law mobilizes widespread informal interventions by parents, friends and relatives, the existence of laws that define legitimate use and prohibit illicit use may actually reduce overall levels of illicit use without any public enforcement activities.

A second, more familiar and more widely accepted mechanism is general deterrence: the notion that citizens might be discouraged from illicitly selling or using drugs by the fear that they will be arrested and punished. This notion differs from the first in that it depends on citizens' fears of punishment to motivate compliance with the laws rather than their desires to conform or seek virtue. The more severe the penalties, and the higher the probability of being caught, the more

compliance there will be.

A third mechanism is incapacitation: the simple notion that imprisonment may physically prevent drug dealers and users from continuing their activities. This concept differs from the second in that it operates only on those dealers and users who are caught, and only for as long as they remain under state supervision. If enough drug dealers and drug users are locked up, then the problem of illicit drug dealing and drug use will disappear.

To describe these mechanisms is to reveal the limitations of the drug laws as a comprehensive drug abuse policy. The problem is not that they are directed only at the "supply side" of illegal drug abuse. Nor is it that they fail to produce reductions in the level of illicit drug use. The problem is that the drug laws are imperfectly effective. They leave behind a residual market composed of drug dealers and users who failed to get the message that they should abandon their drug dealing and use. Moreover, while the levels of drug distribution and use that remain are undoubtedly lower than would be true in a world where the drugs were legalized, the character of the market on both the supply and the demand side are fundamentally altered, and generally worsened as a result of their illicit status.

On the demand side, the users who are not dissuaded from using drugs illicitly by the moral and instrumental force of the law discover that they confront high prices and low quality in the drugs they buy, and are exposed to social stigmatization and criminal prosecution. These circumstances produce disastrous consequences for their economic, health, and social status. Of course, to the extent that these consequences are unpleasant to the users, they provide a continuing incentive for users to abandon their drug use. And to the extent that

the users do so, an important social objective is achieved. But to the extent they do not respond, their lives are made miserable with little corresponding social benefit. The society is left with drug users who are more dependent, dangerous and unhealthy than they would otherwise be.

On the supply side, the residual capacity takes the form of an illicit industry. Some of that industry operates outside the boundaries of the United States, and therefore to some degree beyond the reach of its laws. Another portion operates under the cover of predominantly legal drug production and distribution - within reach of the law, but a morally and legally ambiguous target. The vast majority of the illicit industry, however, consists of wholly illicit traffickers in the United States.

The existence of this illicit industry creates two different kinds of problems. Viewed from the vantage point of drug abuse policy, the principal problem created by the illicit industry is that it continues to supply drugs to illicit markets. To the extent that this continues, old drug users may continue their harmful activities, and new users may be recruited into dangerous patterns of drug use. Thus, to achieve the objectives of drug policy, the society must find ways to constrict the supply capacities of the illicit industry.

Viewed from the vantage point of those concerned with the control of organized crime, the existence of the illicit industry creates a different kind of problem. To a degree, the illicit drug industry engages in the sorts of activities that make organized crime a specially important social problem. Not only do the illegal dealers frustrate the aims of drug policy by continuing to supply drugs, but

they grow rich in the process and taunt the society with their financial success. Moreover, the industry seems to spawn violence. Sometimes the violence spills out into the general population. But even when the violence remains confined to participants in the industry its sheer viciousness creates a general sense of lawlessness and brutality that is threatening to the community. The illicit dealers also seem to become heavily involved in corrupting government agencies. Such activities undermine community security, and the integrity of its basic institutions. Finally, the illicit drug industry may spawn unusually large and powerful criminal organizations, or nourish those that already exist. From the vantage point of organized crime policy, then, the drug laws create a major problem to be solved.

To deal with these side effects and residual problems, the drug laws must be complemented by other policy instruments. To deal with the limitations of drug laws in suppressing the demand for drugs, a comprehensive drug policy necessarily includes drug treatment and preventive education programs. Treatment programs must be provided to help users make the transition to non-use, and to save lives that would otherwise be lost. Preventive education programs must be operated to give more detailed explanations to individuals of why illicit drug use is undesirable. Indeed, given the focus of drug enforcement on the supply side of the market and the obvious limitations of the drug laws in discouraging use among those who are already dependent, it is generally appropriate to think of drug treatment and education programs as the principal instruments focused on the "demand side" of the illicit drug markets.

To deal with the limitations of the laws in suppressing the supply of illicit drugs, and preventing the appearance of organized criminal

activity, traditional enforcement methods must be supplemented by some special policy instruments. Diplomacy and foreign aid must be joined to enforcement and regulation to reach the pieces of the illicit supply system that operate outside the United States. An effective regulatory enforcement system must be created to prevent the diversion of narcotics and dangerous drugs from legitimate to illicit markets in the United States. And perhaps some special enforcement strategies that are effective in constricting the capacity of the supply system to move drugs to illicit markets, or in dispersing well organized drug traffickers must be designed and used.

The purpose of this paper is not to design an effective overall drug policy. Nor is it to consider the wisdom of relying on criminal laws against drug distribution and use as much as we now seem to. For what it is worth, my opinion is that our current drug policy is a wise one, and that the balance of risks favors the continuation of criminal laws directed against the distribution and use of narcotics and dangerous drugs.

Instead, the aim of this paper is to take the existence of the current drug laws and policies as a starting point, and to design a supply reduction strategy consistent with the aims of our current drug abuse policy. In designing such a policy, special attention will be given to the relationship between the supply reduction strategy that is necessary to achieve the goals of our current drug abuse policy, and organized crime policy.

As we have seen, there is some tension between these policies. Making drug distribution illegal establishes fertile soil from which existing organized crime groups might take sustenance, or new groups

might arise. Thus, the continuing prohibitions of drug distribution may exacerbate the organized crime problem. On the other hand, to the extent that organized crime groups are now active in producing or distributing drugs, and to the extent that our organized crime policy makes available resources and techniques that are effective in immobilizing such groups, organized crime policy may make an important contribution to drug policy.

In balancing these concerns, the dominant emphasis will be given to designing a supply reduction strategy that can achieve the purposes of drug abuse policy. This perspective will be adopted not because I think it is obvious that an effective drug control policy is more important than an effective organized crime policy, but simply because if it were true that it was more important to combat organized crime than to keep drugs from illicit users, the simple solution would be to legalize the drugs so that no illegal firms could arise. Since the society does not choose this option, it must be that we are willing to pay a price in terms of the objectives of organized crime policy to achieve the objectives of drug control policy. The only interesting questions, then, are how to minimize that price, and how best to deploy the special resources and capabilities of organized crime control policies to further the objectives of drug policy. That is what we will try to discover.



## 11. The Illicit Drug Industry: Structure, Conduct, and Performance

As we have seen, the character of the illicit drug industry is important to the ultimate success of both drug abuse policy, and organized crime control policy. To define objectives, set reasonable expectations for success, and guide strategic choices in targeting supply reduction efforts, an analysis of the illicit drug industry may be helpful.

In carrying out this analysis, it is important to distinguish the concept of the industry from the concept of individual firms within the industry. The industry includes everyone who is engaged in producing, importing, or distributing narcotics and dangerous drugs to illicit markets in the United States. A firm within that industry is a nothing more than a collection of assets such as a boat, a person who knows the chemistry required to produce psychoactive drugs, or \$50,000 in cash whose use specific uses are determined by the authoritative decisions of an identifiable organizational unit.

Obviously, the firms that make up the industry could take a variety of forms. They could consist of a single entrepreneur tied to others only through the fragile ties of economic interest, or they could include many people linked to one another by family or cultural ties. They could be relative newcomers or have a long history in the industry. They could enter the industry with hopes for a single, big score, or they could plan to become or remain a permanent fixture. They could be involved in all aspects of the deal from financing through production, transportation, and distribution, or they could specialize in only one of these functions. For any given function, the firm may be more or less dominant in more or less local geographic

markets.

Often, this distinction between the industry and the firms that comprise it is blurred, and the industry as a whole is viewed as a single firm. This casual assumption is justified on one of two different grounds. One is that the observed performance of the illicit market is so impressive in terms of its operations and adaptability that it is hard to believe that it is not guided by a single intelligence. Nothing short of a single coherent enterprise could accomplish the enormously complicated tasks of collecting raw materials, processing them, and transporting the finished through the minefields created by enforcement agencies. Nor could anything other than an enterprise guided by a single intelligence adapt successfully to the frequent changes in supply reduction strategies.

The problem with this argument is that legitimate industries accomplish similar feats of production, distribution and adaptation all the time without there being a single intelligence guiding them, and it is likely that this is true in the illicit industry as well. It is not that there is no guiding intelligence in the industry; it is that there are many guiding intelligences, but none predominant. The aggregate result of the individual choices made by individual economic actors may look organized in the sense that the industry gradually moves from places where enforcement has become heavy to areas where it is weaker; or it shifts from one drug to another depending on consumer demand. But this orderly response need not be the result of a wise choice by a single, powerful firm. It could be the natural result of the firms in the heavily enforced areas being wiped out, and the firms in the less heavily enforced areas growing to meet the demand. In short, the

adaptations are made at the expense of individual firms, not under their control, nor to their advantage.

