PROHIBITION OR REGULATION:

AN ECONOMIST'S VIEW OF AUSTRALIAN HEROIN POLICY

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SUMMARY

CONCERN for the spread of HIV infection and with the growing social costs associated with the policy of heroin prohibition have recently led many to reconsider the policy. A large question facing advocates of decriminalisation or legalisation is to what extent the numbers of users would grow under a more regulated scheme. "More regulated" because under prohibition there is a completely unregulated market, which is, however, illegal: lawless laissez-faire. This paper advocates some degree of regulation for the supply of heroin, and abandonment of the unsuccessful policy of prohibition.

In attempting to answer the question of the numbers of users under a different regime—and their importance to society—the paper closely examines the structure of the black market, using a previously unpublished survey of the illegal industry performed in Victoria some years ago by the illicit industry itself. This confirms recent findings that there are relatively large numbers of occasional users who seldom come to the attention of medical or law-enforcement authorities, and whose heroin use per se imposes little cost on society.

CONTENTS

1.	Introduct	ıon		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	1
	1.1 Hero	in as a	Comn	nod	ity	•			•	•	•	•			•	•	•	•	•	1
	1.2 Faus	tian An	nbrosi	a	•		•					•	•	•	•	•	•	•		3
	1.3 A Ve																			3
	1.4 An A																			3
	1.5 The	_																		4
2.	An Inside	r's Vie	w of t	he l	Her	oin	Di	stri	but	ion	Ne	etwo	ork			•				5
	2.1 Meth	ods		•		•						•	•	•	•	•				5
	2.2 The																			6
	2.3 Price																			8
	2.4 Cond																			14
3.	The Clee	land Re	eport	•	•	•	•				•				•	•	•	•		14
	3.1 The																			16
4.	Prohibitio	on or R	egulat	ionʻ	?		•								•	•			•	18
	4.1 Hars	her Pen	alties	•		•						•	•		•	•			•	19
	4.2 De F																			19
	4.3 De J																			20
	4.4 Preso																			20
	4.5 Lice																			21
																				21
	4.6 Com																			
	4.7 A Re	guratec	ı Supp	ory	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	21
5.	Conclusion	on .		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	23
Re	eferences																			23

LIST OF TABLES

TABLE 1.	Four Views of Heroin	2
TABLE 2.	A Simple Dilution and Packaging Process, Melbourne, 1981	9
TABLE 3.	A Simple Dilution and Packaging Process, Sydney, 1988	10
TABLE 4.	A Comparison of Heroin Selling Prices	11
TABLE 5.	Maximum Value Added as a Percentage of Purchase Costs	13

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Attempts to stamp out the illegal drug trade have failed all over the world and have consumed more and more resources. There is no benefit in blinkered thinking. The starting point must be an acceptance that illegal drugs are established in the community and that the prohibition has not worked. Orthodox policy is quite unable to enforce the law. Priorities must be established for the use of the [limited] available resources. One thing is certain: the conventional method of giving the job to the police, on top of all their responsibilities, has failed all over the world and a new approach is needed.

The Report of a Commission of Inquiry
(The Fitzgerald Report) (1989)

1. Introduction

OLICY analysis of the problem of illegal drug use is complicated by the different dimensions in which the drugs are viewed. The more alluring the drug, the greater the difficulty. One of the most attractive of the illegal drugs—heroin—is particularly difficult to disentangle. Table 1 shows four possible ways in which heroin is viewed, each of which contains some truth.¹

1.1 Heroin as a Commodity

The view of heroin as a commodity reflects a certain set of values and beliefs: acting on this view tends to move particular interests to the centre of attention. The commodity view highlights the black markets on which the drug is bought and sold. Any market transactions involve supply, demand, price and quantity. There is more than one black market: there are many, corresponding to the flow of the drug from the opium fields, through the refining from opium to morphine to heroin, from the Asian peasant farmers across the ocean eventually to the users on the street. The central

^{1.} I am indebted to the volume on energy (Stern and Aronson 1984) for the idea of the fourfold view of heroin. And when one considers it, there are strong similarities between drug use and energy use. If the low price elasticity of demand for drugs has enabled those in the illicit distribution chain to earn high profits, then, on one view, the low elasticity of demand for energy—and specifically for oil—enabled the OPEC cartel to extract high rents from the consuming countries. [But for a contrary view, see Marks and Swan (1987)].

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 IVDUs 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

issues emphasized by the commodity view are the high return for the sellers, particularly for the pyramid of sellers within Australia, and the high cost to buyers, especially the consuming buyers who cannot therefore recoup all their costs by onselling the drug.

The high returns provide the sellers with an incentive to engage in the illicit transactions, and provide means to protect the trade by paying for protection by corrupting public officials otherwise employed to prevent the trade from occurring. By the same token, high prices mean that buyers must lay their hands on large amounts of money to pay for their purchases, which they evidently are able to do, despite the illegality and subsequent high costs, and which they are evidently willing to do because of the attractiveness of the drug for them.

The effects of the high returns to sellers and the high costs to final buyers are to impose a high indirect cost on society—above the direct cost to the taxpayers of the criminal justice system—costs which becomes the focus of the economic policy analyst.

Using some previously unpublished data generated from a survey made within an illicit network, this paper will examine and compare the structures of distribution networks in Australia and the U.S., and will use some recently published studies to highlight the cost of the prohibition of heroin in Australia and argue for a relaxation of this law to allow a regulated market for heroin, at a much lower social cost.

1.2 Faustian Ambrosia

The second view of heroin is at a much more elemental, affective level. The most important property in this view is its addictiveness, and its attractiveness, as epitomised in the 1970s saying: "It's so good, don't even try it once." The central values emphasized here are the unbridled pleasure believed to flow from its use and the loss of self-control—and perhaps ultimately of self—that continued use of the drug are believed to result in. The Faustian bargain is thus: "I shall give you pleasure such as you have never dreamt of, but you will become a slave to my addictive attractiveness." The emphasis in straight society is thus on the fear of enslavement and fear of oblivion, which ultimately is a fear of nothingness, of death.

This view, although mistaken, has a strong grip on the popular mind. As Marks (1989) describes, early attempts to outlaw opium smoking in both Australia and the U.S. were tinged with xenophobia, and, despite its commercial origins as a turn-of-the-century cough suppressant, heroin continues to possess some of opium's exotic allure and mystery, at any rate for those who do not have first-hand experience of compulsive heroin users. As Davies (1986) argues, perhaps heroin—and other illicit drugs from time to time—performs the role of a scapegoat in our industrialized society, which militates against rational debate about heroin policy.

At any rate, this potent but incorrect view of heroin—as embodying aspects of the "food of the gods" and diabolical damnation—means that it is very difficult for the commodity view to prevail. There are two further views of the drug, both medicocentrist in approach: a vector for disease, and analgesic.

