

Relaxing the Prohibition: Effects on Supply and Demand.

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As an economist, I am interested in a particular aspect of drug policy: heroin policy. But I am very much aware of the non-economic and emotional dimensions of the problem. I see four major aspects to the problem of drug use.

Insert Table 1

The first one is that of drugs as a commodity, where we are interested in such things as the supply of the drug, the demand for the drug, the quantity that is exchanged, and the price at which it is sold, whether or not those markets are legal markets, as for alcohol and tobacco, or illegal markets, as for heroin. The central features of a commodity such as heroin which is sold on black markets are the high returns to the sellers and the high costs to the buyers, which in turn have other consequences which I'll go through. A policy of prohibition gives rise to certain social costs which we are interested in determining.

There are three remaining aspects of heroin, which make rational discussion difficult at times. The second one is the attractiveness and, indeed, for some people, the addictiveness of the drug. The central features which are emphasised are the loss of control and the perhaps unbridled pleasure associated with the use of that drug in some circumstances in particular ways. Here, fear is a dominant emotion—fear of enslavement by the drug, fear of oblivion or death—and the response has led to prohibition. I've called this view Faustian Ambrosia. Faustian because it embodies a sort of pact with the devil—you sell your soul—and ambrosia because it has this food-of-the-gods element to it in terms of the pleasure the drug provides.

Third, we have become aware in the last five or ten years of the problems of heroin as a vector for disease, because it is taken by injection and also because it is commonly adulterated. The adulterants were always a matter of concern but with the appearance of AIDS, public health policy has focused on injections of heroin as a vector for HIV infection from intravenous drug users to the heterosexual population. Again, fear of death, fear of disease, leading again to regulated supply or perhaps leading to ways to control the method of administration so that at least for HIV the risk of infection is reduced.

Finally, heroin can be viewed as an analgesic, a unique pain killer with little nausea as some physicians claim. I'm not putting these summary points up here to say that they are finally concluded, but there is an argument for the use of heroin as a palliative for the terminally ill. There was a fifth aspect, but it's historical. That was the strategic element of the Opium Wars last century. I want to focus on the first of these aspects, and in particular I want to talk about the goals of policy.

What are the goals of drug policy? What should they be? We presently have a policy of

prohibition. What are the costs of the prohibition? If we are prepared to reduce the numbers of drug users at any cost, then it may be that we are not paying enough to make substantial reductions. But I would argue that, rationally, this is not the goal we should be pursuing. Rather, we should be attempting to minimise the harm caused by drug use, both to individual users and to society in general. In other words, to use the economist's language, we should be attempting to reduce the social costs, and, at the margin, balancing social costs against the social benefits of drug use. There are trade-offs—any attempt to control the drug will lead to trade-offs. John Marks put up a slide earlier which showed some of them. His data show two regions of demand—elastic and inelastic demand—and attempts to control or to make more freely available drugs such as heroin have different consequences depending on the demand elasticity with which we are dealing.

As an economist, I'm interested in looking at the supply of the drug and the demand for the drug. Earlier last year I received some publicity in the press, and as a consequence of this, out of the blue, I got a letter from a prisoner in Victoria. I promised him confidentiality, and he sent me some data—unique data, because this was a market survey which was conducted by the illicit industry in Melbourne in 1981. From this data I've been able to determine the profitability to the importers and the profitability at the different levels of the distribution pyramid in Australia, which is very similar to the pattern of distribution which John Marks showed earlier. These figures are consistent with data obtained in 1988 in Sydney by Dobinson and Poletti (1988). Table 2 shows that the drug has different stages of distribution and dilution and that the quantity of the diluted or cut drug increases as one goes down the pyramid.

Insert Table 2

The interesting aspect here is the profitability. Table 2 compares three sets of data: the data which came from the illicit Melbourne survey, the data which came from the Dobinson and Poletti (1988) survey, and data which came from some work that Mark Moore did for his Ph.D. at Harvard in the early 'seventies (Moore 1977). We see that the gross return—the maximum value added as a percentage of purchase costs—in Australia in the eighties is very similar to the New York City figures: above a thousand per cent. The gross return doesn't include any costs of transport and so on, but is extraordinarily high. Consequently, we can see that apprehending one importer means that, while ever there are unscrupulous entrepreneurs, the high profits will ensure that he is replaced. As one comes down the pyramid to wholesalers and ounce dealers, the gross profitability falls. The lowest line, the ounce dealers line, is perhaps misleading because these are the people who in John Marks' diagram are further down the pyramid, who are consuming as well as selling, and for the most part are financing their own consumption by diluting and on-selling the drug.

