

Recreational drug prohibitions

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Introduction

On the whole, economists have tended to be against prohibition of recreational drugs, dating back to the days of the ban on alcohol in the USA. Tullock and McKenzie (1985) state that:

“In the early part of this century, many well-intentioned Americans objected to the consumption of alcoholic beverages. They succeeded in getting the Constitution amended to prohibit the sale of alcohol. By the 1930s most of them had given up because they discovered how difficult it was to enforce the law. If they had consulted economists, I'm sure they would have been told that the law would be very difficult and expensive to enforce. With this advice they might have decided not to undertake the program of moral elevation. The same considerations should, of course, be taken into account now with respect to other drugs.” (p.7)

There have been exceptions, however. Irving Fisher, one of the USA's greatest ever mathematical economists, was a leading proponent of alcohol prohibition. As late as

1927, Fisher claimed he could not find one economist to speak out against prohibition at a meeting of the *American Economic Association*, and in *The Noble Experiment*, published in 1930, Fisher clearly remained a strong believer in the virtues of alcohol prohibition:

“Summing up, it may be said that Prohibition has already accomplished incalculable good, hygienically, economically and socially. Real personal liberty, the liberty to give and enjoy the full use of our faculties, is increased by Prohibition. All that the wets can possibly accomplish is laxity of enforcement or nullification: in other words, enormously to increase the very disrespect for the law which they profess to deplore. Hence the only satisfactory solution lies in fuller enforcement of the law”. (p. 454-5)

More recently, Thornton (1995, 2004) reports that in relation to illicit drugs, the majority of economists (in the USA at least) are relatively anti-prohibition. He reports the findings of a survey he conducted in 1995 of 117 randomly selected professional economists based on membership of the *American Economic Association*. Of those who offered an opinion, 58 per cent were in favour of drug policy in the USA being steered toward decriminalization of drugs. Only 16 per cent favoured complete legalization, while 71 per cent of those who gave a response other than keeping the status quo, favoured either legalization or decriminalization. Less than 2 per cent supported stronger prohibition other than longer prison sentences and increased enforcement budgets.

In a separate survey conducted in 2004, Thornton solicited the views of US economists who are actively engaged in drug policy research. Three general conclusions emerged. First, most argued that the current policy of prohibition in the USA is fairly ineffective, very ineffective, or even harmful. Second, most agreed that the current policy stance ought to be shifted. Third, most believed that this shift ought to be in the direction of liberalization. A source of disagreement, however, centred on the degree of liberalization.

In light of the above, the principal purpose of this chapter is to provide an analysis of the costs and benefits of prohibition and an evaluation of the likely outcomes of drug legalization. To set the scene, we begin with an overview of the history of recreational prohibition.

A Brief History of Recreational Drug Prohibition

Drugs such as cannabis (marijuana), cocaine, and opium have been consumed ceremonially, medicinally, and recreationally for thousands of years.¹ Prior to widespread prohibition the biggest political development with drugs was the British government's encouragement of opium use in China under the auspices of the British East India Company. In the eighteenth century the company controlled the opium-producing areas in India and had a dominant position in the trade of Indian opium into China. The profits helped subsidize British control of India and to keep exports to China balanced with imports.

¹ For a more detailed introduction to the history of drug use and laws see Abadinsky (2001, chapter 2).

In the late 1830s the British government started the First Opium War by sending a naval expedition that easily defeated Chinese forces, opened up Chinese ports to British trade, and won monetary compensation and Hong Kong as a British colony from China. The Second Opium War began in 1856 when Britain, France, Russia, and the United States attacked China in order to gain increased access to Chinese markets and to legalize opium in China. The Emperor was forced to pay the British government £20,000 which was according to Abadinsky (2001) “more than enough to offset the balance of trade which was the real cause of the war” (page 29).

While these events took place on the other side of the world they would have effects across the globe. The East India Company also brought opium back to Britain while Chinese immigrants brought the habit of opium use to the United States. This would provoke local regulations and restrictions in the US and UK during the second half of the nineteenth and early twentieth centuries. The Chinese opium trade was also the focus of the International Opium Commission which convened in Shanghai China in 1909. The United States initiated the Commission to push its prohibitionist agenda which would become the hallmark of future international drug conferences.