1.3 A Vector for Disease

As remarked by many commentators (see Marks [1974;1988] for a summary), when carefully administered, pure heroin of known dosage will result in no long-term physiological or psychological effects. And smoking or snorting heroin carry small dangers. But injecting the drug—which, by delivering the whole dose into the bloodstream in one batch, greatly increases the acute effects of the drug, particularly the euphoric "rush"—carries specific risks of infection, related to some users' lack of clean facilities, and to their failure or inability to use sterile paraphernalia and water. Shared needles can result in infections such as hepatitis and HIV being passed from one user to another. This in turn can result in the spread of HIV infection from the intravenous drug-using (IVDU) community to the population at large through sexual intercourse. It is this likelihood that has led to clean-needle exchange schemes, and which, I believe, has led many public health officials to revise and in some cases reverse their opposition to arguments for relaxing the prohibition of heroin. Without the AIDS pandemic, it is doubtful whether this view would have received the prominence it has, with the spectre of the Grim Reaper superimposed on the sad faces of the Drug Offensive advertisements.

1.4 An Analgesic

The final view of heroin is also a medical one: as a superb analgesic, in some resects unique, its use has been advocated as a palliative for the terminally ill. Although heroin

is soon broken down into morphine in the body, before this happens it more readily crosses the blood-brain barrier, and so is more potent than morphine. Indeed, testimony before the Williams Royal Commission (1980, pp.C178–95) held that heroin was a unique analgesic, and should be legally available for prescription to two groups: terminally ill patients, as in Canada and the U.K., and those post-operative patients whose recovery might be adversely affected by the nausea sometimes accompanying the use of morphine.

1.5 The Approach and Scope of this Paper

Despite the complications for the policy maker that the fourfold aspect of heroin causes,² we shall focus on the first aspect, that of a commodity, the exchange of which, despite its total prohibition, can be analysed using the tools of micro-economics. Indeed, it can be argued that this is the correct approach precisely because of the mistaken Faustian ambrosia view and given the public-health issues of IV drug use.

We first outline the results of analysis of some rather unusual data: a survey of the illicit heroin distribution network made in Victoria in April 1981 by the Wholesale Dealers for their own purposes, which has recently come to light (Anon. 1989). This is then compared with the results of two other surveys: a more recent survey made in New South Wales last year (Dobinson and Poletti 1988), and a survey of the New York City distribution network in the early 1970s (Moore 1977). We first find evidence of the effects of the escalated law-enforcement effort against heroin importation, distribution, and use over the past eight years, but there is no evidence that the efforts of the Custom Service and the Police Services are stemming the flow of the illegal drug or reducing the extraordinary incentives for unscrupulous entrepreneurs to enter the illicit trade.

A second result of the 1981 Melbourne survey is corroboration that the recent evidence of a very large number of occasional or "weekend" heroin users who seldom if ever come to the attention of the law-enforcement agencies or the medical profession is not a new phenomenon, but has existed at least for eight years. Only to the extent that their use posed a public-health risk should society be concerned, since otherwise their drug use is a private affair, with few if any external effects.

The recently completed report on *Drugs*, *Crime and Society* from the Parliamentary Joint Committee on the National Crime Authority, the so-called Cleeland Report (1989), presents the most recent information on, inter alia, "the scope and nature of the trade in illegal drugs in Australia", and "the social costs of the present policy of prohibition of the production, possession, use, supply, importation and exportation of illegal drugs". We shall critically review the Committee's findings with regard to heroin and some of the Committee's recommendations.

^{2.} Indeed, last century the opiates held a further, strategic aspect, when the Chinese attempted to halt the flow of opium from India in action which resulted in the Opium Wars.

2. An Insider's View of the Heroin Distribution Network

MORE (1977) uses anecdotal accounts, published reports, reports from undercover agents, and economic analysis to attempt to determine possible models of the New York City heroin distribution system: a pyramid in which successively adulterated and successively dearer heroin flows from 25 or so importers through six levels of distribution to 100,000+ users on the street. Dobinson and Poletti (1988) present a similar model of the distribution system in New South Wales, based partly on information provided by undercover agents of the State Drug Group. Their model has one fewer level: Importers, Wholesalers, Ounce Dealers, User/Dealers, Small-Time User/Dealers, and Users. They report how their "street" respondents provided information on the amount of heroin sold by their main supplier, the size of the "deals" they bought and sold and also their understanding of their position in the distribution network and how the drug was diluted before it got to them.

In response to press publicity about our proposals for changes in the heroin laws (Marks 1989), we were approached by a prisoner in Victoria—whom we shall label Anon.—who offered to make available in confidence the results of a survey of the illicit Victorian distribution network made in the first four weeks of April 1981 by five large dealers. Anon, recounted that one night over a Chinese meal several of the large Melbourne wholesalers, who had been wondering how to increase their sales during a period of flat demand, resolved to find out what happened to the heroin they sold: who bought it? how was it diluted? what proportion reached the street in "cap" form? who made money from selling downstream? and how vulnerable was the market to variations in flow? The wholesale market had been close to equilibrium, with supply able to meet the demand at the asked prices, with a weekly flow of 5.45 kilos at 20% purity (that is, 12 lb. per week) for Victorian demand.

We agreed to the request for confidentiality, and here present the results of the survey. The only check on the figures quoted can be their corroboration by the work of Moore and Dobinson and Poletti mentioned above, which means that surprising results may tend to discredit them. But the unique nature of the survey, if true, has led us to present the results, against the previously published models, with some analysis of the economic consequences.

It is paradoxical but true that a completely black market—the market formed by exchanges of a completely prohibited good, such as heroin—provides insights into the operation of completely free and unregulated markets, with the proviso that the everpresent threat of apprehension by the law means that information does not flow as easily as in a legal but unregulated market. It is the purpose of this note to argue that, compared to the black market of prohibition—what we might call lawless laissez-faire—a regulated market for heroin is desirable, from the perspective of social costs.

2.1 Methods

2.1.1 The Survey According to the informant, Anon., the dealers agreed to ask all their customers how much was sold and how much was used before sale, and to ask their "gram" customers to tick boxes on a form to indicate who were the ultimate users of the drug. Dealers were classified according to the size of the deals:

Ounce Dealers: CL, for "Coffee Lounge"

Gram Dealers: CP, for "Car Park"

Cap Handlers: G, for "Gutter".

End-users were classified as:

prostitutes (parlour or street)
street hustlers ("high visibility, no fixed abode, no money")
full-time thieves or robbers
hangers-on (lovers etc.)
workers (gainfully, legally employed)
mixed weekenders (the occasional users).

Anon. reports that most dealers were unhappy about filling in the forms; but that nonetheless much information was gathered.

2.1.2 Checks Readers of this paper are not alone in wondering about the validity of any data from the survey. Anon. reports that although it was difficult to corroborate the survey information coming up the pyramid, in a few cases it was possible to follow the drug down the network.

In one case, Anon. reports, a quantity of 74%-pure heroin from northern Thailand was diluted 1:1 with dextrose, and a small amount of red food dye added, so that when dried and crushed the resultant granules resembled Indonesian "pink rocks". This batch was tracked to cap level, Anon. reports. This revealed a tendency for the additional dilution to be denied by the diluters, as one would expect, since when buyers believe that the purity is higher, they are prepared to pay higher prices per unit of diluted drug.