The reason this survey was done, so my informant tells me, is that over a meal in a Chinese restaurant the five major dealers in Melbourne—no names—who were concerned that they were only selling about twelve pounds a week of 80%-pure heroin, decided to see where it was going, where the profits were being made, what the quantities

and diluting rates were, in order to increase their throughput. They could shift more if they could move it down the pyramid. This is an interesting point because it suggests that there was a resistance at the lower end of the pyramid to further sales. In other words, the market was limited by demand. So far as I know, they didn't consider lowering their prices, and cutting back on the gross profits that they were making. They found that if people down the distribution pyramid with habits who were financing their habits with on-selling couldn't get any additional heroin between Christmas and New Year's, then they would use rather than sell, which would leave them in debt to their distributors. They would subsequently find it very hard to earn enough money to pay off those debts. And this, the survey found, was causing some disruption to the distribution chain. As a result the suppliers decided not to cease supplying over Christmas/New Year's. The full results of this survey are to be published (Marks 1990*b*).

The survey corroborated what other people have found: there is a large number of occasional users, people who are recreational—"opportunistic" was a word used earlier today—users. In fact the ratio of occasional to frequent users was about ten to one. Ten recreational users to every person with a regular habit, to every one person, in other words, who had lost a degree of control over their drug use.

This figure is similar to data collected by the Joint Parliamentary Committee (1989), the Cleeland Committee, last year, and it's also similar to data which Zinberg (1979) found in the United States. The difference between this survey and the others is that it was done by the people at the top of the distribution pyramid, who had the advantage of knowing how much of the drug was moving down the pyramid in order to know that they were getting data across all users at the bottom of the pyramid. The other surveys came in from the outside, sideways, and couldn't know whether there were some links down the pyramid that they were losing.

To return to the point I was making about costs. Our policy should be to minimise costs, both to the users and to the rest of society. The costs to users are roughly of two sorts: the health of the users, and what Moore has called their dignity and autonomy. Users' health may suffer to some extent because of the illicit nature of the drug use. Certainly, they are at risk of contracting HIV because of shared needles. Often they suffer low dignity, low autonomy, and low self-esteem, although whether this is a cause or an effect of illicit drug use is unclear. As targets of the criminal-justice system, their self-esteem is unlikely to grow.

The costs to non-users can be listed under four categories: (a) crimes which are committed in relation to illicit drug use by drug users; (b) diseases which are moving, as I've suggested, from the IV drug-using population into the population at large via drug injections—again, perhaps because of the drug itself, perhaps because of its illicit nature; (c) the public resources used, the use of taxpayers' money in the criminal justice system, the use of taxpayers' money in the health care system; and, (d) finally, public morale, so-called, that is to say, the concern we have that the law is being brought into disrepute by large numbers of people breaking the law; the concern we have that members of the criminal-justice system are corruptible and are being corrupted by the vast profits which

are there to be earned, as the slide on the screen suggests. Those are the costs.

Now, a framework for analysis. As I suggested, we should not attempt to reduce the number of addicts at any cost. We want to question why we are concerned about drug use. Partly, we're concerned about it because of the costs which I've listed. We're concerned about it in a paternalistic way, because of the problems of the users themselves. We're also concerned about it—at least as a tax payer I'm concerned about it—because of the additional costs which non-users suffer. Now, if there were no demand for the drug, then I wouldn't be standing here today. But there is a demand for the drug. If the drug were used in such a way that those costs were very low or negligible, then again there would be very little I would have to say today. But they are not negligible.