The second line of argument supporting the notion that the industry is a single firm is somewhat more sophisticated. It is based on the notion that some illicit firms will develop crucial specialized capabilities, and that these will give the firm important advantages in producing and distributing illegal drugs, or effective control over others who do. These special capabilities could be access to capital, connections with foreign sources of raw materials, knowledge of how to produce the drugs, a special tie to corrupt officials, or a general capacity for disciplined violence that could be brought to bear on anyone who produced or distributed drugs without their permission. This argument is essentially based on the notion that there are some natural economies of scale in the illicit industry, and that these will tend to produce a concentrated industry.

This is a more powerful kind of argument than the first, but it is only an assertion. It needs to be examined with both logic and evidence. The form of analysis that is appropriate is an analysis of industrial organization. An analysis of this kind rigorously maintains the distinction between the industry and the firms that comprise it. Indeed, the principal objective of an analysis of industrial organization is to understand the relationships between the structure of the industry, the conduct of the firms within the industry, and the long run performance of the industry.

The concept of industry structure explicitly captures the distinction between the industry and the firms that comprise it. It focuses attention on how the activities of the overall industry are divided among different organizational units called firms. One key

concern in examining structure is the degree of concentration in the industry. The fewer the firms, the more concentrated the industry. A second is the extent of horizontal and vertical integration. Integration refers to the proportion of activities essential to creating a product and delivering it to a market that are contained within a single firm. Vertical integration is measured by the extent to which a firm includes all the steps from extraction of raw materials to final sales to ordinary consumers. Horizontal integration is measured by the proportion of a given step in the production and distribution of a product that is controlled by a single firm.

Conduct refers to the distinctive ways that the firms within the industry go about their business. Specific questions might focus on the production technologies now commonly utilized, major factors influencing costs within the industry, levels of investment in research and development, the rate at which new products are introduced, or the geographic organization of the industry's markets. Conduct might also be concerned with institutional relationships in the industry: e.g. the competitive strategies being pursued by firms within the industry, the relationships with governmental regulators, and even patterns of collective bargaining and labor relations.

Performance focuses on the question of how successful the industry is over the long run in delivering a product at low cost, expanding the market, and adapting to changing circumstances. Performance is ultimately what an industry analyst is trying to understand. Indeed, the observations about structure and conduct are made principally to explain and predict performance. The more decentralized and competitive the industry, and the lower the costs of bringing new products or new

production technologies on line, the more adaptable and dynamic the industry. The larger the economies of scale in operating, marketing, or bringing new products or production technologies on line, the more concentrated the industry is likely to be. The more concentrated the industry, the higher the prices and the slower the rate of innovation. Propositions such as these link observations of structure and conduct to explanations and predictions of performance.

#### A. The Objectives of a Supply Reduction Strategy

To a great extent, this framework of analysis can be carried over and used in examining the character of the illicit drug industry. But some crucial differences are worth noting. By far the most important is that the implicit evaluative perspective reverses when we are analyzing illicit industries.

In standard industry analyses, one generally hopes for high performance from the industry. The more successful it is in delivering products at low prices, expanding its market to new areas, adapting to changing economic circumstances, and maintaining high rates of innovation, the better the result for the society.

In the case of the illicit drug industry, of course, the society's hopes run in the opposite direction. High performance from the illicit drug industry means that it adapts well to government efforts to eliminate it, and continues to supply drugs at low cost to illicit markets. Over the long run, this means higher levels of illicit drug use in the future. In analyzing the illicit drug market, then, what one hopes for is a failing industry; one that cannot overcome the hurdles set by the government in trying to get its products to market. These hopes are generally frustrated by the sheer inventiveness and adaptability of illicit entrepreneurs in pursuit of money, but

nonetheless one keeps hoping that this industry will stumble rather than flourish. Indeed, making it fail is an explicit purpose of public policy.

A second important difference is that the structure and conduct of the industry have an elevated importance in the analysis. As noted above, in traditional analyses of industrial organization, structure and conduct have importance primarily as factors that influence the performance of the industry. In the analysis of the illegal drug industry, they retain that importance. To the extent that structure and conduct enhance or hinder the the industry's long-run performance in delivering drugs to illicit markets at low prices, they are a source of interest, and a possible target of enforcement actions.

What increases the importance of structure and conduct in the analysis of illegal drug markets, however, is that they are valued by the society independently of their impact on the performance of the industry. Crucial questions about the conduct of the firms within the illegal drug industry include the extent to which they rely on violence to maintain internal discipline or eliminate competition, and the extent to which they rely on corruption to ward off the threat of enforcement. To the extent that they do rely on violence and corruption as essential elements of their business, their conduct has importance to the society quite apart from how these practices affect their ability to supply drugs.

Similarly, the society seems to be deeply concerned about the structure of the illicit drug industry. Specifically, the society seems to regard the problem as worse if the industry is highly concentrated and composed of a few large, durable firms than it would be if it were

less concentrated and populated by smaller and more transient firms. No doubt, this judgment derives primarily from a dominant concern about the performance of the industry, and an assumption that an illicit industry composed of a few large and durable firms would be more effective over the long run in supplying drugs at low cost to consumers. It is important to keep in mind, however, that a highly concentrated industry could perform less well over the long run in delivering drugs to illicit markets than a more atomistic market. Even if this were true, however, it seems likely that the society would still regard an illicit industry composed of a few large, durable firms as worse than one composed of many small transient firms.

The reason is that large, durable firms constitute a social problem independently of their ability to supply drugs. Large, durable criminal organizations can bring much more powerful pressures to bear on their employees, competitors, the government officials who are pledged to attack them, and even the communities in which they operate than could be brought to bear by smaller or more transient firms. It is partly that the large, durable firms become very wealthy, partly that they can maintain truly frightening capacities for disciplined violence, but perhaps most fundamentally that they will be around for a long time and therefore able to reward co-operation and punish opposition that makes them so powerful.

These analytic categories help to clarify the society's objectives in dealing with the illicit drug industry. The concerns of drug abuse policy are captured principally by questions about the performance of the industry, since it is long run performance that will decisively shape overall levels of drug abuse. The concerns of organized crime policy are captured principally by questions about conduct and

structure. Conduct captures the concern about levels of violence and corruption associated with an illegal industry. Structure captures the special concerns that are raised for organized crime policy by the existence of very large, durable organizations whose wealth, disciplined use of violence, and long memories make them specially powerful. A successful supply reduction strategy, then, would leave an illicit drug industry that is high cost, ineffective in supplying drugs to illicit markets, not very adaptable, reluctant to rely on bribery and violence, and composed of small, transient firms.

We are accustomed to thinking that any supply reduction strategy will move us towards improved performance on all of these objectives, and therefore that there are no trade-offs between the objectives of drug abuse policy and organized crime control policy. We have already seen that there is a certain tension between the aims of these two different policies insofar as the criminal laws against drug distribution and use create the basic conditions under which an illicit industry might arise. But now it is possible to see a new tension as well, one that is not only between drug abuse policy and organized crime control objectives, but also between different objectives of organized crime control policy.

Ironically, a supply reduction strategy that increased the degree of concentration in the illicit industry might achieve some important objectives of a supply reduction strategy. Economic theory predicts, for example, that the actual supply of drugs will be less in a concentrated industry than in a less organized competitive industry. It is also likely that the violence would be less, or at least more disciplined and focused on those who were actually involved in the



industry in a tightly organized, concentrated industry. Thus, a supply reduction strategy might succeed in reducing the overall performance of the industry, and even changing its conduct to reliance on threats and bribery rather than overt violence, but do so only at the price of increasing the size, power, and durability of criminal organizations. Whether this would be preferred to a strategy that reduced the concentration in the industry, but increased its performance and shifted its conduct to more random patterns of violence depends on how the society values these competing objectives, and how much improved performance and violence it would have to accept as the price of reduced concentration. That would be a difficult choice.

At any rate, the objectives of a supply reduction strategy are clear. The first and most important objective is to frustrate the performance of the illicit industry - to constrict its capacity to supply drugs to illicit markets. The second is to shape the conduct of the residual industry so that it is less violent and less corrupting. The third is to disperse the industry so that the firms that comprise it are small and transient rather than large and durable. How far one can go in achieving these objectives, and how sharp the trade-offs among them can only be answered by a close look at the factors that shape the structure, conduct and performance of the industry.

#### B. Major Factors Shaping the Industry

As in any industry, performance is determined at least partly by the physical requirements of production and distribution. To get drugs to markets, illegal firms must have access to raw materials, have the knowledge and the equipment required to transform the raw materials into finished products, be able to maintain and protect inventories, and be able to transport finished products to individual markets.

In addition, the performance of the industry will be shaped by perceptions of economic opportunities and risks. Those who make investments of time and energy in producing or diverting raw materials, in learning the techniques and acquiring the equipment for producing illegal drugs, in storing and transporting the drugs, and so on, must have some assurance that they will make money from their investments. They must have some capital to give them the time and the capacity to arrange the deals that will ultimately produce satisfactory returns. And they must have a certain tolerance for risk - not only the risk that they might be imprisoned for their activities, but also that they might take more ordinary economic losses as a result of successful enforcement actions against them, or betrayals by their associates, or more common economic disasters such as shipwrecks, plane crashes, spoiled production runs, or sudden changes in exchange rates. Unless there is a reasonable chance in their minds that they can make enough money from illicit drug deals to compensate them for their time and their risks, the deals will not be made.