The Growth of Global Prohibition

As late as 1894 the Royal Commission on Opium and the Indian Hemp Commission reported that regular use of opium and marijuana was not harmful and Brecher (1972) reports that drug use in the US was not associated with the socially destructive outcomes

that have often been experienced in the second half of the twentieth century. The global prohibition of drugs grew on a framework of international agreements that were primarily instigated by the US.² Musto (1973) dubbed the cause of narcotic prohibition the “American disease” and showed that this instinct to prohibit is a faulty ideological notion within the dominant ideological group.³

The first Opium Conference met in The Hague, Netherlands beginning in 1911. The meeting was contentious in that the US pushed for strong prohibitory measures even though it had no such domestic laws of its own, while other nations sought to protect their interests in the opium trade or opium production. The second Opium Conference at The Hague—on the eve of World War One—produced a patchwork agreement referred to as the International Opium Convention which committed the signatory nations to pass and enforce laws that would reduce abuse of narcotic drugs. This would become the foundation of global narcotics prohibition because it was incorporated into the Versailles Treaty as Article 295 and thus committed all the signatory nations of the WWI peace document to implement all of its anti-narcotic measures.

The US passed the Harrison Narcotics Act in 1914 which avoided Constitutional restrictions on the police powers of the central government by regulating narcotics via its taxation power. All doctors were required to register and to keep detailed records of narcotics prescriptions and to pay a \$1 annual tax. This “tax” soon developed into a de

² For a short overview of the UN Drug Control Conventions and institutions see the United Nation’s *World Drug Report*, pp. 168-180.

³ For a good overview of the history and development of American drug policy legislation see Musto (1987).

facto prohibition as addicts and doctors were arrested for engaging in addiction maintenance, drug addiction clinics were closed, and the black market developed.

In 1914 the UK enacted emergency legislation known as the Defence of the Realm Act at the outbreak of WWI. This legislation gave the British government the power to regulate people's 'morality' by proclamation rather than via Parliamentary legislation. In 1916 the Defence of the Realm Act (ordinance 40b) established strict controls over the sale and possession of cocaine and opium and mandatory closing time for pubs. In 1920 the Dangerous Drugs Act brought the UK into compliance with the Hague International Opium Convention by placing severe restrictions on cocaine, heroin, morphine, and opium. In the early 1920s the UK followed the US's lead by criminalizing doctors who prescribed addiction maintenance for their patients.

The Harrison Narcotic Act was clearly a violation of the 'spirit' of the US Constitution, while in the UK drug prohibition was an emergency wartime measure. In neither case was it the result of widespread public outcry against drugs and in neither case was it subjected to detailed public debate. Rather narcotics prohibition was mandated globally by the hastily conceived conference at The Hague on the eve of WWI and by a minor Article in the tragically conceived Versailles Treaty.

However, while the US continued to press a puritanical line on heroin, the UK reversed course in the mid-1920s to re-establish medically supervised addiction maintenance

programs based on the Rolleston Committee report and ushered in the “British System” of addiction treatment which was made law in 1932 and lasted until the 1960s.⁴

The US passed the infamous Constitutional Amendment to prohibit alcohol consumption that went into effect in 1920. Promoted as the most important social reform in history, it was actually a colossal failure in terms of consumption, health, crime, violence, and corruption (Thornton 1991b). When the Great Depression finally hit, Americans realized that alcohol prohibition was also a public finance disaster and repealed it beginning in 1933 (Thornton and Weise 2001).

The UK added cannabis to its Dangerous Drugs Act in 1928 while the US passed the Marijuana Tax Act in 1937. The Tax Act was designed to circumvent Constitutional scrutiny by placing a \$100 tax per ounce of marijuana (approximately \$1,400 or 750£ in 2005) and was therefore a very lightly veiled prohibition. At the time, marijuana use was not a major issue nor was there any extensive public debate in either country.

After World War II the US continued to pass more punitive anti-drug legislation. The Boggs Act of 1951 increased penalties for drug violations and in 1956 the Narcotics Control Act increased penalties to draconian levels. In 1961 the UN consolidated all the previous international agreements under the United Nations Single Convention which obligated member nations to bring their local laws into compliance with its regulations on over 100 drugs. While it appeared to bring order at the international level, the US turned

⁴ For a good overview of British drug policy see Turner (1991) who shows the “pragmatic incoherence” of the British system and that its social and medical aspects were actually built on the pre-existing private sector charitable systems such as the Salvation Army.

more to drug treatment (Narcotic Addict Rehabilitation Act of 1966), while the UK began dismantling the British System by eliminating the use of heroin, cocaine, and dipipanone for the treatment of addiction and substituting methadone clinics with the Dangerous Drug Act of 1967.