Anon. drily remarks that knowing the flow of heroin (12 lb. per week of 20% pure) to be accounted for was an advantage in the survey—certainly it was not a fact that Moore or Dobinson and Poletti knew in their surveys. Indeed, Moore (1977, p.69) would count himself lucky if the various parameters estimated were correct to within a factor of two or three. Still, the data of any informal survey must be viewed in the light of possible error, especially when of an illegal activity. Consistencies across the three surveys are reassuring, however.

Anon. reports that the surveyers felt confident that during the survey period there were no major independent importations to Melbourne, although a few solitary travellers might have each imported seven ounces (of 75%–80% purity), carried internally, which might have added up to 20% of the 12 lb. known at the wholesale level.

Anon. also reports that three centres in Melbourne were dispensing methadone (the Austin Hospital, the Smith Street Clinic, and Moreland Hall) and six GPs were prescribing methadone in short, intensive courses of Physeptone tablets. In an insignificant grey market for methadone, the price was \$1 per ml, according to Anon.

2.2 The Users

Anon. divides the users into two groups: full-time addicts or "narcovores", who were habituated, and casual users. One result of the survey that apparently surprised the

Wholesalers was the high proportion of casual users. Anon. reports that there were 450 "full-time addicts", but that over the four-week period there were on average almost 4,200 casual users who would buy on average two caps per week. This ratio of occasional users to regulars of over 8:1 is corroborated, at least in a broad sense, by recent surveys in the U.S.A. and Australia, including the Roy Morgan survey for the Parliamentary Joint Committee Report (Cleeland 1989, p.ix) that the ratio of occasional users who have used heroin in the last twelve months to frequent, regular heroin users is almost the same as in the Melbourne survey, viz., 10:1.

These occasional users are in general people who can control their use of the drug, perhaps going on an occasional binge, but no more becoming an "addict" than the social drinker becomes an alcoholic. The public image of the heroin user—recently reinforced by the lurid anti-AIDS advertisements—is of the derelict junkie shooting up in the gutter. The occasional users, since they have not in general come to the attention of the police or the medical services, do not conform to the picture of the "typical" heroin user, and indeed have, until recently, been overlooked by the professional commentators. But since they control their heroin use, they impose no direct cost on the taxpayers, unlike the "full-time addicts" or narcovores. In this case, what reason is there to be alarmed at their numbers or drug use per se? Concern, if any, might be justified if their casual use and needle-sharing poses a public-health risk.

- 2.2.1 The Full-Time Narcovores Anon. reports that the 450 full-time addicts, who in aggregate consumed 70% of the heroin, could be categorized into three groups:
 - 250 Gram Dealers, the "car park junkie-dealers" and their spouses, who would typically buy an ounce of 20%-pure heroin, use about half of this, dilute the remainder 1:½ to get 18 grams of 16%-pure heroin, and sell this as grams and caps at a price sufficiently high to break even, including some amount for bad debts;
 - 150 female prostitutes, most of whom were employed at massage parlours despite the parlours' owners insisting that they did not employ junkies; they bought grams or caps, but hardly any larger amounts; about 30 of them supported a lover's habit as well with their earnings; and
 - a third group, a rotating population of full-time addicts, including a few Ounce Dealers with habits of their own or their friends' to support and a few independently wealthy users, but mainly users whose main income was from burglary and theft, and who were in and out of institutions. Anon. reports that 80 people were noted over the four-week period, 30 "regulars" and on average another 20 per week.

Anon. characterises these full-time users as consuming an average of 1.2g of 20%-pure heroin per day.

2.2.2 The Occasional Users As remarked above, the most surprising result of the anonymous survey of the 1981 Victorian users was the very large number of occasional users: Anon. reports a number of 4,175, who bought on average two caps per week. He remarks that none of the group financed their purchases by on-selling and none were

addicted. He reports that these occasional users fall into three groups:

- some from an identifiable drug-using sub-culture: full-time thieves, street hustlers, prostitutes;
- some who were in good health, well-dressed, and were apparently employed, including an identifiable group of shopgirls, some of whom apparently admitted to paying for their caps with stolen takings from the shops; and
- some, perhaps 15% or 600 odd of the occasional users, whom Anon. classifies as "disaffected urban youth", apparently getting kicks and gaining status from stealing cars, from vandalism, from getting drunk, and from scoring heroin. Anon. estimates that their average consumption of one to two caps per week was less than the employed group. They apparently paid for their recreational use by theft, social welfare payments, or parental handouts. A small number of this group were "street kids", apparently with aspirations to regular use, but with little money for expensive drugs.

Some of this group must "graduate" to regular usage, but a four-week interval is too short to gain data on this process, however important it is to the policy analyst. Anon.'s only comment on this is that some of the shopgirls in the second group would develop real addictions, get caught stealing, and find themselves unemployed, but that most were happy with the occasional snort.

2.3 Prices, Quantities, and Returns

Anon. reports that in April 1981 there were five major groups of wholesalers in Melbourne, who relied in that month upon three sources of heroin: a local (Melbourne) importer, who had paid \$14,000 a kilo, plus costs; Chinese "marketers" in Sydney, who had paid \$18,000 a kilo; and some stocks previously stored by a New Zealand syndicate, who had paid \$8,000 a kilo, plus costs. Costs were between \$2,000 and \$20,000 a kilo, higher for smaller batches. Anon. believes that the Chinese heroin had originated from Laos, and that the other two sources were Thai.

Table 2 shows how 1 kg of heroin imported at 75%–80% purity would have been successively diluted as it moved down the distribution chain in 1981 Melbourne. It also gives the maximum number of pounds, ounces, grams, and "caps" (of 150 mg or 200 mg) available if none of the original material were diverted for dealer consumption. But, as Anon. and others have reported, at or below the Ounce-Dealer level some of the drug is consumed by the dealers, who usually cover the cost of this consumption by selling the remainder further diluted at a higher price. Anon. reports that in 1981 the 200 mg capsule (a Contact 500 'flu capsule) was losing ground to the folded aluminium-foil square, containing between 100 mg and 150 mg of powder at between 4% and 8% purity.

This structure can be compared with that presented by Dobinson and Poletti (1988, Figure 1). In Table 3 we see that the purity of the imported drug is similar (between 75% and 90%, although occasional importations are mentioned in both surveys of 40%-pure heroin), but we see that in 1988 Sydney ounces are over twice as concentrated as in 1981 Melbourne (up to 45% pure versus a low of 16% pure), but "street weight" grams in

	Implied Results Characteristics of Heroin						
Dilution Process	Total Material	Percent Purity	Maximum No. of Marketing Units				
Step 1: 1 kilo of "pure" heroin packaged as: kilo	1 kilo	80%	1 kilo				
Step 2: cut 1:3 packaged as: pounds or packaged as: ounces	4 kilos	20%	8.8lb 141 oz @ 20%				
Step 3: cut 1: ¹ / ₄ packaged as: ounces or packaged as: grams	5 kilos	16%	176 oz @ 16% 5,000 grm				
Step 4: cut 1:1 packaged as: 200mg "caps" or packaged as: 150mg "caps"	10 kilos	8%	50,000 "200mg caps" 67,000 "150mg caps"				

TABLE 2. A Simple Dilution and Packaging Process, Melbourne, 1981 *Source*: Anon. (1989).

