EPILOGUE: CONNECTING DRUG POLICY AND RESEARCH ON DRUG MARKETS

by

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Over the last two decades a substantial body of field research has accumulated describing characteristics of various low-level markets for illicit drugs, primarily cocaine and heroin. At least for a few American cities, a good deal is known about who retails these drugs, the size and stability of the organizations in which they work, their careers, the prices they charge, and the incomes they earn. A much smaller body of research has examined various aspects of high-level trafficking.

A principal, perhaps dominant, motivation for this research is that it can inform policy and lead to reductions in the nation's drug problems. It is unclear that the existing work, summarized in the first half of this chapter, does so; the second half of the chapter describes how a more policy-relevant research agenda might be developed.

WHAT HAS BEEN LEARNED?

I focus on retail markets because for higher-level trafficking there exist so few studies that one could only list their findings individually rather than draw consistent conclusions. Only the major substantive results, with scarcely any reference to methods are presented. The review is limited to studies that have been interested in more than just prices.

The price literature is reviewed in Caulkins and Reuter (1998). The principal finding about prices is that they are not only high (with

heroin more than 50 times the price of gold) but also remarkably variable across places such as cities and neighborhoods (see e.g., Caulkins, 1995); they even vary within a single market location in short periods of time (see e.g., Weatherburn and Lind, 1997). Intriguing as these findings are for those interested in market structure, no one has yet attempted to explain what kinds of markets would generate these patterns of variation, though Caulkins (1997) has presented a model of diffusion of cocaine across metropolitan markets that begins the research task.

Some of the principal findings about drug markets are:

Monopoly control is rare. Prior to 1980, it was widely believed that the Mafia had dominated the major illegal markets such as those for bookmaking, loansharking and even for heroin importation into New York City until the late 1960s (e.g., Cressey, 1969). Despite finding that some dealers within the U.S. have enormous incomes and traffic in large quantities, no researcher has found evidence, except on the most local basis (e.g., a few blocks), that a dealer organization has the ability to exclude others or to set prices, the hall-marks of market power (Katz and Rosen, 1994; chapter 13).

Even at the trafficker level, market power seems elusive. Notwithstanding references to the Medellin and Cali "cartels," these seem to be only loose syndicates of independent entrepreneurs who sometimes collaborate but who also have to compete with other, smaller, Colombian smuggling enterprises (Clawson and Lee, 1998: Epilogue). The small share of the retail price accounted for by all activities up to import is strong, but not conclusive, evidence of competition at this level². The continuing decline of prices over an almost twenty-year period at all levels of the market suggests that, if market power ever existed, it has now been dissipated. Thus, there is no level at which policy makers need be worried that tough enforcement will lead to price declines because a cartel is broken, a matter raised thirty years ago by Schelling in his classic paper on organized crime (Schelling, 1967). The explanation for the lack of market power may also be contained in Schelling's paper; the Mafia may have been collecting "rents" on behalf of corrupt police departments that had exclusive jurisdiction and little external scrutiny.³ Those departments are now less systemically corrupt and face substantial oversight from federal investigative agencies, which was lacking until recently.

Retail employees now have very low earnings. In 1988 in Washington, D.C. low-level drug dealers were estimated to earn an average of \$30 per hour, four times their legitimate wage rate (Reuter, et al., 1990). However, by the mid-1990s a number of research studies reported hourly earnings apparently well below the minimum wage (e.g., Caulkins et al., 1999; Bourgois, 1995). This is broadly

consistent with the assumption that the markets are competitive. In the 1980s there were rents for being an early entrant into a cocaine market characterized by very high levels of violence; the returns may have also been merely the accounting returns to survival in that market. These rents have been eroded by the maturing of the market, while measured incomes may be lower because of the reduction in violence and what might be called "barriers to exit." That is, retail level workers, now mostly in their 30s with more than a decade of addiction and extensive careers of jail, have difficulty in finding alternative employment, legal or criminal.

That most low-level sellers are frequent users of the drugs they sell is a distinctive and overwhelmingly important feature of cocaine and heroin markets. Users have lower costs than non-users in markets in which a principal cost element is time of exposure to arrest. Whereas the drug-abstinent dealer must sell all of his bundles in order to realize his returns, the user obtains the same returns by selling a smaller number of bundles and retaining the remainder for own use. This strategy reduces the arrest risk associated with a given return. Users are also more likely to have already been convicted of drug offenses and thus lose fewer legitimate work opportunities as a consequence of an additional arrest.