The War on Drugs was launched with the US's Comprehensive Drug Abuse Prevention and Control Act of 1970, the UK's Misuse of Drugs Act of 1971, and the UN's 1971 Convention on Psychotropic Substances. The US legislation was a multi-pronged attack, but notably removed constitutional restrictions on the federal drug law enforcement while in the UK the Home Secretary was given direct authority to add new drugs and to upgrade drugs to higher penalty levels. The new UN Convention expanded the list of restricted drugs to include synthetic drugs including amphetamines, barbiturates, and hallucinogens.

Drug policy has continued to evolve and to recycle failed policies. This gradual racking up of prohibition over the twentieth century has been fuelled by optimism unguided by reason or memory. The UN even committed itself in 1998 to a drug free world by 2008. While the US is sticking with prohibition, there are indications that policy may have begun to ratchet downward in the UK, UN, and many other countries, particularly in Europe, away from prohibition in the direction of the 'Dutch Experience,' where harm reduction policy dominates prohibition. The Netherlands has nominal prohibition against all drugs but it is targeted primarily against the largest dealers of the most dangerous drugs. Consumers are not prosecuted and the problems of drug abuse are addressed

socially and medically, not criminally. The results in terms of drug use, drug abuse, health, crime and violence have been relatively good (Engelsman, 1991).

The Costs and Benefits of Prohibition

A cost-benefit analysis about past events is difficult because not everything has a tangible monetary value, such as the value of a human life and even when economists make a good faith effort to provide such numbers, they will naturally be viewed with scepticism. Analyzing the future is even more difficult because of inherent uncertainty and there have been gigantic miscalculations such as the Tennessee Tombigbee Waterway project in the US which famously underestimated costs and overestimated benefits, likewise with the bankrupt Chunnel in Europe. The “Big Ditch” in Boston, another transportation project, is now \$12 billion (£6.5 billion), or nearly 500 per cent over budget.

A traditional cost-benefit analysis of prohibition vs. legalization would go as follows: Prohibition raises the price of good X by 100 per cent and would reduce consumption by 50 per cent. If consumption is 50 per cent lower, then all health and social problems associated with good X will be improved by 50 per cent. Next multiply the number of lives saved by one monetary amount and the number of lives helped by another monetary amount. Then compare these combined figures with the amount spent on prohibition. This process is not unreasonable when applied to small changes within the market economy, such as an increase in the sugar tariff. However, with prohibition you cannot assume *ceteris paribus* conditions because with prohibition everything about the

recreational drug market changes radically. Fortunately the economist can ask what is the *opportunity cost*—what do we give up when we allocate these resources to prohibition?

This cost could be any government service or tax cut that we sacrifice for drug prohibition. If we begin with the status quo and allocate some of your law enforcement budget to enforcing drug prohibitions what will happen to crime? With fewer police officers safeguarding property and tracking non-drug criminals the commission of crimes will be easier and more crimes will be committed. If you increase the law enforcement budget, you will apprehend a larger number of criminals, but that would overextend prison resources (and the court system) and prisoners would have to be given early releases from their sentences. If non-drug criminals are released early, then the cost of crime decreases and that would, *ceteris paribus*, result in an even higher rate of crime. You could also expand the prison capacity, but that not only increases the direct cost of prohibition, it also increases the opportunity cost because the labour force is reduced and once in prison drug offenders and their families face large permanent decreases in their future economic outcomes. One of the primary goals of prohibition is strong independent families, but the result is just the opposite.⁵

Another important opportunity cost of prohibition can be gleaned from the black market because with prohibition we lose all of the legal and competitive safeguards that an open market provides. McDonald's would be crippled or bankrupt if it sold even a small number of deadly hamburgers. Toyota does not sell cars to minors and it certainly would not sell cocaine or heroin to minors. These constraints do not exist in black markets and

⁵ See Benson et al (2001) for a discussion and evidence on most of these issues.

unlike pharmaceutical companies, coffee manufacturers, and distilleries, consumers of illegal recreational drugs have little idea of how strong or potent the products they are buying. In fact the more prohibition is enforced the more potent and dangerous drugs have become and more dangerous substitutes have come onto the black market (Thornton 1998). Any reduction in the quantity of illegal recreational drugs is easily offset by the higher potency and the significant increase in health risks. Some consumers may simply switch to legal substitutes such as whiskey, prescription pain relievers, and sniffing volatile solvents.⁶ The overall increase in health risk is an opportunity cost that is counterproductive to a primary goal of prohibition which is to reduce health risks in society. The spread of AIDS via “dirty” hypodermic needles would also fit into this category.