A third factor influencing performance is the structure of criminal liability that surrounds the industry, for it is the laws and the way that they are enforced that determines many of the opportunities and risks facing illicit drug dealers. A simple way to think about how this factor operates is to think of the criminal laws and the specific methods of enforcement as a kind of tax confronting the illegal dealers. To maximize their return, they seek to avoid as much of the tax as possible. They do this by avoiding activities that are heavily taxed, by taking advantage of loopholes in the tax laws or weaknesses in enforcement, by concealing as much of their operation

from the tax collectors as possible, or by corrupting the tax collectors. Such activities affect both the scale and the character of the illicit industry.

#### 1. The Apparent Influence of Geography

Geography looks like a factor that plays an important role in determining the conduct and performance of the illicit industry. Indeed, much of our thinking about supply reduction strategies is guided by the notion that there are important source countries that become the targets of diplomatic and enforcement initiatives. Thus, for many years, Turkey and France were regarded as the principal sources of heroin, though they have now been replaced by Mexico and Southeast Asia. Similarly, Colombia is now considered the principal source of cocaine, and Jamaica a primary source of marijuana.

The reason that geography seems important is that different countries represent different clusters of conditions that give them a comparative advantage as a supplier of drugs to illicit markets in the United States. Sometimes a country becomes an important source country because of agricultural conditions that make it an especially attractive (perhaps even unique) place in which to produce raw materials. Thus, for a while, we imagined that opium poppies could be successfully grown in only a few countries in the world, and we now hope that is true of coca leaves. In short, country may become an important source of supply due to a physical advantage.

Other times it seems that a country has become a major source as the result of a long tradition of producing the relevant raw materials, or a large domestic industry that is based on them. In effect, the country has a unique institutional and economic advantage because it has a large infrastructure already invested in the cultivation of the

opium, coca leaves, or marijuana.

Still other times, it seems that the country's advantage comes from weak laws governing the legitimate or illicit drug industries, or weak governmental commitment and capacity for controlling the illicit drug industry. Just as Las Vegas can become the center of gambling simply by establishing a legal regime that tolerates it, Jamaica may become a principal source of marijuana by being particularly lax with respect to the suppression of illicit cultivation.

Thus, while geography looks like it plays an important independent role in determining the character of the illicit drug markets, this apparent influence actually derives from the more basic causes already noted: the physical relations governing production and distribution, the economic/institutional relations that give economic actors reasonable assurances that investments in particular activities will be rewarded, and the legal regime that has an independent effect on the risks and opportunities confronting illicit dealers. Thus, geography may drop out of any close analysis of the factors shaping the performance of the illicit supply system, and be replaced by a separate consideration of how certain countries seem to represent unusually favorable combinations of the underlying causal factors, and which ones seem particularly important.

## 2. The Irrelevance of the Mechanics of Production

While it is tempting to search for the explanation of the structure, conduct and performance of the illicit industry in the physical mechanics of producing and distributing drugs, there is very little in these relationships that is unusual, or that could constrain or shape the performance of the industry. Many of the raw materials

necessary to produce narcotics and dangerous drugs are widely available. This is true primarily because they have many legitimate uses, but also simply because they can be grown or artificially produced in many different locations. Of course, an occasional local shortage in basic raw materials may sometimes appear, but given the alternative sources of supply, it is hard to imagine that the shortage would last. Indeed, it is hard to to imagine long run shortages in the availability of opium poppies, marijuana, coca leaves, or even the chemicals that are used to produced synthetic opiates, hallucinogens, and other psychoactive drugs occurring, or being created.

It is equally difficult to imagine that either the knowledge or the equipment necessary for manufacturing illicit drugs will be in long run short supply. The chemical structure of the illicit drugs are well known. Indeed, they are so well known that illicit labs are now experimenting with small manipulations of the chemical structure of existing drugs to determine if the newly created drugs will produce similar or superior psychoactive effects. These so-called "designer drugs" challenge the legal regime regulating drugs because they may be legal to produce and distribute until enough experience has accumulated to declare them a significant abuse threat.

The equipment required for the production of the drugs is commonplace. Indeed, heroin "labs" in Mexico often consisted of little more than wash-tubs and rubber hoses. And the drugs can be made in many different quantities with few implications for the costs of production. So, there seems to be little in the technology of production that would have a decisive impact on the structure, conduct or performance of the industry.

### 3. The Impact of Illicitness on Industry Conduct

My strong conviction is that the dominant factor shaping the illicit drug industry is the simple fact that it is illicit. This fact has broad and significant implications for the structure, conduct, and performance of the illicit industry. The immediate consequences of illicitness register in the conduct of the illicit firms. But the changes in conduct have important implications for structure and performance as well.

The most obvious consequence of illicitness is that those who produce, import, distribute or use drugs illegally are exposed to the threat of arrest, prosecution, and imprisonment. Moreover, in some countries, they are threatened by the seizure of any property or assets that are used in their illegal drug dealing - a threat whose significance may dwarf not only any criminal fine they may receive, but also some jail terms.

The obvious effect of threatening illicit producers, distributors and users with jail is that the dealers who remain in the business will take steps to reduce their risks, or to compensate themselves for the risks of being in the business. The principal devices for reducing their risks are to keep their operations secret so that enforcement agencies cannot discover them, or to corrupt the agencies so that even if their operations are discovered, they are not punished. The principal devices used to keep their operations secret are to deal with a small number of people, to conceal the traces of their activities, and to screen and discipline their employees, associates and customers to make sure that they are not undercover agents, and do not become police informants. The principal ways of corrupting enforcement agencies are to offer money to be allowed to continue to operate, and

also to inform on their competitors and associates so that the police can make arrests without harming their operations.

Such efforts can only be partially effective in eliminating the risk of punishment. To deal in large quantities of drugs and make money from the enterprise, one must inevitably deal with a large number of people, only some of whom are familiar and effectively disciplined. Thus, the risk of informants and undercover agents among one's employees, associates, or customers is always present. Similarly, drug dealing always involves leaving traces of one's activities that cannot be entirely concealed: physical inventories of raw materials or drugs, records of financial transactions, even records of phone calls among the conspirators. These, too, are vulnerable to discovery by enforcement agencies. And there are so many agencies and agents involved in drug enforcement activities that one can never be sure whether all those who pose a threat to him have been corrupted. Since the risk can never be quite eliminated, the dealer's response is to demand additional compensation for the risks he runs in dealing drugs. He demands higher prices for his drugs than he would if there was no risk of going to jail.

A less obvious but by no means less important consequence of the illicit status of drug production, importation, and distribution is that illegal dealers are confronted by threats from other criminals as well as by enforcement agencies. Indeed, associates, competitors, and ordinary armed robbers probably create greater risks for illicit drug dealers than enforcement agencies. Partly it is that dealers are very tempting targets. They are likely to have large amounts of cash, or large quantities of drugs that can be converted to cash. And they are unlikely to turn to enforcement agencies to help protect their

operations. Whatever protection against armed attack or stealing they have, they will have to supply. But it is also that those in the criminal milieu may know more than enforcement agencies about who is "holding" or currently doing business, and that these other criminals are less constrained by the niceties of due process than the enforcement agencies. Thus, other criminals may be more strongly motivated and better positioned to attack illegal drug dealers than the enforcement agencies, and therefore pose a graver threat to the illicit dealers.

The implications of this fact are that the dealers must make special provisions to protect themselves from this sort of threat as well. To a degree, the same methods of secrecy and discipline may be as helpful against other crooks as against the police. But it seems likely that the threat from other crooks is more apt to be met by capacities for violence as well. In general, if it comes to an armed confrontation between the dealers and enforcement agencies, the dealers know they will lose. They may win a local fire-fight, but there is no way that they can compete over the long run with enforcement agencies in violent confrontations. Consequently, they rely most heavily on secrecy and corruption to deal with the threat of enforcement.

With other criminals, however, the balance of armed power is less clear. Thus, it is tempting to build capacities for violence initially simply to protect oneself and one's business from "take-off" artists, and to establish credible threats that are effective against betrayals by associates. This capacity for violence can also be used internally to discipline employees, and externally to drive out competitors. But it is the vulnerability to other criminals associated with illicitness



that provides the most immediate and compelling justification for developing a capacity for violence as well as secrecy and corruption. And it is the existence of these capacities for violence among dealers and those who would steal from them that produces the bulk of the violence within the illegal drug industry.

Thus, the conduct of the firms within the illicit industry is profoundly influenced by the fact of their illicitness. They are forced to manage their operations to maintain secrecy, and to prevent the infiltration of police agents. They must develop capacities to bribe, suborn, or mislead government agents, and capacities for violence to enforce contracts with associates, protect their property from armed robbers, and to discipline employees. Because the risks of arrest or rip-offs cannot ever wholly be eliminated, they must price their products not only to cover costs, but also to compensate themselves for the risk of arrest or financial loss that they are taking by engaging in such a risky business. These effects on the conduct of firms have implications for structure and performance as well.