Sydney are sometimes less concentrated (down to 10% pure versus 14%–16% pure). The Sydney survey does not mention "caps" as such—apparently the term has fallen into disuse. But there is mention of "foils", apparently the folded aluminium-foil square that was appearing as the 100mg–150mg cap in 1981 Melbourne.

As mentioned above, the illicit nature of the market for heroin with the ever-present risk of detection means that information on quantities, purities, and prices is liable to be incomplete, and indeed prices and purities may vary with changes in market supply and demand, including local gluts and shortages, perhaps following from successful interdiction of quantities of the smuggled drug.

As well as reporting the prices paid by the Importers for their 75%–80%-pure heroin on overseas markets, Anon. reports that Chinese marketers in Sydney were offering that month a "special" on "brown rocks" of \$55,000 per pound, guaranteed to 40% purity, including commission. That would correspond to an equivalent price of \$302,500 per kilo of 100%-pure heroin, or of \$242,000 per kilo of 80%-pure, in April

		esults					
	Characteristics of Heroin						
Dilution Process	Total Material	Percent Purity	Maximum No. of Marketing Units				
Step 1: 1 kilo of "pure" heroin packaged as: kilo	1 kilo	80%-90%	1 kilo				
Step 2: cut 1:1 packaged as: ounces	2 kilos	40%-45%	70 oz.				
Step 3: cut 1:1 packaged as: 10g bags	4 kilos	20%-22½%	400 10g bags				
Step 4: cut 1:1 packaged as: ½g, 1g	8 kilos	10%-11%	8,000 1g "weights"				

TABLE 3. A Simple Dilution and Packaging Process, Sydney, 1988 *Source*: Dobinson and Poletti (1988).

1981 dollars.³ Dobinson and Poletti (1988, p.93) report that Importers were selling 80%–90%-pure heroin at between \$200,000 and \$250,000 per kilo, which in turn was being cut 1:1 and sold in ounces of 40%–45% purity for between \$5,000 and \$6,500 per ounce, which corresponds to a price of between \$350,00 and \$405,000 per kilo of 80%-pure heroin. If we take this wholesale price as the datum, we see that the real price of heroin at this level in the distribution network has fallen by between 7% and 31%, as Table 4 shows. Given the fall in the Australian dollar, we can deduce that the world price must have fallen more over this period.⁴

Table 4 includes the 1981 Importer selling price as reported by Anon. of \$32,000 per pound of 20%-pure; the Chinese special, described above; the 1981 Wholesale price of \$2,600 per ounce of 16%-pure; the 1988 Importer price as reported by Dobinson and

^{3.} To convert April 1981 dollars to December 1988 dollars using the Consumer Price Index as a yardstick, we multiply the former by 1.808.

	1981 \$'000/kilo 80% pure	1988 \$'000/kilo 80% pure
Importer (1981) \$32,000 per lb @ 20%	281.6	509.1
Chinese special (1981) \$55,000 per lb @ 40%	242.0	437.5
Wholesale (1981) \$2,600 per oz @ 16%	576.6	1,042.5
Importer (1988) \$200,000–250,000 per kilo @ 80%–90%	_	200–250
Wholesale (1988) \$5,000–6,500 per oz @ 40%–45%	_	350–405
Wholesale (1989) \$7,000+ per oz @ 40%	_	492.8

TABLE 4. A Comparison of Heroin Selling Prices *Sources*: Dobinson and Poletti (1988), Anon. (1989).

Poletti of between \$200,000 and \$250,000 per kilo of 80%–90%-pure; the 1988 Wholesale price of between \$5,000 and \$6,500 per ounce of 40%–50% pure (note that this corroborates Anon.'s 1989 Wholesale price); and the 1989 Wholesale price as reported by Anon. of \$7,000+ per ounce of 40%-pure. Obviously the 1981 figures are wholesale prices: the size of the deal and the purity of the drug establish this.

The two sources agree that the structure of the market has altered in the seven-year interval. The increase in the purity (from 20% to 40%) and the reduction in weight (from pounds to ounces) of deals at the Wholesale level suggests that the risk of apprehension is higher in 1989 Sydney and Melbourne than in 1981 Melbourne. This is also reflected at the Importer level.

Moore (1977, p.104) suggests three reasons for the dilution of heroin: the dilutant may enhance the quality of the product; small deals of heroin would be virtually

^{4.} The Australian Federal Police (1988, p.6) in their submission to the Cleeland Committee note that "in 1980–87 a general increase in purity at street level was noted . . . Wholesale and retail prices of South East Asian heroin, particularly the higher-quality grades, have risen consistently up to this year [1988], when a downward trend in retail prices began to appear. With supplies reported to be available or readily available in most major cities in recent years, these factors indicate a steady, if not increasing, demand."

unmanageable if not "fluffed up" with up to 90% of adulterants; and finally that it is successive diluting of heroin which provides the deals at each level with a value added and hence a profit. This of course must depend upon a degree of "purity illusion" on the part of the buyers, and leaves unexplained the high levels of purity of the imported drug.

To this author it seems unexceptional to argue that when the expected loss of heroin is highest—both because the risk of detection is highest and the quantities are largest: when the drug is being smuggled across national frontiers—its concentration or purity is highest: in order to reduce its volume and hence the risk of detection. Comparing 1981 Melbourne with 1988 Sydney and Melbourne, we see that the purity of the smuggled drug is unchanged—between 75% and 90%—which suggests that the risk of detection by Customs has not fallen. It may have risen. Purity of 80% or 90% does not leave much scope for further significant reduction in volume, and the cost of further refining in the country of origin may be too high.

Within Australia, at the level of the Wholesaler buying from the Importer, there is great scope for reduction in volumes of 20%-pure drug in one pound deals. The Cleeland Report (1989, p.89) reported that in 1988 there were 200 Australian Customs Service officers, 350 Australian Federal Police officers, 170 New South Wales Police officers, and 72 Victoria Police officers engaged exclusively on drug detection work. Moreover, the National Crime Authority was established in 1984, and the recommendations of the Williams Commission (1980) have been acted upon. Davies (1986, pp.41–48) reported that in 1978 the 46 members of the NSW Drug Squad made 39 arrests. The Cleeland Report (1989, p.x) remarks that "the law-enforcement agencies have been more successful than they have been given credit for in making seizures of drugs". The data from the 1981 Melbourne survey (Anon. 1989) and the 1988 Sydney survey (Dobinson and Poletti 1988) bear out this contention.