Political corruption is another cost of prohibition. Prohibition drives up the cost of illegal recreational drugs, with more enforcement resulting in higher prices. The ‘wedge’ that prohibition drives between the cost of production and the final selling price provides an incentive for illegal drug sellers to bribe law enforcement, judges, and politicians for protection against capture, prosecution, and incarceration. This was a major problem during the alcohol prohibition in the US, as it is now with recreational drug distribution around the world, especially in countries that produce drugs such as Afghanistan, Bolivia, Columbia, Lebanon, and Mexico. In the limit, such corruption makes the legal and political systems dysfunctional and greatly weakens the economy.⁷

⁶ The UK averages more than one death per week from volatile solvents overdoses, mostly teenagers. The average home will contain two dozen or more of these solvents in products ranging from butane lighters, to paint thinners, to nail polish remover.

⁷ See Thornton (1991a) for a more detailed treatment of this issue.

This type of analysis could easily be extended to violence, addiction, organized crime, the enticement of youth into drugs, decay of the inner city, and other related issues. The point is that prohibition creates profit opportunities that create ‘unintended consequences’ that are directly counterproductive to the goals of prohibition. In addition, prohibition prevents local governments from applying routine sanctions and regulations such as taxes, location restrictions, and limits on the hours of operation. In summary, the cost of prohibition exceeds government expenditures on prohibition because it makes things worse rather than better.

Prohibition Does Have Benefits

Economics teaches that public policy is economically driven. Policies certainly are linked with ideologies but at some level a policy must provide some groups, classes, or “interests” with benefits or they will not be implemented or survive in the long run. One important corollary of this view is that the survival of a public policy does not depend on the policy producing net social benefits for its survival. Thus, a sugar tariff can survive if it produces concentrated benefits for domestic sugar producers that are less than costs imposed on the multitude of sugar consumers.

Prohibition does not eliminate the demand for recreational drugs. People who want recreational drugs have access to illegal drugs as well as legal recreational drugs and inferior substitutes such as sniffing volatile solvents. Therefore you cannot sustain a

claim that consumers are beneficiaries of prohibition. A non-naïve and straightforward view of the beneficiaries of prohibition (and other policies) was put forth by Bruce Yandle in his 1983 article: “Bootleggers and Baptists: The Education of a Regulatory Economist.”⁸ His model provides the explanation that it is the unlikely combination of Baptists (who oppose drinking alcohol on Sundays) and bootleggers (who sell alcohol illegally) that explains the persistence of Sunday pub closing laws in the American south. We need only add brewers to Yandle’s Baptists and bootleggers. This is not to say that all brewers support drug prohibition, or that some Episcopalians do not support prohibition, it is only to give three likely examples of groups that benefit from prohibition.

Baptists—generally considered—benefit from prohibition because they believe the consumption of recreational drugs is harmful and immoral. Their ideology holds these drugs are objectively sinful and that any use of the drugs is inherently evil. Because the goods are inherently evil, it is not good enough to personally abstain; the ideology demands that society must be cleansed from its use. Prohibition satisfies this demand and provides utility to people who believe in this point of view. This applies broadly, even to atheists who support prohibition based on the naïve view that prohibition is good for society and therefore they derive utility from prohibition. Pro-prohibitionist citizens support prohibitionist candidates.

The term bootleggers originally applied to those who smuggled illegal alcohol (i.e. moonshine), but it applies to those in the recreational drug distribution business and even other illegal products like “bootleg” DVDs. In contrast to the ideological and subjective

⁸ Yandle (1998) applies the Baptists and Bootlegger model to environmental regulation.

utility that Baptists receive, bootleggers are in the recreational drug business and benefit monetarily from prohibition. Recreational drug bootleggers make up a vast global network of individuals ranging from the Columbian cocaine kingpins to the teenagers who sell drugs on city streets. How these individuals influence public policy is unclear, but we do know that they bribe law enforcement and public officials at all levels of government, especially at the level of “organized” crime. To this we can add the influence of the criminal justice system and any organizations that benefit from greater expenditures on prohibition. This category of beneficiaries is probably of secondary importance to that of the Baptists.