Structure and conduct varies across space, time and drugs. Some markets have large, stable distribution organizations, while others are predominantly serviced by individual dealers with only opportunistic relationships to other participants. These different structures may be the result of: markets passing through phases (initiation, expansion, maturity); the level and form of enforcement; and characteristics of the drug or of the users. Johnson, Dunlap and Tourigny (this volume) assert that police targeting has led to the demise of "vertically integrated, relatively large crack distribution groups controlled by one or two dealers who benefit from the labor of 15 or more people." The difference between crack and powder cocaine markets in the 1980s may have been primarily a consequence of the fact that the crack market was initially dominated by very young males, who were more, willing to engage in violence than those who serviced the powder cocaine and heroin markets, and less reliable as commission agents. Aging of sellers may lead to less violence and again to more stable, though small, organizations. The same result can follow simply from a selection effect: the more violent sellers have higher probability of exit over time because they are at greater risk of death and incarceration themselves.

Immigrants play an important role. The European literature is particularly rich and consistent on this issue. Immigrant groups are prominent among drug dealers in almost all wealthy nations in West-

ern Europe. Killias (this volume) shows that the role of Albanians in the Swiss market extends well beyond drug importation. Ruggiero (this volume) supplements this finding through his study of the source-country population, revealing that drug dealing and importation are important activities for immigrants. In the U.S., despite the dominance of foreign nationals in the importation of cocaine and heroin, the evidence on immigrant participation in retailing is inconsistent. At least two of the most prominent groups in importation (Colombian and Chinese) play a much smaller role in street selling. In the U.S., minorities provide an alternative underclass cut out of mainstream of economic opportunity in the same way as immigrants in Europe.

Immigrants have advantages both in importing and retailing. In the source countries they have better knowledge of potential sellers and opportunities for corruption. In the U.S. their communities are less cooperative with the police. Even language can be a major asset. For example, few police departments are able to conduct effective wiretaps or other electronic surveillances of people speaking various Chinese languages. Immigrants have better opportunities for exit and weaker licit market opportunities than most of the native population. Continuing immigration is thus likely to serve as a source of new entrepreneurs and reduce the effectiveness of enforcement interventions. This situation may have been the case with organized crime and Italian immigration in the early part of the twentieth century.

Retailing is characterized by low trust. Whether it be from product impurities, violence, or police action instigated by informants, dealers and customers operate in an environment of extraordinary riskiness. Loyalty ought to be a highly valued quality, much cultivated and rewarded as it is in the diamond business, another market with few enforceable legal contracts. Quite the contrary, even within extended families, seems to be true for cocaine and heroin. Perhaps this reflects desperation of customer needs, the erratic behavior of people who use cocaine frequently and the incentives to inform created by intense enforcement and lengthy sentences. Loyalty is simply an implausible attribute in those circumstances.⁴

This lack of loyalty manifests itself in a number of ways. Akhtar and South (this volume) refer to how "lower price wins over loyalty," a finding that also puzzled me when I was interviewing mid-to-high-level cocaine and marijuana dealers in the mid-1980s (Reuter and Haaga, 1989). While every dealer we interviewed proudly emphasized the high quality of his product and service, each thought a customer would desert as soon as he found a lower-price source. Even kinship ties seem weak in face of these threats. The recent finding (e.g., Riley, 1997) that customers have multiple sources is yet another manifes-

tation of this response to uncertainty. The high-level network analyzed by Natarajan (this volume), reflecting the very rapid turn-over in high level traffickers, at least in the United States, hints at this kind of avoidance of dependence on a single supplier at high levels.

These factors jointly help explain why cocaine and heroin markets are characterized by small, short-lived, vertically unintegrated and technologically unsophisticated sole proprietorships that generate great violence and disorder. This has an important strategic implication: investigations of high-level traffickers are not only likely to be challenging, because of the lack of many subordinates with access to the principal, but also have to be justified on grounds of condign punishment rather than any distinctive effect on the availability of drugs.

MOTIVATING RESEARCH ON MARKETS

I can identify three distinct motives for research on drug markets.