But if the structure of the distribution network has responded to the increased law-enforcement efforts of the past decade, this has not had the desired effect of staunching the flow of heroin to the streets, as the Australian Federal Police observed in the footnote above. Moreover, when we analyse the potential returns to dealers at two different levels of the network—Wholesale and Ounce Dealers—the return on capital has risen by at least 20%. Table 5 presents the maximum value added at the three dealer levels of Importers, Wholesalers, and Ounce Dealers, in New York 1970–74, Melbourne 1981, and Sydney 1988. The detailed calculations, given in the Appendix, are based on maximum, gross figures; that is, no accounting has been made for possible leakage by, for instance, own consumption or gifts, and the only costs included are those of the purchase of the drug. We have used geometric means of the ranges of figures in Table A1. None of the activities need take more than four weeks to complete.

Table 5 also includes returns from the data published by Moore (1977). The dealer categories are not the same as in the two Australian surveys: for Importers we have calculated the aggregate return to Moore's Importers plus Kilo Connections; for Wholesalers we use his Connections; and for Ounce Dealers we use his Weight Dealers, who sell ounces. Although these results come from surveys conducted using quite different techniques, in different cities, over a period of eighteen years, there is a strong similarity in the pattern and magnitudes of the returns in the three surveys.

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

TABLE 5. Maximum Value Added as a Percentage of Purchase Costs

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

The most striking number is the potential return of 1550% to importers in 1988 Sydney. Of course, the costs of transporting and smuggling the drug will reduce this return somewhat, but the attraction of the return to any unscrupulous entrepreneur is obvious. Necessary for the extraordinary returns made by illicit importers is the large gap between the low prices in the producing country and the high prices in the consuming country. Dobinson and Poletti (1988, p.93) estimate that the price in Hong Kong for 80%–90%-pure heroin is between \$12,000 and \$15,000 per kilo, and Stimson (1987) reports that heroin in Pakistan is available for export at about £3,000–£4,000 a kilo. If the Cleeland Committee's "preference" for a figure of annual imports of 350 kg of 80%-pure is taken (Cleeland 1989, p.45), then the annual import bill for heroin is no more than \$5,250,000. Even if the higher estimate of Dobinson's (1989, p.1151) of 440 kg is used, the import bill would still only total \$6.6 million.

The second point is the comparison of the returns in 1981 Melbourne and 1988 Sydney to Wholesalers and Ounce Dealers. If it looks as though the Wholesalers are losing out in the distribution chain, then we should emphasize that the percentages are the maximum possible returns. All three surveys point out that at the Ounce Dealer level and below some dealers are also users. As they consume some proportion of the drug bought, they are thus eating their potential profits. Indeed, Anon. reports that for many dealers the aim of selling was solely to finance the dealer's own habit; with a small reserve to cover bad debts, they aimed to break even. Their need for sufficient flow to finance their habits through on-selling was important when the surveyors considered the effect of supply disruptions.

Given the lack of reliability of the data from the surveys, perhaps all we can say is that, first, the returns in the quite differently performed surveys are apparently consistent, providing further corroboration of Anon.'s data, and, second, that despite the increased

^{5.} The *Sydney Morning Herald* in its editorial of May 9, 1989, misquoted this author in the statement that by supplying Australian heroin users from the Tasmanian opium farms Australia could save "perhaps \$1 billion a year".

effort of law enforcement against illicit drug distribution there is no evidence of the dealer's life between the poppy fields and the street being any less attractive. Of course, the emergence of HIV infection among the population of intravenous drug users (IVDUs) means that the financial returns do not tell the whole story.

The final data from the 1981 Melbourne survey are on the amounts and shares of heroin consumption. Anon. reports that the 450 full-time addicts were consuming almost 70% of the weekly supply of 12 lb of 80%-pure heroin: an average of 1.2 g at 18% purity per day, which is 1.51 g per week of 100% pure, and would cost \$532 per week at the wholesale price of \$70.40 per gram of 20% pure or \$864 per week at the retail price of \$2,600 per ounce of 16% pure.

The remaining 30% of the weekly supply was consumed by the 4,100-odd casual users, at an average of two caps per week, an average of 140 mg to 280 mg of 100%-pure heroin per week. At the retail price of \$2,600 per ounce of 16% pure, this would cost \$160 per week, or \$107 at the wholesale price.

2.4 Conclusions from the 1981 Melbourne Survey

As remarked above, the number of casual users was apparently a surprise to the dealers who organised the survey, according to Anon. (1989). These 4,100-odd users were paying a total of up to \$668,000 a week for the 328 g per week of 100%-pure heroin they were buying (highly diluted, of course). The balance of the weekly consumption of 764 g per week of 100%-pure heroin would have cost \$270,000 a week at wholesale (20%-pure) prices. So the casual users and the prostitutes were paying for most of the heroin consumed. But it was the small core of 250 "junkie-dealers" who would most affect the market in the case of supply disruptions. This group, so the surveyors realised, were financing their habits by cutting and selling about half of their purchases of the drug. When confronted by shortages, they would use before they would sell, even if this meant going into debt. According to Anon., any break in the flow of heroin down the network would disrupt the market for several weeks. As a result of the survey, he notes, the tradition of ceasing wholesale trading over the Christmas period was abandoned, at least by one group.

3. The Cleeland Report

DRUGS, CRIME AND SOCIETY, the title of the report by the Parliamentary Joint Committee on the National Crime Authority, encapsulates a serious interrelationship in Australia today. If AIDS is not referred to explicitly, nonetheless its occurrence and its spread through the population of IVDUs around the world has resulted in serious reconsideration of their attitudes towards the use of illegal drugs such as heroin by many groups in society. Indeed, the NSW Bar Association (1989), in its submission to the Committee's inquiry, agrees that concern over the AIDS pandemic has resulted in its recommendation that illicit drugs should be provided to "selected drug users through regulated clinics following careful assessment of individuals with assistance provided in treatment programmes", and the Australian Medical Association is reconsidering its position. Many other submissions argue for a relaxation of the prohibition, to varying degrees, but the Committee does not agree. Nonetheless, it makes sensible calls for the

gathering of additional data on drug users and on the price, purity, and availability of drugs at the street level. It calls for a closer examination of ways to attack the *traffic* in illicit drugs and not merely their possession. It reiterates the call for indicator targets for the level of success in curbing the drug trade.

Moreover—and of special interest here, given the title of this paper—it recommends that Australia consider "the options by which governments might impose more controls on the sale and marketing of the presently illegal drugs". In the accompanying discussion (Cleeland 1989, p.123), the Committee emphasises that "the present policy of prohibition results in an absence of government control over the chemistry of the drugs being sold, the outlets where the drugs are sold and whom the drugs may be sold to". The Committee continues: "This would not matter if the policy [of prohibition] were succeeding in its original aim: if, in other words, none of the illegal drugs were being sold, or if there were even a realistic prospect of the trade being brought to a halt. Such is not the case, and the Committee believes that it is time to consider alternatives to the present policy."

The Committee accepts that the policy of prohibition is not successful, and that illicit drugs are now available throughout Australia—including high-security prisons—to anyone who wants them, although the law-enforcement effort does have an effect: it artificially inflates the prices received by the sellers of the drug. As we have shown above, these high prices provide extraordinary incentives for the persistent demand for heroin to be met with illicit supply, as is occurring, despite the high prices being asked of buyers.