Brewers and those industries that sell substitutes for illegal recreational drugs form the third example of the beneficiaries of prohibition. This would include the makers of beer, wine, and distilled spirits as well as the makers of tobacco products. At the margin, prohibition will raise the prices of illegal recreational drugs and divert more sales to legal recreational drugs such as whiskey and cigarettes. Like the bootlegger, the brewer’s incentive is a monetary one, rather than ideological or subjective. We can add the pharmaceutical drug industry because prohibition drives demand from illegal recreational drugs to pharmaceutical drugs such as OxyContin, Vicodin, Valium, and Ritalin. The brewer category is probably the least important of the three examples.

When we examine the costs and benefits of prohibition from the economic point of view, we get a much clearer picture than provided by a traditional cost-benefit analysis. The opportunity cost of prohibition recognizes that we give up valuable safeguards that exist

in the economy. As a result we experience more crime and corruption and much more dangerous products, all of which are contrary to the goals of prohibition. The economic benefits are also problematic because the beneficiaries are not consumers or society as a whole, but rather the black marketers in prohibited markets and their legal market competitors. The Baptists get great subjective satisfaction from prohibition, but that satisfaction is illusory.

Potential Outcomes of Legalization

For the remainder of the chapter, we examine the likely outcomes of an economy shifting drug policy away from prohibition toward some form of legalization. Four alternative policies are evaluated: government monopoly, government regulation, the sin tax and the free market. In turn, each of these policies represents a spectrum of possible policy choices.

Government monopoly

One policy that is often considered a replacement policy for prohibition is to establish a government monopoly for the distribution of drugs, particularly narcotic drugs such as heroin. This approach would place the production and distribution of drugs in the hands of the state and thus provides direct control over most aspects of the marketplace.

Several US states monopolise the distribution and sale of liquor, and a few also do so for wine [see Benjamin and Anderson, 1996; Benson, Rasmussen and Zimmerman, 2003].

Two other examples of these privatized government monopolies are the market for human organ transplants and state lotteries.

One consequence of this policy approach is that government can directly control the product. It can establish rules for the production, distribution, and consumption of the product and therefore mandate the composition of the product (for example, potency), price, quantity limits, and hours of operation. With human organ transplants the government prohibits the sale of organs and determines who gets those available. With state lotteries the government regulates what products can be sold, their price, and the method of sale. Some state liquor monopolies control the wholesale distribution, choosing products and setting wholesale prices, while others monopolise retailing as well, thus determining the number, location, operating hours and practices of retail outlets, along with prices and products to sell.

Government monopolies can also establish regulations concerning who is allowed to purchase and consume the product. In the area of drugs, government-run liquor stores restrict the sale of their products to adults, although the liquor is often resold by adults to minors or obtained from government stores by minors by theft or deception. Methadone clinics have a monopoly on the distribution of narcotics, but they generally only provide the drug to registered addicts. The methadone is often provided at no charge, but the addicts are required to consume the product on the premises in order to prevent resale.

The results of government monopoly vary depending on whether it is contracted out or publicly run and whether it distributes its product at high prices or gives the product away for free to pre-determined consumers. State-run liquor monopolies and state lotteries generally provide diminished access, high prices, limited product selection, and high levels of tax revenue to the government. Revenues typically range from 30-50 per cent of sales but the high prices tend to encourage smuggling. Most importantly, restricting access by this means does little to distinguish (and punish) bad behaviour from good behaviour (Whitman, 2003).

Government regulation

Economic analysis of regulation often focuses on price regulations. While price regulations might be applied in a legalized drug market, it is much more likely that other aspects of the market would be regulated. In fact, while price constraints are often a part of government-imposed regulations in markets, regulations actually deal with many other aspects of most markets (Benson, 2003). One need only examine the markets for prescription drugs, or various alcohol markets.

Thus, there have been many reformers who have suggested that illicit drugs be made legally available but only through a regulated process whereby buyers and sellers meet certain government requirements. Kleiman (1992) argues that alcohol drinkers and marijuana smokers pay a high tax, have a revocable license, and a limit on the amount they consume. Under his scheme, cocaine users would be registered and could receive a

limited amount of cocaine from regulated distributors either at a high price or under therapeutic supervision. Tobacco users would be registered, sellers would be licensed, quantities would be limited and heavier taxes would be imposed. Heroin prohibition would be rigidly enforced, but addicts would be registered and placed in maintenance and treatment programmes. The cost of administering Kleiman's approach would be extremely high, of course, and violations would probably be rampant, but there are alternative approaches as well [see Kleiman, 1992; Thornton, 1994 for a critique].