- 1. Prurient curiosity, a powerful motive for studying a phenomenon as large and subversive as drug distribution. That curiosity is served by more journalistic books such as Simon and Burns' *The Corner* (1996) and accessible ethnographies such as Bourgois (1995) and Williams (1989).
- 2. Scientific interest in the role of law in markets. Illicit drugs are, ultimately, consumer goods, and like other goods in modern societies they are provided primarily through markets. Illegal drug markets lack some of the principal mechanisms that facilitate modern commercial markets. Learning how markets work when the government and courts aim to suppress rather than support them may provide insights for those interested in law and economics. This is not likely to generate much funding and seems a stronger motivation for the National Science Foundation than for the National Institute of Justice or the National Institute on Drug Abuse, the principal funders in this field.⁵
- 3. Raising the effectiveness of enforcement, which aims not only to lower the availability of drugs but also to reduce the harms associated with these markets. The relevant harms include: violence, corruption, disorder around market places, illegal income, the size distribution of that income, and the cumulative number of participants, especially the number who end up with felony records. That is, enforcement should not only aim to reduce drug use but also to punish those who use violence as an element of their conduct; to make corruption risky enough for both dealers and officials so that few corrupt transactions are consummated; to prevent

the accumulation of large fortunes; and to protect juveniles from the temptations of drug dealing as well as drug use.

Research might help policy in at least three ways:

- (1) Developing measures of effectiveness. Eck and Gersh (this volume) tentatively propose as an indicator the number of organizations destroyed, which is similar to the measure in the latest Performance Measurement Effectiveness system developed by the Office of National Drug Control Policy (ONDCP) (1998). The value of that measure depends on the organization of the market as a whole. If dealing enterprises are truly ephemeral, this measure may capture little of consequence, though it is certainly no more myopic than maximizing the number of arrests or quantity of drugs seized.
- (2) Reconceptualizing the problem. How do drug markets, both as places and as mechanisms for distribution, adversely affect society? The much cited Boston Youth Gun Project, concerned with suppressing homicide among young males in a poor section of Boston, came in part from an understanding of how they acquired guns and the transience of explicit markets for firearms (Kennedy et al., 1996). That project provides an exemplar of how detailed studies of markets may alter the way the problem is viewed by enforcement agencies.
- (3) Choosing among methods of reducing drug markets. Discretion in policing surely reaches its extreme in drug enforcement; the doubling of marijuana-possession arrests between 1992 and 1997 (to 675,000) in the face of flat usage of the drug⁶ is just the most recent manifestation of this power. Police in a major city can rapidly increase drug arrests if they choose. What is important is where and when they focus their activity, their choice between buyer and seller, and how aggressively they pursue low-visibility selling, etc. Market studies focused on dealer conduct can help inform these decisions.

A RESEARCH AGENDA

A characteristic of the research in this area, as in many others, is that policy implications are drawn from studies, which were simply not designed for that purpose. For example, Rengert et al., (this volume), conclude that "local" demand should be reduced through increased treatment, better employment opportunities, etc. No doubt these are reasonable propositions, but they are not implications of the research reported *in* the paper, which shows only that there are limits to what can be accomplished through enforcement, not that other programs can do more. Policy questions have to be built into the research design, not grafted on at the end.

The starting point for a policy-research agenda should be identification of the decisions that are to be informed. One line of writing, particularly associated with Kleiman (1992; chapter 6), considers what highly rational enforcement agencies would need to know in order to reduce drug use, drug selling and associated harms. These writings should be treated as prescriptive rather than positive analyses, since there is no way to show that enforcement agencies have such clear strategic aims.

Research on policing generally can provide a model here. It has only been through an understanding of the dynamics of policing itself, such as the high discretion inherent in the individual officer, the reliance on community for information and the norms of police, that it has been possible to identify the central issues and capacities of police departments and thus what will be useful research.

The same has not yet been accomplished for drug enforcement. Is it likely that policy will be influenced by the development of a taxonomy of dealing organizations, the subject of many articles in this area? Perhaps whether to use "buy and bust" to work "up the chain" in a particular market should reflect whether the organizations in this market are "corporate" or "freelance," to use a common terminology (e.g., Johnson et al., this volume) but no research has described decision-making by enforcement agencies in order to determine how these decisions are made.