The Committee accepts the results of recent research which has revealed that much of the convention wisdom about heroin is mythical: friends rather than "pushers" are the initiators for many young people to begin using illicit drugs; addiction is not inevitable; those who do develop addictive use of heroin can and do voluntarily cease heroin use; heroin addicts either stop using after relatively brief periods of addiction or continue for some years until voluntarily "maturing out" between the ages of 35 and 45.

Research carried out for the Committee reveals that the ratio of occasional users (those who have used heroin in the last twelve months) to frequent, regular users is ten to one. This confirms evidence cited in Marks (1989) of large numbers of occasional heroin users in overseas studies, and the evidence of the 1981 Melbourne survey (Anon. 1989). The total number of heroin addicts from the Committee's sponsored survey is up to 12,000 Australia-wide, with no more than 3,360 addicts actively using at any one time (Cleeland 1989, p.ix). This is an order of magnitude less than earlier estimates (Marks 1988), but the Committee argues that these figures are consistent with the limited avenues that heroin users have to finance their drug use. We would argue that, as in the 1981 Melbourne study and the 1988 Sydney study, the large number of occasional users, who use small amounts of the drug and could therefore afford, in general, to pay a higher price for their less frequently made purchases, might well be used by the user/dealers to finance their habits, so that the limited avenues for other income may not be the barrier to larger numbers that the Committee asserts. If the Committee's recommendations for better data collection are acted upon, this uncertainty may be resolved.

3.1 The Social Costs of the Prohibition

3.1.1 Drug-Related Crime As many authors have argued, the policy of prohibition restricts the supply of the illicit drug, which in the face of the inelastic demand for heroin results in high prices, which provide the incentives to flout the law by supplying, and which also result in an increase of crime by the drug users, apart of course from their illegally possessing and using the illicit drug. Evidence of the incentives for supply was presented above, in our discussion of the surveys of distribution chains, although the difference between the buying price of a kilo of 80%-pure heroin in Hong Kong (\$12,000 to \$15,000) and its landed price in Australia (\$200,000 to \$250,000) may be evidence enough.

Evidence of the effects of the demand for heroin on crime is summarised in Dobinson and Poletti (1988), who cannot clearly resolve the issue of whether heroin use causes additional crime, or whether heroin use is higher among people who would anyway be criminals, or whether both heroin use and crime are caused by a common antecedent. While data from all three of their studies (of imprisoned property offenders, of a group seeking treatment for drug dependence, and of a group of heroin user/dealers active within the Sydney community) demonstrate that property crime amongst these people appears to be predominantly motivated by the desire to support a level of heroin consumption, other factors may be involved. Given this, it would probably be incorrect to assert that a reduction in the price of heroin to a small fraction of its street price would entirely eliminate the crime now committed by drug users, some of whom would undoubtedly have become criminals anyway, and some of whom have almost certainly been inducted into property crime by their illicit-drug-using associates, and who may not readily stop. Nonetheless, the crimes associated with illicit drug use are serious, and not simply property crimes. Controlled supply of heroin of known purity and strength would eliminate the motivation for drug-related corruption in law-enforcement agencies, which unfortunately has been occurring (Cleeland 1989, pp.82-84), and low prices would eliminate the wherewithall for this corruption.

3.1.2 Direct Costs The Cleeland Report (1989, p.76) estimates a direct cost of \$123.2 million for the prohibition of several drugs (including cannabis, cocaine, and amphetamines, as well as heroin), a figure which includes "not only the operational costs of the law enforcement agencies, but also the costs of the prosecution and defence lawyers, the costs of court time and staff involved in the hearing of the cases related to drug offences, and in more serious cases the costs of imprisonment". It does not include the law-enforcement costs in relation to offences committed by illicit-drug users in order to finance their drug consumption. It does not include capital costs (estimated at about \$200,000 per high-security prison cell). Nor does it include the crowding costs and delays occurring in the courts because of drug-related cases (NSW Bar Association 1989).

The figure of \$123.2 million is a direct cost to Australian tax-payers, and is a measure of the cost of the resources being directed at attempts to enforce the prohibition which could otherwise be employed elsewhere, or which could be returned to tax-payers in the form of lower taxes, if the prohibition were replaced by regulation. As the Committee notes (p.77), "Licensing cases, prosecutions for sale of alcohol to minors and

prosecutions for evasion of State taxes on tobacco take up very little of the courts' time and rarely result in anyone going to gaol".

3.1.3 High Prices and Administration of the Drug The high prices of the illicit drugs (a consequence of the prohibition and attempts to enforce it) have a further effect, as Marks (1974) and others have remarked. In Vietnam and in Hong Kong, when increased enforcement resulted in higher prices, users were observed to change their method of administration from snorting and smoking to the more cost-effective method of IV injecting, with the concomitants of greater risk of infection through shared needles, as well as other risks of disease (collapsed veins, thrombosis). There is some evidence, as Marks (1989) discusses, that when the price falls, this is partly reversed, but, once over the hurdle of feelings of repulsion towards self-injecting, users may not always want to revert to other, less effective methods of administration.

3.1.4 Health Costs As we have remarked above, the AIDS pandemic has provided the impetus for many groups to question their support of the prohibition of heroin especially, but of other injected illicit drugs as well. It may be that such drug-taking is merely the symptom of a more profound malaise in society, but the urgency of the need to slow or halt the spread of HIV infection means that many people have accepted that treating the symptom—if that's what drug-taking is—is the only public-health response, even if, at the level of the individual patient, that would be the wrong way to go about treatment. It might also be that the focus should be on needle-sharing, since that is the means of the spread of the infection, but, again, if relaxing the prohibition and providing pharmaceutical-quality drugs of known purity and dosage in one-use syringes under some form of regulated supply has a marked effect on the spread of disease, then public-health concerns urge that this step be taken, or at least seriously considered.

The common thread in this is that changing people's behaviour is much more difficult than altering the environment in which they live, so that their actions are less harmful to themselves and to others, in this case.

There is evidence that a programme of prescription drugs in Liverpool (where prescribing them is legal) has checked the spread of HIV infection, certainly when compared with Edinburgh, where, in the absence of any doctors prepared to prescribe, HIV infection among IVDUs grew from nil in 1983 to 51% in 1986 (Cleeland 1989, p.84).

Some concern has been expressed about the affects of the opiates in general, and heroin in particular, on the development of the human fetus. Of course, the pregnant woman should avoid all drug use, including alcohol and tobacco, but narcotic analgesics such as morphine, heroin, and methadone are not entirely counter-indicated: Onnis and Grella (1984, pp.22–36) recommend that opioids should be used with care during pregnancy only when absolutely necessary, since it is possible for a neonate born to an addicted mother to suffer withdrawal syndrome and to be underweight (Hutchings 1985), although long-term effects appear negligible (Rosen and Johnson 1985). It should also be noted that the love and care received by the newly born child are also extremely important to its development, both emotional and physical. It is difficult to separate the woman's behaviour towards herself and her child and the ingestion of drugs in any abnormalities.