#### 4. The Impact of Illicitness on Structure

The consequences of illicit status for the structure of the illicit industry are hard to estimate, for they will be determined by a balance of conflicting influences. On one hand, the desire to prevent the police and other criminals from learning about their operation will motivate illicit entrepreneurs to keep their firms small, transient, and neither vertically nor horizontally integrated.

Smallness has the virtues of involving only a small number of people and a small number of transactions. This implies both that the intrinsic vulnerability of the operation is less, and that the contributions of any special efforts to discipline or secure the

operation will go further because there are fewer associates, employees or transactions over which to spread these efforts.

Transience has similar advantages to smallness. If the problem for illicit dealers is to avoid others knowing that they are in business, then they can accomplish that by getting into the business and out of it before anyone knows who they are as well as by running a small operation. Indeed, from the perspective of avoiding detection, the best sort of operation is one that is both small and transient. But that is the sort of firm that is not worth disrupting also for it could never amount to much in terms of its ability to supply drugs, its contribution to violence and corruption, or to become a powerful institution in the community.

Vertical and horizontal disintegration also have important advantages when it comes to avoiding detection. A vertically integrated firm would require some system of information gathering and record-keeping to exploit the advantages of explicit coordination across the different phases of the operation. But these records would become an important source of evidence against the dealers. Similarly, almost by definition, a vertically integrated firm would be large and involve many transactions, and each element of the firm would know what other elements were doing. Thus, a vertically integrated firm would present more possible points of penetration, and would be much more vulnerable to any given penetration than a firm that was organized as a set of largely separate cells that operated relatively autonomously. Similarly, a horizontally integrated firm would also have to be large, and would have to be in contact with all the firms that were engaged in the activities at other stages of the production process. Thus, a

horizontally integrated firm that was in the business of off-loading mother ships would come to know the principal importing firms that arranged for the mother ships to appear off the coast, and the principal firms that were engaged in storage and distribution. This would make such a firm vulnerable to betrayal by the others compared with a firm that handled less of the overall off-loading business.

Thus, to escape detection, firms in the illicit drug industry would choose to be small, transient and dis-integrated. This, in turn, would lead to a highly fragmented - even atomistic - structure in the industry.

On the other hand, it is possible that there are some economies of scale in the production and distribution of illicit drugs, or some opportunities for controlling competition that would lead to relatively large, durable firms, and a relatively high degree of concentration in the industry. Ironically, the principal potential for economies of scale do not seem to lie in the areas of production or marketing, but instead in the development of capacities for corruption and violence that will give some firms special opportunities to operate safely and efficiently in the dangerous illicit markets.

The capacity for disciplined, irresistible violence may be a particularly important factor of production in illicit supply systems, and may be an area where there are natural economies of scale. As we have seen, a capacity for violence is terribly important in disciplining employees to keep them from becoming informants. It is also important in being able to enforce contracts with business associates, and in protecting life and property from other criminals in a world where one cannot rely on the ordinary courts and police to perform this function. Moreover, once developed for these purposes, the

capacity for violence can become important in eliminating competition, or forcing it to be small and transient rather than large and durable. For all these reasons, a firm that had a substantial capacity for violence would have an obvious competitive advantage in supplying drugs to illicit markets.

But to argue that violent firms would have a competitive advantage is not quite the same as saying that the obvious value of a capacity for violence will tend to produce large, durable firms, and a concentrated structure in the industry. That argument rests on an additional assertion that there are economies of scale in the development of this special capacity for violence. This assertion, in turn, rests on the idea that what a useful capacity for violence consists of is not the production of actual violence, but instead of a reputation for irresistible violence that can overwhelm (in force, viciousness, or both) any degree of violence that another illegal entrepreneur can imagine mounting. This is important for it is quite obvious that real violence can be produced quite easily and inexpensively. What is valuable violence, however, is violence that need not be used, but will still intimidate and discourage others because it is there to be used, and cannot be successfully resisted. To have this sort of capacity, a firm must have available to it not only a large quantity of violence, and not only demonstrate its willingness to use it in a certain number of instances, but also be a sufficiently permanent and relentless institution that the possibility of challenging it and escaping without retaliation seems remote.

This capacity seems to have some natural monopolistic features to it. One can easily imagine how a single organization could gradually

corner the market for irresistible violence and create a fairly impregnable local monopoly. One can less easily but still plausibly imagine a small number of firms with such capabilities co-existing in an uneasy truce, and ignoring a certain number of violations of their tacit understandings as well as a small amount of minor competition from transient outsiders. But what is hard to imagine as a stable equilibrium is a world in which there are large numbers of closely matched firms vying for the position of a recognized dominant capacity for violence, for in that world the factor of production that has value - namely, a dominating capacity for violence that is sufficient to discipline employees, enforce contracts, and protect reliably against take-offs - is not available to any firm, and each firm is therefore vulnerable to all the things that a solid reputation for irresistible violence would guard against.

If the reputation for irresistible violence is what is valuable, if it takes a substantial investment to build the capabilities, and if it only has value when it is greater than any other competing firm's, then it should be clear that the importance of this factor of production will tend to produce high degrees of concentration in the industry, and therefore lead to the development of a few large, durable firm in any local market. This is true at least partly because this reputation for violence can substitute for small scale in preventing the detection of the operation. If employees, associates, competitors and customers are all afraid to give information about the operations of a firm to the police or other criminals, then it can operate at any given scale with less risk than another firm that is similar in all respects other than its reputation and capacity for violence.

The capacity for corrupting government officials may also be an

important factor of production and distribution that might also tend to create larger more durable firms and higher degrees of concentration than one might hypothesize if one were thinking only of how the illicit firms might escape detection. The easiest way to think about the problem of corruption is to imagine that the various government officials and agencies that are responsible for enforcing the laws against illegal production and distribution have a de facto power to grant a license to illegal entrepreneurs to operate legally - or at least with no threat from them. Obviously, the value of this license to the illicit dealers depends on the extent to which a given official or agency monopolizes the legal threat to them. If a given official or agency is the only official threat against an illicit dealer, the value of his protection will obviously be higher than if the official or agent is only one of many potential threats against the dealer. Thus, the question of whether corruption will tend to concentrate the industry depends crucially on the organization of the enforcement agencies. If the enforcement agencies were organized in a single agency, and if the hierarchical control within the agencies was very powerful, and if the illicit firm could corrupt that agency, it would be able to gain and hold a monopoly in the area principally by using the enforcement agency to help it eliminate competition while keeping it safe. If, on the other hand, the enforcement agencies had fragmented jurisdictions, and quite imperfect control over their agents, then they might be more vulnerable to some degree of corruption, but the significance of the corruption would be much less. Essentially, the enforcement agency could not sell an exclusive right to operate safely. It could only sell little pieces of insurance against threats from

specific agents or agencies. Even this would produce some higher degree of concentration in the industry than if corruption were not part of the operating strategies of the illicit firms, since it would establish some barriers to entry and protect the position of some firms. But it would by no means guarantee a monopoly.

How strongly the role of corruption would push the industry towards large firms and high degrees of concentration thus depends crucially on the organization of the enforcement efforts against the illicit industry. The more concentrated and tightly organized it is, the stronger the tendency of any given level of corruption to create a concentrated illicit industry.

So there are pressures that push towards small firms and an atomistic structure, and others that are consistent with the development of local monopolies and relatively concentrated structures. My strong hunch is that the net result of this will be to produce an illicit industry that includes a heterogeneous distribution of firms. There will be a few firms that are in a strong position to exploit the economies of scale that come from a reputation for trustworthiness, and for irresistible violence in the case of betrayal. Such firms may come to account for a relatively large fraction of the drugs reaching illicit markets, but they will be a small fraction of the total number of firms operating. This will be true partly because it is unlikely that these firms will become either horizontally, or vertically integrated. The risks of long chains of command in the case of vertical integration, or a wide network of contacts in the case of horizontal integration are apt to be much greater than the potential benefits. It is also true because these firms will not be able to prevent, and will not find it worth preventing occasional competition from transient or

small operations with their own sources of supply, and their own local markets. So there will be a great many firms of different sizes and organizations involved in the industry.

If one were thinking about analogies from legitimate industries, my hunch is that the best analogy might be something like the industry of real estate developers rather than the auto industry or even the fast-food industry. An awful lot of the work has to do with putting together large, uncertain deals rather than producing or distributing something. Moreover, the deals are likely to involve several different partners, and the partnerships and roles may change from deal to deal. Those in the industry who have a reputation for trustworthiness, "deep-pockets," strong political connections, and effective lawyers are likely to account for a large fraction of the total dollar value of the deals made. But there will be a great many others in the industry who do smaller deals.

##### 5. The Impact of Illicitness on Performance

Because illicitness affects conduct and structure, it also has an enormously important impact on industry performance. The crucial result is that drug prices are much higher than they otherwise would be. This is partly the consequence of the fact that the defensive strategies mounted by dealers against enforcement agencies and other criminals translate into higher operating costs per unit of drug delivered, and partly the result of the dealers demanding additional compensation for their risks. That such effects occur is clear from the fact that the price of drugs in illicit markets is higher than the price of equivalent drugs in legal markets by factors of 20 or 30.