Indeed, for a host of reasons (the glamour of large seizures, condign punishment of those who apparently profit most from the trade, etc.), agencies will attempt to apprehend those who deal in larger quantities and to seize drugs in larger bundles. In an immature market it is possible that the removal of a few dealers will substantially reduce the efficiency of the market, as measured by price dispersion and search time. For mature markets such as those for cocaine, heroin and marijuana in large American cities in the late 1990s, it is implausible that the removal of any small number of dealers could have such an impact. Additional research on market structure is hardly needed to make this point, though Kleiman argues that neighborhood markets may indeed be quite fragile and thus affected by the elimination of a small number of dealers, as he found in the town of Lynn, Massachusetts in the mid-1980s (Kleiman, 1988).

It is useful to note here just how many persons are involved in the drug trade. Total revenues are estimated to be \$50 billion (ONDCP, 1997). If average earnings of a full time participant is \$50,000 per annum, well above recent estimates, then the market supports one million Full Time Equivalents (FTE). Many participants are only part-time; and, assuming that there are 1.5 participants for each FTE, that produces a total of 1.5 million people regularly involved in sell-

ing activities. It seems likely then that in any large city one would have to remove many hundreds of dealers to have an effect.

Enforcement agencies do seem to have accepted the value of making markets more discreet (e.g., by driving them indoors) —even if that makes further enforcement more difficult — and of reducing the violence associated with retailing. Studies of markets that allow the assessment of how well different enforcement strategies accomplish these goals may have considerable value.

Johnson et al., (this volume) claim that: "Extensive investment in crime control has not had — and probably never will have — important measurable impacts upon drug use patterns, drug selling patterns or prices of illicit drugs in the nation's inner cities." This is a strong policy conclusion that requires what we transparently do not have, namely an understanding of how enforcement interacts with price-and search-time determination. It cannot be established by observational research alone but requires analysis of the relationship across time and space between enforcement and prices. It is also contradicted by the Arrestee Drug Abuse Monitoring System (ADAM) finding that New York City arrestees were much more likely to report not having been able to score on at least one occasion in the past month than arrestees in cities with apparently less vigorous streetlevel enforcement. Moreover, even if we find that current enforcement has limited impacts, that doesn't say much about enforcement based on tipping models and using direct communication with offenders to shape behavior. But ethnographic studies such as those carried out by Johnson and colleagues (see references in Johnson et al., this volume), if focused on the process of price determination at the individual level, can help the development of models for this analysis.

CONCLUSION

If this field of study is to grow, researchers must establish the utility of their work with law enforcement agencies. This is not merely to generate more research funds but also because access to data for any but the lowest levels of the market requires assistance from the agencies. Adler (1985) was able to describe some of the characteristics of higher-level cocaine markets in their infancy through ethnographic work that had a largely accidental origin. Fuentes (1998) a mid-level police officer, was able to obtain interesting interviews with Colombian traffickers, for his doctoral dissertation, through the Drug Enforcement Administration, perhaps because of his credentials as an enforcement officer. An active research agenda will require more predictable modes of entry. The agencies are not simply expressing prejudice against academic researchers by screening so heavily. Pro-

viding researcher access is both time-consuming and risky in terms of loss of authority and privacy-protected information. They will need to be persuaded by a clearer articulation of the policy value of this work.

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NOTES

- 1. The best evidence against control is simply the ease with which new sellers enter and the speed with which dealers depart. There may be rents for various capacities but certainly no power to exclude.
- 2. If demand is inelastic with respect to price, then a seller with market power can increase revenues and decrease costs by cutting production until reaching a level at which the demand is elastic. Though the demand for cocaine and heroin may have elasticity of greater than one with respect to final price at current levels, it is very likely that that elasticity is less than one with respect to high-level prices, though there are extreme models of price mark-up from import to trafficking that would yield a different result (see Caulkins, 1990).
- 3. "Economic rent is defined as those payments to a factor of production that are in excess of the minimum payments necessary to have that factor supplied" (Varian, 1993).
- 4. Caulkins (personal communication) suggests another, more technical factor. The instability of drug markets makes repeat transactions less likely; that encourages defection. In addition, because of drug use and other factors that lead to continued criminal involvement, this is a population with a high discount rate. That, in turn, encourages defection.
- 5. Perhaps illegal drug markets can inform other disciplines broadly; I am not well enough read to venture an opinion on this.
- 6. Use has increased among adolescents, as measured by either the National Household Survey on Drug Abuse (NHSDA), Monitoring the Future or Arrestee Drug Abuse Monitoring system. However, the NHSDA also provides data on adults; rates have declined for those over 24 years of age and the net effect is a flat total prevalence since 1990.