The prescription-license approach has many variations both inside and outside of drug markets. Within 'prescription' drugs markets consumers are generally registered, licensed, or given a prescription for narcotic drugs from a medical doctor or drug treatment therapist. Drugs can then be purchased from a license pharmacy or maintenance programme facility in limited quantities. Permission to consume could be obtained along a spectrum that runs from only for legitimate medical needs, to addiction maintenance and treatment, to any adult who the doctor determines is knowledgeable and healthy enough to consume such drugs. Drug prices can range from the highly taxed to free at government-run maintenance programmes.

Benjamin and Anderson (1996) point out that the form of alcohol control (taxation and regulation) among states in the USA clearly is a function of the cost of inducing compliance. Most states along the Canadian border where smuggling is easy employ a very different approach to alcohol control than most interior or Southern States.

Similarly, alcohol control differs in the traditional ‘moonshine’ states in the Appalachian Region where social norms support illegal production, compared to other states.

One good example of where an illegal market was legalized and regulated is the casino gambling industry in many US states. Here casinos are licensed, regulated, and taxed.

Generally, the requirements and taxes are considered normal rather than strict or lax and the results have been quite positive.

Sin taxes

Another alternative to prohibition is to allow drugs to be sold in the market, but to impose a special tax on the product above the normal sales tax, called an excise tax. This sin tax approach is common on alcohol and tobacco products, but is also used in the case of gasoline and a variety of other products.

One potential advantage of a sin tax approach is that it is relatively politically attractive. It provides politicians with revenues and allows them to continue to condemn the product by imposing a sin tax. While many of its advocates contend that the resulting revenues can and should be earmarked for enforcement, treatment, or some other specific purpose, legislators will probably reduce revenues directed at such purposes from other sources as the earmarked sin tax revenues rise. Spending on the desired activity will not rise in the way that advocates intend it to.

Other shortcomings of the sin tax approach also require recognition. For instance, technically, most excise taxes are paid by the seller. This creates high compliance costs for sellers. In essence, enforcement costs are shifted, at least to a degree, from the public sector under prohibition, to sellers. Naturally, sellers have incentives to avoid such costs, so if they are high (and/or if the tax is so high that it dramatically reduces their sales and revenues), illegal sales will continue, much as under prohibition.

The excise tax is also a regressive tax in that it takes a larger percentage of income from low-income households who purchase the taxed product than from high-income households. In the political arena this may be seen as a benefit of the sin tax, in that it presumably reduces consumption more effectively among low-income groups. On the other hand, such taxes create relatively strong incentives for buyers, and particularly low-income individuals who want to consume the good, to turn to black market sources. Most sin tax advocates assume that raising taxes simply raises price and results in reduced consumption. They fail to see that as prices rise consumers have incentives to look for substitutes and producers have incentives to supply them. One substitute for highly taxed goods is the same good sold in an illegal market.

A major problem with the sin tax approach is the difficulty in setting the tax rate. Low tax rates would have little effect on consumption, while high tax rates can spur black markets to develop in order to avoid the taxes, so the underground production, smuggling, crime and corruption associated with prohibition also occur with significant sin taxes. Becker, Grossman and Murphy (2006) are among the minority of sin tax advocates in that they

recognise that illegal markets will persist under this approach, thus necessitating continued spending on enforcement. They suggest that setting the optimal level of expected punishment for black market activities will eliminate that market.

Finally, another drawback of a sin tax approach which corresponds to a prohibition approach is that, like prohibition, taxes are targeted against consumption in general, not the external harms that some consumption may produce. For example, the tax on red wine in the USA does have the effect of reducing the consumption of red wine over the entire economy, but this reduces the health and other benefits of red wine, and yet does little to target specifically the potential harms of wine consumption, such as automobile accidents (Mast, Benson, and Rasmussen, 1999).

Free market

Under a free market approach, the supply of and demand for a drug would be determined solely on the basis of market forces. Competitive conditions would result in relatively low prices and diversified offerings of competitive products, while consumer sovereignty would dictate that the products that best satisfied consumers in terms of price, quality, and so on, would dominate the market.