Almost as important is the result that the drugs are less



conveniently available than they otherwise would be. The reason is that dealers have an incentive to conceal their activities rather than advertise them. What growth in the market occurs, tends to happen within intimate networks of friends rather than through public advertising and widespread availability. In all likelihood, these are slower and less effective methods of market development than the same mechanisms joined with a legitimate distribution system.

We can combine the effect on price and the effect on availability in a single concept called the "effective price" of drugs in illicit markets. That would include not only the monetary cost, but also the amount of time a customer would have to spend looking for the drug, and the chance that he might fail to find the drug, or be cheated by an unscrupulous dealer. In these terms, illicitness results in much higher effective prices for illicit drugs than would be true if they were legal. Note that this is probably true even if publicly supported enforcement activities were relatively ineffective. For, even if the threat from the enforcement agencies were removed, the threat from other criminals would remain, and that by itself would be enough by itself to dramatically increase the effective prices of illicit drugs. So illicitness has a profound impact on the performance of the industry.

The fact that the price of drugs is increased by the illicit status of the industry is evaluated in different ways from different vantage points. Viewed from the perspective of drug abuse policy, this is a desirable result because it will reduce overall levels of drug use in the population by discouraging new users from continuing their drug use, and motivating older users to seek treatment and abandon their use. Viewed from the perspective of organized crime policy, the

increased prices means a larger flow of revenues to illicit dealers and criminal organizations. This is damaging to the objectives of organized crime policy for it creates the impression that crime pays, and because it may provide the financial means necessary for enlarging illegal operations, or consolidating a position vis-a-vis other criminal organizations or the enforcement agencies. Whether the proceeds are used by illegal dealers for consumption or investment then, the higher revenues become a problem for organized crime policy.

It is also possible that over the long run, the higher revenues also become a problem for drug abuse policy. This would be true, for example, if the conspicuous consumption of wealthy drug dealers attracted more people into the industry, or if the investments made by more disciplined dealers allowed them not only to dominate the supply system, but to increase its overall capacity to supply drugs. In each case, the revenues from the industry would be operating to increase the overall supply capacity of the system just as excess profits in a legitimate industry would attract new investment into that industry.

What is important to keep in mind, however, is that the reasons that prices are high in the drug industry is precisely because dealers are confronted by risks of violence and financial loss from both the government and other criminals. This fact remains true and continues to discourage many from entering the business. Indeed, the greater the risks, the greater the profits must be to attract any one into the business. That is the explicit purpose of making the drug business illegal and attacking it aggressively. As long as that threat remains substantial, the overall supply capacity of the industry will be much smaller than it otherwise would be even though the people that are in

the industry are making lots of money. People do not flock to the industry even with high prices and high revenues because the risks are also high.

### 3. The Impact of the Legitimate Drug System

The last important factor shaping the structure, conduct and performance of the illicit drug industry is the character of the legitimate drug system that operates alongside it. The significance of the legitimate drug system is most obvious for drugs such as methadone, amphetamines, and barbiturates which have important medical uses, and very large legitimate production and distribution systems. But even those drugs that do not have legitimate medical uses often have some contact with a legitimate market system. Some illicit heroin, for example, comes from legitimate opium crops grown to produce morphine. Hallucinogens and methamphetamine are often manufactured from chemical precursors that have significant legitimate uses. And even marijuana has a legitimate sector composed of researchers who are experimenting with its pharmacological characteristics, and potential medical applications for the control of glaucoma and depression.

The existence of a legitimate sector in which raw materials, precursors, or finished goods are produced, stored, distributed and consumed has a potentially significant impact on the character of the illicit industry. The reason is that diversion from the legitimate market becomes an alternative to wholly illicit production and distribution as a source of supply to illicit markets. Exactly what influence will be exerted depends on the size of the legitimate market, the strength of the regulatory regime that surrounds it, and whether the legitimate system includes the production and distribution of finished goods or stops someplace short of this goal. For drugs which

have a large, loosely regulated legitimate supply system that includes the distribution of finished goods, diversion from legitimate sources is likely to become the dominant source of supply to illicit users. For drugs that have only a small legitimate sector that is limited to raw materials or pre-cursors, the illicit supply will be dominated by wholly illicit production and distribution. Thus, the illicit demand for tranquilizers is likely to be supplied principally by diversion. The illicit demand for hallucinogens and marijuana will be principally supplied by wholly illicit production and distribution. And the illicit demand for amphetamines and opiate analgesics such as heroin, morphine and methadone will be supplied partly by diverted legitimate drugs, and partly by wholly illicit production and distribution.

The existence of a legitimate sector from which drugs may be diverted to illegal use will generally improve the performance of the illicit market in that drugs will be cheaper and more readily available than they would be if no legitimate sector existed. This is true simply because some portion of the activities necessary to produce and distribute the drug will not be hampered by the difficulties created by illicitness. Raw materials can be acquired, transformed into finished products, stored, and distributed with fewer worries about theft and betrayal by associates, or disruption by enforcement officials. True, operating costs will be increased by the requirements of the regulatory regime. And true, also, someone must absorb the costs and risks of diverting the drugs to illicit markets. But in all likelihood, these costs will be much smaller than the costs imposed on the firms if they had to assume all of the burden of protecting their property and enforcing contracts as they have to in a wholly illicit industry. To

the extent that only a portion of the supply system must pay these costs, operating costs and therefore prices should be lower in illicit markets.

The existence of the legitimate industry should make the illicit markets much more flexible. If an illicit amphetamine laboratory finds that it cannot obtain precursors from the legitimate market, it can always go into the business of stealing them from the legitimate sector. Once it has the capacity to steal precursors, the illicit firm might find it easier to steal finished products. In short, the existence of the legitimate market allows illicit dealers the options of relying on theft or fraud with or without the collusion of people within the legitimate industry to meet market demands - options that would not be available if there were no legitimate market.

The impact of the legitimate market on the structure of the illicit industry is also quite important. The crucial variables are where in the process of production and distribution the leaks occur, and how large and regular the quantities are that leak.

Obviously, if only raw materials and precursors leak from the legitimate system, the illicit system will have to develop illicit production capabilities to transform the raw materials into finished goods. This will exert a slight centralizing trend, for the knowledge and the equipment necessary to produce the drugs constitute a form of capital which must be amortized, and that means that those who possess these things will stay in business long enough and produce enough drugs to achieve this goal. The break-even point may not require a very large or very durable firm. But the point is that the diversion of raw materials will be associated with larger more durable firms than the diversion of finished goods.

In the case that finished goods are stolen, the firm may have no capital to amortize, and may stay in business only long enough to dispose of an existing quantity. Of course, a large theft such as a truck hi-jacking can produce a firm that looks like a major trafficker. And, if the firm arranges to continue hi-jacking drug shipments, it may become a major drug dealer with an unusual source of supply. In the more likely case, however, a large theft of legitimate drugs will produce a large, but transient firm. It will go out of business shortly.

The other possibilities are that small quantities of finished goods are diverted either continuously or irregularly from the legitimate supply system. This form of diversion will produce small firms that are either durable or transient depending on how frequently they go back to the well.

Thus, the supply of drugs that have legitimate uses to illicit markets will be decisively influenced by the size and character of the leaks from the legitimate system. The earlier in the process of production and distribution the leaks occur, the larger and more continuous they are, the more the illicit supply system will be composed of large durable firms. The later in the process of distribution, and the smaller and more erratic the leaks, the more the industry will be atomized. Thus, one might expect the illicit market in tranquilizers and methadone to be composed primarily of small, transient firms fueled by small scale thefts. The illicit markets in amphetamines and hallucinogens are likely to be somewhat more concentrated with more of the illicit supply in the hands of larger, more durable firms.

### C. Different Drugs, Different Supply Systems

So far, our analysis of the illicit drug industry has abstracted from the particular features of the principal drugs of abuse in the United States. We have treated heroin, cocaine, marijuana, hallucinogens, amphetamines, barbiturates and tranquilizers in a similar analytic framework. But to analyze the supply systems for these drugs from the same analytic perspective is not the same as assuming that the supply systems will be similar. It is only to assume that they will be pushed in similar directions by the factors we have considered. Exactly how far they will be pushed in one direction or another depends a great deal on all the factors we have considered including how zealously the illegal supply systems are controlled by regulatory and criminal enforcement.

Heroin, for example, seems to be primarily a problem of wholly illicit production and distribution. The fields in which the opium poppies are grown are generally illicit fields in countries that cannot adequately enforce existing laws prohibiting the cultivation of opium. Similarly, the processing of the raw opium into heroin occurs principally in foreign countries - probably to reduce the bulk of the material to facilitate international smuggling. Because the volume of heroin is so small, it comes into the United States through many different devices - in the carry-on luggage of pilots, hidden in small cans of tomatoes and olive oil, concealed in secret compartments built into cars, and so on. In the United States, the distribution systems seem moderately tightly concentrated with significant local monopolies, but little vertical integration. There is probably some degree of horizontal integration at the importing stage, and it is at this stage that the concentration of the distribution system is probably the

greatest. Perhaps the few largest firms in any given city control more than two-thirds of the total volume of heroin in the city, with some cities in the U.S. serving as transshipment points for other cities. This relatively tight and concentrated structure is the result of the fact that the enforcement pressures are probably still the heaviest against heroin dealers.