The next question we have to ask is: are those costs high because of the drug itself or because of the illicit nature of the drug? Because of the prohibition, the drug is only available on black markets. If we felt that the users' costly behaviour was a consequence of the drug use itself, then we might conclude that the prohibitionist policy we're following is the correct one, and that we're just not pursuing it hard enough. In other words, if it were the case that the drug made people into "crazed maniacs" and the behaviour that these stoned people engaged in imposed the sorts of costs that I've gone through, to themselves and to society, then, yes, we should be attempting to eliminate the drug, to improve the health and dignity of the users or the people who would have been users had they been able to obtain it, and to reduce the crime and other costs to non-users. If, instead, we believed that the costly behaviour was due to the illicit nature of the drug, was due to the fact that it is bought on the black market with the quantity, the quality, the kind of adulterants, the source of supplies all unknown, at very high prices, and indeed with the incentive for users to share needles and therefore to spread various diseases, in particular HIV, then the correct response would not be to further tighten the screws but rather to provide a source of the drug which was not illicit. In other words, to decriminalise or to make it legal under some sort of regulatory regime. If, as some people have argued, the costs associated with drug use were not necessarily to do with the illicit nature of the drug, nor with the drug itself, but rather were due to underlying causes, such as the restricted opportunities of people in U.S. ghettos, then either attempting to prohibit drug use or making the drug available by legal supply would really be treating the symptom rather than the primary cause. The correct policy in this case would be to expand the opportunities available to these people, to reduce employment so that the people had higher self-esteem and greater opportunities for living successful, fulfilled lives.

There is a fourth possibility—that there is a proportion of people who are in a sense pathologically different, whose behaviour when they use the drug is harmful to them and to the rest of us, not because of any underlying causes in their background and not because of the drug itself or the illegal nature of the black-market drug. In that case they might behave identically whether or not they had the drug, in which case attempting either to prohibit any drug use entirely or to supply small amounts of the drug legally would not change their behaviour. If this analysis were correct, then drug use would be irrelevant when we're concerned with attempting to reduce the costs associated with that

particular behaviour.

The bottom line is that we want to alter the behaviour of the people who are using the drug in order to reduce the associated costs. In general, there will be a trade-off in doing this. It may be that, for instance, relaxing the prohibition and making the drug more freely available under some sort of regulated regime would lead to an increase in the number of drug users. Should that concern us? Well, what I've suggested before (Marks 1990a) is that, rather than looking at the number of drug users or even the number of hard-core users, what we should be looking at are the total costs—costs both to the drug users and to society—associated with their behaviour. I must say—I must nail my colours to the mast—my thinking and research on this topic has led me to believe that the second of these four reasons is the reason for the costs associated with the drug use. In other words, it is the illicit nature of the black-market supply of the drug which imposes the very high costs on society and on the users themselves. Consequently, we should attempt to relax the prohibition and to supply the drug under some sort of regulated regime to minimise the social costs. I make the point here that at the moment, with a prohibited black market, there is absolutely no regulation. It's a case of the buyer beware, close to the hearts of the laissez-faire economists, where there is in fact no legal redress for broken contracts, for adulterants or impure quantities, for fraud or being ripped off or dying. I have listed the costs associated with the black market above, costs to the individual user and costs to the rest of us through the associated spill-overs.

I argue that we should devise ways of providing the drug legally. When we do that, as we've been reminded by other speakers and as David Hawks will remind us again after I've finished, there is a question of trade-offs. We have to decide who will be eligible to obtain drugs legally and who won't. If we attempt to say to some group in society "no, you're not to get the drug", then it's likely that there will be some residual demand for illicitly supplied drugs which may be satisfied by the black market. Some commentators have argued that in consequence the black market won't disappear. Well, the sellers who are involved in the black market, certainly at higher levels of the distribution pyramid, the non-users, are there because of the profits they hope to make. As unscrupulous entrepreneurs, they're rational profit maximisers. Some commentators have argued that if the black marketeers can't make a buck in the market selling illicit heroin, they'll go off and make illegal money somewhere else. The point is that so long as we continue with the prohibition, the unscrupulous entrepreneurs are making more than a buck: they're making a hell of a lot of money per kilo of heroin imported into Australia, and that money is continuing to corrupt the system, to bring the law into disrepute and to swell bank accounts in Switzerland, Lichtenstein, or wherever. And these people are not getting any less wealthy, the longer prohibition continues. They are getting wealthier, they are getting more powerful. The argument that "oh, well, they'll spread their illicit activities elsewhere once selling drugs is no longer profitable enough" seems to me to argue in favour of having continued the prohibition of alcohol in the United States lest the bootleggers move to other endeavours. If Prohibition had continued for longer, the ex-bootleggers would be much more wealthy than they are now, because after the repeal they had to fall back to second-best alternatives, a drop in profitability. Their illegal activities may not be entirely eradicated by legal supply of drugs, but the illicit suppliers would be