We would also expect a large number of suppliers to enter the market and for most suppliers to leave the underground economy. Although it is impossible to project what a mature market would look like in terms of the precise number of firms and products, it is

safe to say that most consumption would be served by commercial production, rather than by home production. Looking at other mature industries such as soft drinks, cigarettes, toothpaste, beer, and over-the-counter drugs, we find that a small number of firms supply the majority of the products sold in the marketplace.

The advocates of legalization are often quick to emphasise all of the costs of prohibition but often downplay or dismiss the increased consumption expected under legalization.

The supporters of prohibition rest much of their case on the increase in consumption that would be experienced with legalization, but neglect to consider that legalization would remove the costs of prohibition. Indeed, some prohibitionists believe that all the problems related to drugs and drug prohibition, including crime and corruption, will simply get worse as a function of the (greatly) increased consumption of drugs, despite considerable evidence to the contrary.

Further, prohibitionists also suggest that once the prohibition is lifted, consumption of drugs will skyrocket because of a lack of legal restriction, a significant decrease in price, and the use of commercial advertising promoting their use. They feel that lower prices would increase consumption among current consumers but more importantly legalization would increase the number of consumers who currently abstain only because of the legal threats or the perceived morality of the law.

Overall, however, in a free market scenario, many abstainers would not consume the drugs, particularly hard ones such as heroin and cocaine even if they were legal because

they consider the consumption of those drugs to be immoral, dangerous, or repugnant. Those who only refrain because of the legal threat would probably consume the drugs responsibly for fear of running afoul of other legal threats, such as Driving Under Influence (DUI) laws or the loss of their job or reputation.

In fact, legalization reformers sometimes suggest that there will be little or no increase in consumption because illegal drugs are readily available and competitively priced against their legal counterparts. However, we cannot completely discount the impact that purchasing illegal drugs involves more than just price and availability, namely going to prison, losing your job, or overdosing on drugs, and that these threats do diminish the actual number of drug consumers.

Some individuals may be affected by the 'forbidden fruit' effect which actually increases their demand for illegal products. By making a good illegal you draw attention to it and encourage its use as a way of rebelling against society or unjust laws. If prohibition creates this forbidden fruit effect and increases sales in a black market, then demand could decrease as a result of legalization. There is some evidence for the existence of this effect, but nothing that would suggest its magnitude in the case of drugs.

The actual increase in consumption is probably somewhere between those two positions; positive but not ominous. Moving from prohibition to a completely free market would likely lead to an increased consumption of drugs. First, current consumers would face a lower price and increased quality. Second, new consumers would enter the market due to

the lifting of criminal sanctions and the improved safety of the products. Third, there would be a substitution from drugs that are currently legal and highly taxed, such as alcohol and tobacco, into newly legalized drugs which are not. Fourth, legal products would tend to be sold in lower potency forms so that the measurable quantity of product as measured by weight or volume sold would increase. Fifth, there would be a surge in demand for the legitimate medicinal uses of marijuana, cocaine, and heroin that are currently prohibited or restricted.

What are often neglected in the drug policy debate are the real characteristics of free markets governed by the rules of private property, contract, and tort, and a ‘free-for-all’ market without any enforceable rules of the game. The fact is that rules against fraud, duress, imposition of intentional or accidental harms, and trespass or other involuntary takings do exist in all modern economies. Furthermore, even when these rules are not instituted by the state, various kinds of ‘privately-imposed’ regulations would virtually guarantee that the production, distribution, and consumption of drugs such as marijuana, cocaine, and heroin would be significantly different compared to black market conditions. With legalization, market behaviour will look more like Budweiser, Marlboro and Coca Cola, and less like Al Capone, Miami Vice, and The Sopranos.

Conclusion

Following a brief history of recreational drug prohibition, this chapter examined the costs and benefits of prohibition and provided an analysis of the major forms of legalization

that are available to policy-makers throughout the world. On balance, it appears that there are many unintended, negative consequences of prohibition and these include crime and corruption. Further, there is evidence that prohibition may also cause or exacerbate the various risks associated with using recreational drugs. Whilst it was established that prohibition is harmful in numerous respects, our analysis also showed that many of the alternatives are certainly not perfect either. Government monopoly, government regulation, sin taxes, and the free market were all described and assessed with the help of well-developed economic models. As each of these policies has been used in a variety of different industries, we also had a wealth of historical experience to draw upon to further understand their implications. Given that the reader will likely face the prospects of changing drug policy in his lifetime, our analysis should provide valuable information.

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