The cocaine supply system seems quite similar to the one for heroin. It is principally a problem of wholly illicit production and distribution. The sources of raw materials and finished products are primarily foreign. The physical volumes to be handled are small enough to make concealment of the drugs a relatively trivial matter, and to allow smugglers to use a variety of different methods for bringing the drugs into the country. The average size of the deals measured in terms of financial requirements seem to be approximately the same as those that occur in the heroin market.

The major difference between the heroin and the cocaine supply systems seems to be that the cocaine system is less concentrated, and more violent than the heroin market. There seem to be many more entrepreneurs who enter the cocaine business on a short term basis. Moreover, none of the groups that is operating on a more permanent basis seems to have established predominance in the industry. Thus, it is not surprising that this market is more violent than the heroin market, for there are cash, drugs, and market position up for grabs in a way that they are not in the heroin market.

Marijuana is similar to heroin and cocaine in that it is a wholly illicit system with predominantly foreign sources of raw materials. Three principal differences seem to make the marijuana supply system



quite different, however. One crucial difference is that the bulk of marijuana per dollar of value is so much greater than that of heroin and cocaine that the smuggling problem is enormously exacerbated. A hundred thousand dollars of heroin or cocaine can easily be held in a suitcase, but to carry a hundred thousand dollars worth of marijuana, one needs a small truck, boat or plane. Because marijuana is so much more visible than heroin or cocaine, the primary mode of smuggling is in large loads landed between ports of entry rather than infiltrated through ports of entry in the huge volume of cargo and people that daily cross the U.S. borders. This also implies that many specialized firms might grow up to cope with the special problems of smuggling marijuana.

A second difference between heroin and cocaine on the one hand and marijuana on the other is that the pressures in the illicit industry seem less. It is not that marijuana dealers do not face substantial financial risks. Indeed, it seems that quite the opposite is true. The best current estimates indicate that marijuana dealers lose from a quarter to a third of their shipments to enforcement agencies. Instead it seems that the losses are primarily financial, and primarily inflicted by the government. Other criminals do not seem to prey on marijuana traffickers in the same way that they attack heroin and cocaine dealers. Moreover, even if the government seizes property and arrests the dealers, the prison terms meted out to marijuana traffickers seem less severe than for those who traffick in other drugs. Since the marijuana dealers face smaller and less drastic threats from both the government and other criminals, the marijuana market seems less preoccupied by the problems of secrecy, discipline, and security than the heroin and cocaine markets. The net result of

this is an industry that is probably less concentrated than either the heroin and cocaine market, and almost certainly less violent.

The third important difference shaping the marijuana industry is the existence of small scale domestic production and distribution as well as foreign. Indeed, the potential for small scale domestic cultivation of marijuana makes the marijuana market more like the market for barbiturates and tranquilizers than for heroin, because some portion of the overall illicit demand will be met by those who grow their own. It is this fact that guarantees the overall industry cannot become very concentrated, just as it is the widespread availability of barbiturates and tranquilizers through small scale diversion from legitimate sources that prevents a concentrated illicit industry in these drugs from developing.

The supply system for hallucinogens seems to be primarily domestic illicit production, though it is possible that some of these drugs come from Mexico or Canada. There is some degree of concentration in this industry as a result of specialized knowledge, and the creation of brand names to which consumers become loyal. It seems to operate with relatively little reliance on either violence or bribery, probably because the industry is sufficiently small to not be worth the time of enforcement officials or other criminals.

The industry that supplies barbiturates to illicit markets seems to depend primarily on diversion from the legitimate market. Thus, its structure mirrors the character of the leaks from the legitimate system. This seems to produce a highly atomistic market composed of small or transient firms. Again, there is little reliance on either violence or corruption because the economic stakes seem too small to

warrant such risky conduct.

The amphetamine industry seems to be a combination of the supply system for hallucinogens and barbiturates. There seems to be small scale illicit production and distribution that is primarily domestic, but also from our near neighbors. And there is also diversion from the large legitimate supply system. The net result is an industry that is high performing, relatively atomistic in structure, and relies little on either violence or corruption.

### III. Designing a Supply Reduction Strategy

From the perspective of drug abuse policy, the primary objective of a supply reduction strategy is to increase the effective prices of drugs in illicit markets. Given our analysis of the factors shaping the structure, conduct and performance of the industry, it is reasonable to suppose that making the production and distribution of drugs illegal will tend to make drugs more expensive and less available than they would be if they were legal. The important policy question is how the resources of the government - its diplomatic initiatives, its interdiction efforts, and its criminal investigations - might be deployed to maximize the impact of supply reduction efforts on the effective prices of illicit drugs.

#### A. Priorities for Supply Reduction Strategies

One way to establish priorities in this area is to determine which particular drugs seem to be causing the greatest social problems, and which present opportunities that would give supply reduction efforts relatively powerful leverage. The worse the drug, and the more powerful the leverage that can be exerted, the higher the priority. Of course, the question of which drugs pose the greatest threat to the society is much debated. One way to resolve the issue is to gauge the number of chronic users of each drug, and to weight that number by the seriousness of the health, economic and social problems that the chronic users of each drug suffer. By this reckoning, heroin, amphetamines and barbiturates tend to come out on top as the worst drugs.

A second standard would be to consider which drugs are most widely used, and therefore operate as the principal transmitter of an illicit drug culture and the most common introduction to drug use for young

children. By this standard, marijuana and tranquilizers would probably come out on top.

A third standard would be to determine which drugs seem to be associated with the most money, violence and corruption, and attack that drug as the principal threat to the society. This last standard would probably make cocaine and heroin the dominant targets of drug policy.

In thinking about which of these standards might be appropriate to use in deciding which drugs caused the greatest social problems, it is worth trying to keep the separate objectives of drug abuse policy and organized crime policy in mind. The principal objective of drug abuse policy is to minimize the social problems associated with drug use. A key instrument of that policy are criminal laws controlling the supply of drugs. These policies succeed when there are few people using drugs in patterns that create grave threats to their health and economic welfare. In effect, we use criminal laws and criminal enforcement to achieve a social welfare objective.

The principal objectives of organized crime policy are to suppress the provision of illegal goods and services that constitute the core of organized crime, to prevent the violence and corruption that is more characteristic of organized crime groups than other kinds of criminal activity, and to prevent the emergence of very large, durable organizations with well developed capacities for violence and corruption.

There is a substantial overlap in the goals of organized crime policy and supply reduction efforts insofar as organized crime policy takes the control of the supply of drugs as an important objective, and

insofar as the illicit supply systems included violence, corruption and large firms. But to the extent that the core of organized crime policy is really concerned with the disruption of major criminal organizations, there is an overlap between the core of drug abuse policy and organized crime policy only insofar as the drugs are supplied by rich, violent and powerful criminal organizations. As we have seen, that is true of only a certain number of drugs, and not necessarily the drugs that pose the greatest threats in terms of widespread and dangerous consumption.

In fact, the third standard described above is closer to a description of the core objectives of organized crime policy than to the core objectives of drug abuse policy. In essence, the society has to decide whether it means to go after the drugs that cause it the most problems in illicit use, or whether it should attack the drugs that are supplied by the nastiest and toughest dealers. These are not necessarily the same.

#### B. The Instruments of a Supply Reduction Strategy

Once the society has implicitly or explicitly established its objectives, it must then look to the available instruments of a supply reduction strategy. Again, there are many different ways one can think about the available instruments.

One can think about them in terms of the particular drugs they attack. Thus, one can distinguish the instruments of heroin policy which include the effective control of legitimate opium in Turkey, the suppression of illicit crops in Mexico and Afghanistan, the encouragement of crop substitution in Thailand, the creation of specialized heroin detecting devices at U.S. ports of entry, and the targeting of heroin importing and distributing organizations, and even

the occasional attacks on street level dealing in notorious areas of a city. Or, one can think of the marijuana control policy in terms of diplomatic initiatives and foreign aid to Mexico and Jamaica, the eradication of illicit fields, the training of marijuana sniffing dogs to stand guard at the border, the mobilization of the Navy and Coast Guard to aid in the identification of ships engaged in large scale smuggling, and so on. The point is that many policy initiatives are specific to, or have their maximum impact on one drug rather than another, and it is a useful exercise to see how our efforts are deployed against particular drugs.

A second dimension in which supply reduction efforts can be described and evaluated is geography. One can talk about the division between the international drug control effort, and the domestic activities. Among the international efforts, one can talk about policy towards Southeast Asia (which would be principally directed at heroin), or towards Colombia (which would be principally directed against cocaine), or towards Mexico (which would embrace heroin, marijuana and amphetamines). Within the domain of domestic supply reduction efforts, one can discuss the allocation of enforcement efforts across major cities in the United States, and this, too, has implications for the different drugs that are attacked. Enforcement efforts in New York and Los Angeles will probably give more emphasis to heroin and cocaine than efforts in Kansas City or St. Louis.

A third dimension useful in characterizing and analyzing supply reduction policy instruments is the factor of production and distribution that is the principal target. Thus, one can distinguish eradication and crop substitution programs which are directed at raw

materials, from financial investigations which attack the capital of illicit dealers, from interdiction programs which attack goods in transit, from conspiracy investigations which are designed to immobilize trafficking networks, from street level enforcement which is designed to discourage advertising and the development of new markets. Of course, many of these instruments allow one to reach other targets as well as its principal target. Indeed, conspiracy investigations are often built from the discoveries made in interdiction and street enforcement programs. But the point is that these different policy instruments have different factors of production as their proximate targets, and, to the extent that some factors of production and distribution are scarcer than others, the relative importance of the different supply reduction instruments in constricting the supply of drugs may be gauged, and appropriate adjustments made in the supply reduction strategy.