severely hurt, and might even turn to legitimate activities.

It has already been remarked that, properly administered in known quantities and known dosages, heroin is of very low toxicity with no long-term deterioration, psychological or physical. It seems to me that we're falling into the fallacy of trying to get black or white solutions, trying to find an answer which completely at one fell swoop abolishes the black market, and I don't accept that we can do that. Economists aren't in the business of finding all-or-nothing solutions. They attempt to find the point of optimum trade-off between control and availability. To finish up, let me show you a graph which I plotted over the break, based on John Marks' data on the different regimes of drug use—whether he was talking about alcohol, heroin or marihuana.

Insert Graph

A bit of economics here. The upper graph is a downward-sloping demand curve. The left-hand axis, the vertical axis, is the price asked—where “price” can be non-monetary as well as monetary: that's why it's in inverted commas. The horizontal axis is quantity demanded; what that shows, in a very simple, diagrammatic way, is that the higher the price, the less the amount demanded. If there is very tight control over supply, then one can see that there is a high price and relatively low quantity on the left-hand side. This will vary, of course, depending on the exact shape of the curve. At the right-hand end, there is what I've called “open slather”—a low price and a high quantity of drugs sold. What I've done in the lower graph is to multiply price times quantity in order to get revenue, to get the total amount of money. The total amount of money exchanged on the black market is in some sense a proxy measure for the amount of damage, the cost, the social costs associated with the drug use.

We see that for demand curve as plotted, there is a U-shaped revenue curve which is very similar to the curve that John Marks showed before. With tight control, on the left-hand side, there is a large revenue, and that is associated with attempts to staunch the flow entirely through the prohibition. It's a black-market supply and the revenue is illicit, but very high. On the right-hand side, with open slather, with very low degree of control, the price is low but the quantity sold is high and the total revenues are high. Tobacco manufacturers are well aware of that. In the middle, the revenue is at a minimum, which delineates the region on the left of inelastic demand where demand doesn't change very much in response to change in price, from the region on the right where there is very elastic demand. It's certainly the case, as empirical studies have shown in the United States, that the demand from heroin on the black market is on the left-hand side of the graph, which is consistent with the data that John Marks showed before. What I am advocating is that we move down that solid curve towards some sort of regulation in the middle, accepting that there is no black-and-white answer, accepting that if there are to be any controls then there may be some incentive for illicit supply. But if it's not sufficiently profitable for the unscrupulous entrepreneurs, then the game won't be worth the candle for them, and they will be hurt where they hurt most: in their profit statements.

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View	Important Properties of Heroin	Central Values Emphasised	Interests/ Motivations
A Commodity	supply; demand; quantity; price	high return to sellers high cost to buyers	social costs of prohibition
Faustian Ambrosia	attractiveness; addictiveness	loss of self-control unbridled pleasure	fear of enslavement fear of oblivion → prohibition
A Vector for Disease	injected; adulterated	vector for HIV from IVUDs to heterosexual society	fear of disease/ death → regulated supply
An Analgesic	pain-killer with no nausea	uniqueness	palliative for the terminally ill

TABLE 1. Four Views of Heroin

	<i>Melbourne 1981</i>	<i>Sydney 1988</i>	<i>New York City 1970–74</i>
Importers	1400%	1550%	660%
Wholesalers	63%	72%	90%
Ounce Dealers	103%	120%	133%

TABLE 1. Maximum Value Added as a Percentage of Purchase Costs

Sources: Anon. (1989), Dobinson and Poletti (1988), Moore (1977)