4. Prohibition or Regulation?

In response to the social costs outlined above, seven different responses have been suggested:

- tougher penalties to "finish the job" and entirely eliminate the use of the illicit drugs;
- de facto decriminalisation, in which relaxation of the prohibition against personal use and possession of the drugs occurs, while maintaining the prohibition on commercial growing, manufacture, imports, exports, and sale;
- de jure decriminalisation, which avoids possible abuse of discretionary powers possible under the de facto scheme, but which gives the State no rôle in consumer protection;
- prescription of currently illegal drugs to registered drug users, along the lines of the U.K. experience, at least after the Clinics were established in 1968;
- licensing drug users as we now license firearms owners, to enable them to purchase over-the-counter drugs, while at the same time being monitored;
- commercial supply of the illegal drugs, using the regulatory apparatus already in place to control the manufacture and sale of alcohol and tobacco; and
- government monopoly supply, perhaps through outlets similar to the State and Provincial alcohol stores in a majority of the United States and in many Canadian provinces, with mandatory labelling of purity and strength, with no advertising or price promotions.

It is significant that this list, taken from the Cleeland Report (1989, pp.91–116), does not include any attempt to "cure" the addicts of their addictive habits, although the medical concern is evident through the fear of the spread of HIV infection.

For over fifteen years policy analysts have been asking what the goals of the prohibition of certain drugs are (Marks 1974, 1989; Moore 1976, 1977; and others). Is it to reduce the numbers of users at any cost? Has it changed—the first laws restricting the use of opiates in Australia were clearly anti-Chinese (Marks 1989). Whatever the reasons in the past—and the fourfold aspects of heroin outlined in Table 1 demonstrate the many possibilities—they are of little more than historical significance, although the images of drug users projected by the anti-AIDS television advertisements can have a strong influence on people's views and attitudes, so the past cannot wholly be overlooked. Instead, we should be asking: what should our laws and customs be attempting to achieve?

The Cleeland Report (p.91) suggests that an alternative aim of drug laws should be to minimise self-harm, with an emphasis on safe use, rather than the apparent punitive goals of the present laws, with their extremely high costs both for the drug user and, as we have seen, for society at large. This issue is best discussed by Moore (1976) and summarised by Marks (1989). In this paper we shall confine ourselves to a framework which considers the balancing of social costs and social benefits. We assert that on

balance government regulation, as described below, is preferable to the lawless laissezfaire of the existing markets, in which the apparatus of the criminal-justice system performs as some kind of de facto price-setting mechanism.

Although the Cleeland Report argues that the previous estimates of the number of regular heroin users in Australia have been much too high, and presents lower figures of its own, the Report acknowledges the evidence that the numbers of regular users has been growing rapidly, as Marks (1989, Figure 1) suggests. Moreover, the Report accepts the recent evidence—corroborated by the survey presented above of the 1981 Melbourne market—that there are ten occasional heroin users for every regular user, and that this army of "weekend tasters" has remained unobserved because they have controlled their use, and so have not come to the attention of the criminal-justice system or the hospitals. Before outlining our regulatory proposal, we shall briefly examine others mentioned above.

4.1 Harsher Penalties

This is more of the same. Perhaps better data would convince advocates of this approach that it has not worked in any society that we would consider free and civilised. If we were prepared to pay the direct and indirect costs associated with a tougher effort to enforce the prohibition, it would first result in higher prices on the black market. If dealers were incarcerated, the higher returns would attract additional unscrupulous entrepreneurs into the networks. The higher penalties would provide a greater incentive for drug dealers to attempt to subvert the criminal-justice system, and the higher prices would provide them with the higher returns necessary to achieve these nefarious ends. The evidence from New York City in the mid-1970s, when Governor Rockefeller instituted harsher penalties, is that the courts and prisons became overcrowded with drug offenders, and that there was a marked increase in the use of under-age youth by the distribution system, since the penalties for them were more lenient. Such an approach might provide the cynical politician with the appearance of success—in terms of more drug seizures and more people in prison—but the acid test must be a reduction in the flow of the drug to the streets, and there is strong evidence that the Australian electorate would not accept the curtailment of civil liberties sufficient to achieve this goal using these means. As Coombs put it in the NSW Bar Association evidence before the Cleeland Committee, "If you cannot keep drugs out of Long Bay and if you cannot keep drugs out of Mulawa, how are you going to keep drugs out of Australia?"

4.2 De Facto Decriminalisation

This is similar to the "Dutch" system for soft and hard drugs, in which the prohibition against personal use and possession is relaxed, while commercial growing, manufacture, refinement, imports, exports, and selling remain illegal. Cleeland (1989, pp.98–99) provides evidence that, despite the disquiet of its EEC neighbours, the Dutch system has been successful, but argues that it would provide an implicit signal to potential users that the government approved of the use of these drugs. Of course, there are already mixed signals with regard to the legal drugs of alcohol and tobacco: their advertising is severely restricted, and their purchase and consumption are also controlled. A more telling

argument, given Mr. Tony Fitzgerald's words at the beginning of this paper, is that allowing discretionary powers in the enforcement of the law is just asking for corruption of those with the power to exercise discretion, as he chronicles with respect of gambling and prostitution in Queensland.

4.3 De Jure Decriminalisation

This avoids the temptations and pitfalls of the discretionary powers of the de facto decriminalisation, but Cleeland (1989, p. 100) argues, convincingly I think, that it is more appropriate for cannabis, which can be consumed with a minimum of processing of the raw plant material, than it is for the opiates in general, and for heroin in particular. Nonetheless, several United States have decriminalised the use of marihuana, and it is interesting to note that the threatened flood of users has not eventuated, as figures quoted by Cleeland (p. 101) demonstrate. (This is confirmed by the South Australian experience of its "expiation system for possession, cultivation, and private use of small amounts of cannabis by adults", [Sarre 1989].) Given the altogether different qualities of the two drugs, it is doubtful whether extrapolation from this experience to what might happen with decriminalisation of opiates would be valid, although opium poppies will grow throughout temperate Australia, the Tasmanian opium farms being some of the world's most productive.

4.4 Prescription

The medical model of drug use is one that has survived most strongly in the U.K., where physicians retained the right to prescribe heroin and cocaine long after their professional colleagues had lost it in Australia and the U.S. Marks (1989) describes the evolution of the British experience, including analysis of what happened after the Clinics were established in 1968. Some have argued that it was an experiment that failed, but to close observers (Stimson 1987; Bennett 1988; Spear 1989) it was not an experiment but a continuous evolution of a way of dealing with a demand for drug use that was not dwindling, and which was not appropriate for legal controls alone. As others have argued, a system where heroin is only available to those who can demonstrate a prior addictive habit is one that provides a strong incentive to users not to remain occasional tasters.

Nonetheless, thinking observers (such as Hamer 1989) have argued that the medical approach of prescription drug supply is a better way of approaching the problem than our present system, and is not very different from the methadone maintenance programmes which are treating over 6,000 drug users in Australia today (Cleeland 1989, p.44). The similarities and differences between heroin and methadone have been described many times [for instance, Marks (1974, 1989)]. The most significant difference is that one is legally available and the other is absolutely prohibited. There are minor differences in other respects, such as the period to the onset of withdrawal, but a key difference is that addicts apparently prefer heroin to methadone, and often supplement their legal intake of methadone with illicit, street heroin. This underlines the fact that a solution must be workable and attractive to the users, lest it become irrelevant, or worse.