A fourth way of thinking about supply reduction policy instruments, and probably the most common, is in terms of the agencies that are principally responsible for carrying out different activities within the overall supply reduction effort. Thus, one thinks in terms of the international supply reduction program as the principal responsibility of the State Department; the interdiction effort as the primary responsibility of the U.S. Customs, Border Patrol, and Coast Guard with occasional assistance from the U.S. Armed Forces; the domestic investigation program as the primary responsibility of DEA and the FBI; and the street level enforcement effort as the primary responsibility of the nation's thousands of local police departments. Thinking about the supply reduction effort in these terms has the advantage of bringing immediately to mind which agencies are available



for supply reduction efforts, and of suggesting approximately where they can make a contribution both geographically and in terms of squeezing particular factors of production and distribution, but it has the disadvantage of not sharply distinguishing among the different efforts in terms of either drugs or specific factors of production and distribution.

### C. The Strengths and Limitations of Alternative Instruments

For purposes of a broad brush strategic analysis, we will use this last set of categories since they are the terms in which most of the policy discussions at the federal level are now being carried out. Our task will be to determine the potential of each of these areas in minimizing the supply of drugs to illicit markets in the U.S. That, in turn, depends on our ability to see how each of these programs presses on the factors of production and distribution for the major drugs of abuse.

#### 1. The International Program

The international drug control program has two principal liabilities as an instrument of supply reduction efforts. The first is that this program is inevitably hostage to the interests and capabilities of foreign governments. The U.S. can do no more in this area than other governments will allow it to do. Of course, there are numerous ways in which the U.S. government can increase the motivation and capacities of foreign governments to control drugs that reach U.S. markets. With respect to increasing motivation, the U.S. can indicate the importance it attaches to drug control among other interests it is pursuing within a given country, or it can appeal to obligations a country has under international treaties, or it can appeal to the

country's self interest by documenting the extent of the country's domestic drug problem. On the capacity side, the U.S. can contribute money, or particular kinds of equipment, or technical assistance in the form of specific on-site advice, or more generalized training of drug control officials. These specific measures constitute the daily activities of the international program. In the end, though, they run up against more or less unmoveable limitations such as the limited control of central governments over out-lying areas of a country, or the inefficiency and corruption of government agencies. Against these obstacles there is often little that the U.S. government can do.

The second limitation is that the bulk of this program seems to be targeted on the raw materials for heroin, cocaine and marijuana. Arguably, this is not particularly effective since there is no particular reason to believe that the raw materials for these drugs are in long run short supply. Indeed, all our experience and intelligence suggests that potential growing areas for these drugs are widespread, and that the elimination of fields in one place will fairly soon be replaced by cultivation elsewhere.

These limitations are sufficiently severe that it would probably be a mistake to rely on the international program as the primary instrument in a supply reduction strategy. It simply cannot do enough work reliably enough to merit that position. Having said this, however, there are some very important things the international program can do that will make an important contribution to the overall effectiveness of supply reduction efforts.

The first is that it will occasionally turn out that the standard efforts of the international program will suddenly become effective. This usually occurs when a country that is important in supplying drugs

to the United States suddenly becomes highly motivated to control drugs. When this occurs, support from the United States can often result in a significant shortage of the drug. Typically, the shortage lasts no longer than a year or two as the illicit industry adjusts to the new conditions. But even so, that shortage is worth producing. That is particularly true for drugs that are unusually dependence producing, for the shortage means that a cohort of children in the ages of maximum vulnerability squirts through that period of relative shortages with much lower probabilities of dependence or addiction.

Indeed, this is what happened in the early part of the 70's when Turkey suddenly shut down its legitimate production of opium and helped to produce a two to three year shortage in the supply of heroin. The effect of this success was high effective prices in the United States, reduced incidence of heroin use, and a shift to Mexico and Southeast Asia as the principal sources of supply, though for a while at lesser volumes than had been true when Turkey was also a supplier.

Keeping open such opportunities, and being in a position to exploit them when they come along is the principal contribution of the international drug program. But one cannot always count on such successes. What is important, then, is that the international program be in the field, trying to increase the likelihood that they can occasionally produce such successes, but no one relying on it as the principal supply reduction instrument.

A second way that the international program can be helpful is by stepping up its efforts to support international criminal enforcement. In essence, the focus of the international program might usefully shift from crop eradication, to efforts to deny international traffickers

"safe havens" anywhere in the world. What this would mean concretely is increased progress in negotiating extradition treaties with countries that now harbor traffickers, and improving operational co-ordination between foreign and U.S. police agencies to take advantage of both extradition and investigations and prosecutions within the host country.

Such a thrust has potential for two reasons. First, it is a narrowly focused program. It has none of the logistical and bureaucratic difficulties of massive crop control programs. Second, it is targeted against a factor of production and distribution that I think is the factor that is in long-run short supply, namely individuals with a sufficiently well established reputation for both reliability in successful transactions, and viciousness in betrayals that they become the primary people with whom large drug deals can be made. If this is the factor that is in long run short supply in the illicit industry; and if the international program could squeeze this factor even more by denying notorious dealers safe havens anywhere in the world; then the international program would have another more reliable and more powerful way of making a contribution than cultivating the motivations and capacities of foreign governments to control illicit crops.

## 2. Interdiction

In recent years, the interdiction program has probably been the fastest growing component of the supply reduction effort. The growth has come primarily as a result of engaging the U.S. Coast Guard and other military agencies in the pursuit of smugglers on the ocean, and in the air. The results of this effort can be seen in the dramatic difference in the price of drugs landed in the U.S. as compared with

the price of drugs off-shore, or in foreign source countries.

The principal problem with interdiction as the dominant instrument of supply reduction efforts is that it is principally focused on a single drug - marijuana. That is particularly true insofar as it concentrates on bulk shipments clandestinely landed between ports of entry, for marijuana is the only drug whose volume restricts smugglers to these methods of getting the drugs across the borders. Smugglers of heroin and cocaine have many more options, and much more of these drugs seem to come across in relatively small containers through ports of entry. So, the engagement of the Coast Guard, the Navy, the Air Force, and the Federal Aviation Administration, turns out to be an initiative that is primarily targeted against marijuana. To the extent that one thinks marijuana is currently a high priority drug to control, this may be counted a benefit rather than a problem. But to the extent that one thinks other drugs are higher priority, or to the extent one wanted flexible supply reduction instruments that could be used for controlling several different drugs, the current interdiction program has important limitations.

The interdiction program has a further limitation. It is principally targeted on finished inventories of drugs. There is a certain, concrete satisfaction in capturing drugs that would otherwise reach illicit markets. But as in the case of crop elimination, one can wonder whether the inventories are what is in long run short supply. When we think about legitimate firms, we don't think of their inventories of finished goods as being particularly important. Obviously, the inventories have value, and to the extent they are eliminated, the firms has less capital than it otherwise would. But the

inventories usually reflect only a small portion of the total value of the firm. When Tylenol had to be taken off the market, for example, no one expected the company to go out of business, even though a month's worth of production had to be written off, and their reputation had been seriously tarnished. Similarly, it is hard to understand why we think it is so important when drugs are seized. This may be important if the firm was a short term operation, and the seized shipment represented a large fraction of its total assets. But there is no particular reason to believe this. Indeed, most of the time it seems that shipments are divided up precisely to hedge against the possibility that the drugs will be seized. Indeed, current estimates indicate that somewhere between a quarter and a third of all marijuana shipments are seized, but this has had little impact on the effective price of marijuana. So, our experience and our reasoning suggest that finished goods are not a factor of production and distribution that is in long run short supply, and consequently, that a policy instrument directed primarily against such inventories will not exert an enormous amount of leverage on the long-run effective price of drugs in illicit markets.

### 3. Domestic Enforcement

The standard criticism of the domestic enforcement program is that it is "too far from the source" of drugs to allow effective control. By this reckoning, both the international program and the interdiction program are preferred instruments because they attack the chain of production and distribution at an earlier phase than domestic enforcement. A second criticism is that the quantity of drugs seized in the domestic enforcement program is too low to allow it to have much effective control. A third criticism is that too much of the effort

within the domestic enforcement program goes into low level cases which are farthest from the source, and involve the smallest quantities of drugs.

The difficulty with these criticisms is that they rely on assumptions about the best way to control the supply of drugs that have little evidence or reasoning to back them up. In fact, they emphasize physical relationships over economic relationships. A priori, there is no particular reason to assume that resources are better spent "nearer the source." True, if one stops the drugs earlier rather than later one need not worry about the later stages. And, true, the drugs may be at their maximum concentration with respect to volumes at the point they are processed into finished products. But neither of these points indicate that the source is the most important point to attack. As we have seen, it may be quite difficult to mount an attack at that point. Moreover, both these arguments make too much of the drugs, and not enough of the entrepreneurs and firms whose continued determination and adaptability keep the drugs coming even if production runs are spoiled and inventories seized.

If the principal difficulties that confront dealers in producing and distributing drugs are risks posed by enforcement agents and other criminals, then the crucial factors of production and distribution are not raw materials and technology and warehouses, but the determination and capacity to complete transactions in this risky environment. And those may be qualities possessed by specific individuals or trafficking networks - not the raw materials, not the finished inventories, not even the financial capital. If these observations are accurate, then any instrument that attacked the capacities to complete risky

transactions would be more effective than those that attacked raw materials or inventories.

It is here that domestic enforcement operations have advantages as an instrument in a supply reduction strategy. For one thing, the principal objective of domestic enforcement are the traffickers themselves. The drugs are important only as convincing evidence that will be sufficient to jail, and therefore presumably immobilize, the traffickers. In addition, the tactics of domestic enforcement operate principally on the capacity to execute transactions. The principal tactics include informants, undercover agents, and wiretap investigations. The first two attack the ability to make transactions by forcing dealers to be wary of associates, employees, and customers since any of these might become an informant, or might be an undercover agent. The third makes it difficult for traffickers to communicate efficiently with associates, employees, and customers. So domestic enforcement presses hard on the factors of production and distribution that seem in long run short supply.

It is worth noting that slowing transactions and forcing dealers to be cautious has value at many different stages of production and distribution. Even at the lowest levels of distribution there are some advantages in forcing dealers to be cautious for it prevents the aggressive recruitment of new customers, and makes it more difficult even for regular consumers to find drugs. In short, street level enforcement increases the effective price of drugs in illicit markets. At intermediate or high levels, each transaction that is slowed reduces the overall capacity of the system to supply drugs, and each trafficking network that is taken out results not only in the loss of current inventories, but also the future capacity to supply.



Moreover, it is possible that the same techniques of attacking transactions, and immobilizing those networks that have developed a continuing capacity to execute transactions in a risky environment would have enormous value in the interational program as well as in the domestic program. Indeed, while one cannot assume that foreign countries have laws and enforcement agencies that allow them to attack cirriminal trafficking organizations, it seems that it is primarily convention that makes us think of the international program as focused on raw materials, and the domestic program as focused on trafficking networks. In principle, one could have a criminal enforcement program that moved across national boundaries. And that might hold the best chance not only for minimizing the supply of drugs to illicit markets, but also for advancing the subjectives and using the resources of organized crime policy as well.

#### D. An Alternative Approach to Supply Reduction

If the right way to think about supply reduction strategies is to guess which factor of production and distribution is in long run short supply, and then to devise a strategy that presses hardest on that factor; and if I am right that the factor that is in long run short supply is the capacity to make transactions quickly and effectively; then a way is opened to think about the supply reduction strategy in wholly different terms. Specifically, the principal aim should be to frustrate transactions and immobilize trafficking organizations.

With this as the principal aim, the way that we think about each of the other instruments changes. Of course, the international efforts to control legitimate crops, and eradicate illicit fields retain their special occasional importance. And the separate arguments for

maintaining pressure at the street level remain strong. But we can also see the international program, interdiction, and domestic enforcement all represent different opportunities to slice into the illicit industry, and create possibilities for developing cases against illicit strategies. To see how this alternative strategy would work, it is useful to introduce some different analytic terms.

1. Patrol versus Investigation

If the goal is to immobilize trafficking organizations that are able to complete transactions with ease and efficiency, the central problem is to determine who the traffickers are, and to develop evidence against them. This sounds like a problem of criminal investigation, and so it is. But all investigations must begin somewhere. In ordinary criminal investigations, the start is usually provided by a victim or witness to the offense, or by physical evidence available at the site of the crime. In narcotics investigations, there is no victim, the witnesses are likely to be implicated in the crime, and the physical evidence won't reveal much. On the other hand, the traffickers are likely to continue committing offenses, and therefore the opportunity to observe a crime occurring is high if the enforcement agencies can get themselves into position to see it.

In practice, this means that narcotics investigations are extremely dependent on informants and undercover operating who can provide evidence themselves, or produce sufficiently precise and accurate information to justify a wire-tap or other less intrusive but more expensive and less penetrating forms of surveillance. They are the ones who can position the evidence gathering capabilities of enforcement agencies, and how to infiltrate undercover agents into the illicit industry.

One answer to that question is to attack the illicit supply systems in the places where it is least protected. This means on the streets in central cities where the distribution system must finally come into the open, or, it means at the inherent vulnerability of having to move drugs physically from one place to another. Or, it means as raw materials are being collected from remote fields in foreign countries. Surveillance and undercover operations conducted in these areas will not only frustrate transactions at these levels, and remove small stocks of drugs, but they will also produce the rumors, the physical evidence, and the potential informants who might provide the basis for more intrusive and determined investigations of larger networks.

This will not always work, of course. Many people arrested at this level will be small scale, transient operators. Others will be employees, but be unable to supply much information. Still others may know a great deal but be afraid to reveal it. Moreover, there are other ways of developing informants. One can offer large payments to those who are greedy, or protection to those who are afraid, or the combination to potentially valuable sources. And, just as low level enforcement operations against street dealers, smugglers, and collectors in foreign countries can produce potential informants, all successful investigations against median and high level investigations can also yield informants. So, successful cases can be built from many sources other than low level cases.

But the argument is that a high volume enforcement effort at low levels is often quite valuable as a source of rumors, intelligence and informants. In fact, there is an argument supporting low level

enforcement, and even more unexpectedly, for a low level enforcement that is not directed or guided by intelligence about the operations of major traffickers.

The strength of investigative efforts is their capacity to make connections among known facts, and inform enforcement agencies how to position themselves to penetrate existing trafficking organizations and develop evidence for a successful prosecution. The weakness of investigation is that it becomes increasingly narrow, and discounts information that cannot be related to something that is already known. In attacking something as mysterious and dynamic as the illicit drug industry, this tendency to become narrow is potentially very dangerous. There is always the chance that one is concentrating on only a small piece of the overall industry, and that there is a newer or better shielded piece that has so far escaped notice. If this is true, the only way that enforcement agencies could discover this is to look in areas where they didn't expect to find something. That is the role of broad, untargeted low level enforcement agencies. Like pickets and patrols sent out by a main military force to maintain contact with a mysterious enemy force, agents on the street, at the border, and in the market places and bazaars of foreign help the main investigative forces stay in touch with the emergence and development of new trafficking capabilities.

For analytic purposes, it is useful to think of these broad, low level enforcement operations as patrol operations that are scanning for drug offenses, and the remaining pieces as investigative operations that can develop the leads into powerful cases that immobilize major trafficking organizations. Moreover, in many ways, the patrol operations perform better if they are broad and random, rather than

narrowly targeted. A random strategy is more successful in deterrance, and in disclosing previously unsuspected trafficking networks.

## 2. The Role of Intelligence and Conspiracy Investigations

To take full advantage of the potential relationship between investigative and patrol functions, and to produce the maximum impact on trafficking organizations, it is necessary that some previously neglected capabilities be more fully developed. Two are particularly important: the intelligence function within the investigative agencies, and the capacity to develop and prosecute conspiracy cases within investigative and prosecutorial offices.

By the intelligence function, I mean the capacity to make disciplined use of the information about trafficking networks that is potentially available to the investigative agencies. This is essential not only to take full advantage of any opportunities that present themselves, but also to make sure that the investigative agencies are not misled by informants. As we have seen, there is always an incentive for traffickers to inform on their competitors. And there is always an incentive for enforcement agencies to use the information and keep the informant alive. This is fine as long as the informant is not any more important than the traffickers he is delivering to the enforcement agencies. But if the informant is himself a dealer, then the result of his informing looks like he and the enforcement agency are colluding to maintain his position in the market. The only way to guard against this is to have relatively accurate information about both the informant and the target, and to have someone other than the case agent monitoring this situation. That is something that a good intelligence analysis function could provide.

The capacity to make conspiracy cases is essential because there are many traffickers who can be revealed only through conspiracy indictments. They may never be in direct contact with drugs, or with the violence and corruption that provide the structure within which the drugs can be confidently moved from place to place, and from person to person. In addition, conspiracy cases have the advantage of simultaneously immobilizing many pieces of a trafficking network leaving no remnants from which a new network might be constructed. If a single person is removed, he may be replaced. If the entire network is eliminated, replacement is more difficult because more of the personal relationships that are so essential to successful trafficking remain.

The challenges to investigators in making conspiracy cases are partly matters of technique. Electronic surveillance is often an essential ingredient. So, are financial investigators. And each of these require the development of some special skills. But producing high quality conspiracy investigations also requires a change in attitude. They require patience - including situations where enforcement agencies allow some dealers to continue operating even though they are indictable. They also require risking current cases that are certain, for a future case that may or may not develop. Finally, conspiracy cases often depend on stories rather than hard physical evidence. And, even though the stories might be a more accurate account of what has been happening than the hard physical evidence, it requires a real knack for analysis and inference to make the case solid and convincing. In short, patience, a willingness to take risks for an uncertain gain, and thought are required, and these are not always qualities that are plentiful in action oriented

enforcement agencies. Yet without these, the aggressive actions might have less impact than they otherwise could.

#### IV. Summary and Conclusion