Many people will be watching the outcome of the National Health and Medical Research Council trials of providing IVDUs with injectible drugs on prescription, to remove any need to share needles (Foy et al. 1989).

4.5 Licensing

Mugford (1988) has argued that a system of licensing drug users provides society with the assurance that completely unrestricted access to drugs is prevented, but at the same time removes the profit incentives of the black market, as we saw in Table 5 above. Under his proposal, over-the-counter drugs would be available at a low charge to licensed users, with some record kept of the extent of drug use for each user. To obtain a licence, one would have to follow a procedure similar to that for obtaining a firearms licence: be over 18 years old, have taken a course in drug education, and wait for a "cooling-off" period of some days before the licence was issued. Since the drugs in pharmaceutical form are of no threat to others, there is no reason—unlike a gun licence—why a criminal record would be a bar; indeed, given Dobinson and Poletti's data, preventing people who had a criminal record from becoming licenced drug users would be asking the black market to continue. For, if high-quality drugs were freely available, and if adults could relatively easily obtain drug-users' licences, then there would be virtually no demand for black-market drugs, certainly not enough to support the profitability that the surveys revealed in Table 5 above.

4.6 Commercial Supply

Although one heard rumours of the tobacco companies having registered trade names suitable for marihuana products some years ago, society has been moving towards greater restrictions on the commercial alcohol and tobacco concerns, and politically it is virtually impossible to imagine a government opening up a commercial market for opiates in general, and heroin in particular, even if regulated to the extent that the supply of alcohol and tobacco is now (no under-age smoking or drinking, the products sold only from licensed premises, restrictions on advertising, restrictions on places of consumption—even if there are health reasons for some of these restrictions, and, importantly for tax-payers, high rates of excise levied on their sale). Perhaps there is some memory of the turn-of-the-century patent medicines, virtually all of which included opiates, and none of which in the absence of pure food laws provided information of their ingredients.

4.7 A Regulated Supply

As an alternative to the completely unregulated, completely illegal markets for heroin under the existing prohibition, this author and others have argued for a regulated market, in which drugs are made available through government outlets, which would ensure that drugs were clearly marked with their purity and strength, in which minors would be precluded, with no advertising, and which might provide the government with some excise revenue. Under this scheme, the price might have to be very low initially, in order to completely undercut the black market. Such a scheme would require Australian withdrawal from our international obligations under the Single Convention on Narcotic Drugs, but as a sovereign state Australia can legally institute such a scheme, given the

political will. The Americans, always at the vanguard of drug control, might be unhappy, but there is growing realisation in the U.S. that their drug policy may be an unpopular export abroad (Nadelmann 1988). The most recent example of the U.S. exporting their domestic policy is the U.N. (1989) convention against drug trafficking, which Australia has already signed. If we ratify the convention, with accompanying enabling legislation, it will be that much more difficult to acknowledge the failure of the punitive, supply-side campaign against heroin use and to liberalise the availability of the drug, as I argue.

The Cleeland Report (1989, pp.112–13) puts the case for this scheme very well, in attempting to balance the benefits of the existing prohibition in deterring new drug users and encouraging existing users to seek treatment, against its costs both to society and to the users themselves. Against any increase in drug use:

must be balanced the benefits which would flow from the elimination of the illicit market. Even if legal supplies were heavily taxed to act as a disincentive to widespread use, it would still be possible to undercut the illicit market, which would therefore die away. There would be savings in law-enforcement costs, in court time, and in the costs of imprisonment. At the same time, the proceeds derived from the taxes could be used to fund drug-education and -rehabilitation programmes. The costs to the community of drug-related organised crime, corruption and property crime would be eliminated. Crime and corruption would, of course, not disappear, but they would no longer be fuelled by the need to purchase drugs at artificially inflated black-market prices. The illegal drugs would no longer have the glamour of forbidden fruit. Heroin users would no longer suffer the consequences of injecting drugs of uncertain strength and purity, and barriers to their seeking medical treatment would be removed. No longer pariahs to mainstream society, they would come forward more readily for medical treatment, and could be targetted for education on such issues as the risk of sharing needles in the age of AIDS. Cheaper heroin, in particular, could be expected to lead to a reduction in injection and a change to other methods of administration which pose fewer dangers to the health of the user. Informal social controls might develop which would operate as barriers to heavy use and addiction. [Cleeland 1989, p. 113]

An example of social controls over drinking which we take for granted are the disapproval that greets solitary drinking and drinking before lunch.

Opponents of this view argue, for instance, that organised crime would move into other areas if denied the existing profitability of the heroin black markets. Of course, if such potentially profitable opportunities exist now with no barriers to entry, then there will be unscrupulous individuals or organisations seizing them already; otherwise, such actions will be very much "second-best", with a lower rate of return. Indeed, on such an argument Prohibition should never have been repealed in the U.S.—which overlooks the dynamic nature of the markets and the evidence that the longer the prohibition—of alcohol or opiates—the wealthier, and hence more powerful, those who profit from the illicit trade become.

The big imponderable is the number of users under the new regime. To the extent that the demand for heroin among the regular users is price-inelastic in the face of black-market price rises—which is the basis for the profitability of the illicit suppliers—then a fall in the price will also reveal an inelastic demand, with a relatively small (10%-15%) increase in the numbers of regular users. Numbers aside, under a

regulated system these users would not pose the social problem of the junkies under the prohibition. What is a recently perceived phenomenon is the hidden bulk of the iceberg of occasional users. If theirs is a more elastic demand, then their numbers may well grow proportionately more rapidly as the price falls, but their previous invisibility should give us pause: why should we be concerned, so long as there are few external effects from their use. The most significant possible externality is the public-health risk of HIV infection spreading from shared needles. To repeat, if we are not prepared to tolerate any increase in the numbers of drug users, however private, then we should persevere with our existing, costly, punitive, but nonetheless ineffective policy, with its dire public-health risks.

5. Conclusion

The paper has presented and analysed the data from a previously unpublished survey of the Victorian heroin market in April, 1981. In contrast with surveys of New York City in the early 1970s and New South Wales in 1988, this survey was sponsored and managed by wholesalers in the illicit trade. Comparison with the other published surveys highlights the gross returns to importers in all three surveys, and incidentally corroborates the Victorian data, to some degree of accuracy. A survey by insiders has one advantage over the outside surveys: there is good knowledge of the level of the flow of drug in the network. Given this information, the Victorian survey is credible when it reveals that there was a large number (almost ten times the numbers of regular, full-time heroin users) of occasional users, using small amounts per week. A similar proportion of occasional users was revealed by a survey reported by the Cleeland Committee's report on *Drugs*, *Crime and Society*, the relevant parts of which we have summarised and analysed in the final section of the paper. The continuing flow of survey data and ensuing analysis points, we argue, to the desirability of a relaxation of the prohibition on heroin use.

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