



Report

# Legalization, Decriminalization, and Other Alternatives to Prohibitions That Create Illegal Markets

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## Executive Summary

Governments prohibit many products and services beyond drugs and alcohol. Sometimes, those prohibitions are eased or reversed. Discussions often distinguish decriminalization for customers vs. legalization of supply, but there are many variations (e.g., decriminalizing suppliers of banned commercial sex and courts striking down bans as unconstitutional). New prohibitions (e.g., bans on wildlife trafficking) are happening all the time.

This report explores the relaxation and reversal of prohibitions across a wide range of domains. Examining these policy shifts across multiple issue areas helps dispel myths about prohibition that would be easy to believe if the analysis were limited to a single domain—for example, the myth that prohibitions necessarily engender violent illegal markets, criminal involvement, and more concentrated forms of the banned product, as well as broader claims about prohibition necessarily failing. This approach uncovers interesting parallels and contrasts. For example, jurisdictions that are leaders in cannabis-policy liberalization are often leaders in permitting assisted suicide but not necessarily in legalizing gambling.

Some prohibitions—such as those on drugs, gambling, commercial sex work, and counterfeit goods—engender large illegal markets. Others, such as bans on abortion, create markets for illegal transactions, but the illegal market is not the most important dimension. Still other prohibitions, such as those against surrogate pregnancy, create (legal) exports of services from legalized jurisdictions to “customers” who live in places with bans.

The policy questions involved are complex, and outcomes are hard to predict; so it would be beneficial to subject any new prohibitions or legalizations to an Illegal Market Impact Assessment (IMIA) in order to reduce the risk that well-intentioned bans or reversals of bans will be regretted down the road.

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# Introduction

Decriminalization and legalization of illegal goods and services are at the center of many pressing policy controversies. Cannabis policy is in flux, with notable legalizations in Uruguay, Canada, South Africa, a few European countries, and many U.S. states. Current debates about legalizing psychedelics are reminiscent of debates about cannabis 20 years ago. Liberalization is not confined to drugs. For example, gambling has been legalized and normalized in the U.S. over the last 50 years, as has pornography.

Change is not all in one direction. Oregon recently reversed the decriminalization of controlled substances enacted via Ballot Measure 110, one of several recent policy reversals in the Pacific Northwest.<sup>1</sup> Thailand is reversing its decriminalization of nonmedical cannabis, several states have banned—or are considering banning—kratom, and Congress re-criminalized intoxicating hemp products that were (probably inadvertently) legalized by the 2018 Farm Bill.<sup>2</sup> New laws and treaties ban trade in various wildlife products, and appeals for tougher sanctions echo “drug war” rhetoric of the 1980s.<sup>3</sup> Pope Francis called for a universal ban on commercial surrogate pregnancy contracts, which are already illegal in many countries.<sup>4</sup> New illegal markets have been created not only by new bans on old practices but also by the emergence of new technologies, such as online markets for stolen credit cards and other personal data.<sup>5</sup>

The first section of this report discusses the reasoning behind prohibitions in greater depth, but the basic idea is simple. The production or consumption of certain goods and services creates harms, and prohibitions often reduce the scale of that market activity. But they do so at a price: enforcing prohibitions can be costly for taxpayers, exacerbate harmfulness per unit of activity that remains, and create opportunities for criminal incomes, as well as for occasional violent conflict over that income and the product.

As Mark Kleiman famously observed, the choice between drug prohibition and legalization lets one choose the type of problem that one confronts, but one cannot choose not to have a problem.<sup>6</sup> Choosing wisely is complicated because the consequences are multifaceted and uncertain. There is widespread agreement for some products: most countries ban crack cocaine but allow caffeine. But for other products and activities, including cannabis, prostitution, and gambling,<sup>7</sup> policies vary considerably over time and across countries.

After discussing motivations for prohibitions, subsequent sections of this report seek to clarify distinctions among legalization, decriminalization, and other options for liberalization; challenge certain widely held misconceptions; and consider a range of markets that have been either prohibited or legalized. Rather than offering broad judgments about the merits of legalization—which depend on particulars of the market in question and the values of the observer—the report offers a constructive suggestion: whenever a legislature considers imposing a new ban, there should be a dispassionate, market-savvy analysis of the likely effects of that ban. Modeled on Environmental Impact Assessments (EIAs), these Illegal Market Impact Assessments (IMIAs) might reduce the number and size of illegal markets that are created without sufficient planning for unintended consequences that could have been foreseen. Just as the statutory requirement for EIAs drove improvements in the ability to do environmental impact analyses, a statutory requirement for IMIAs might drive advances in the science of illegal markets.

Policy changes in the other direction—the lifting of prohibitions—could, and probably should, also be subject to market impact assessments. In some cases, such as cannabis legalization, public debate before the policy change allows ample consideration of these impacts. But not all legalizations



receive such scrutiny: those created by courts—for instance, the legalization of sports gambling and of prediction market contracts on election results—are especially unlikely to be preceded by the extended debate that often accompanies major legislative actions.

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## Varieties of Illegal Markets

### What Is an Illegal Market?

For present purposes, we define an illegal market simply as transactions between willing buyers and sellers, either or both of whom are subject to legal punishment because of that activity. The “willing” qualifier excludes transactions involving fraud, deception, or coercion. The transactions can involve goods (e.g., guns) or services (e.g., laundering money or smuggling undocumented immigrants across an international border).

Some illegal markets involve goods or services that are illegal for (almost) anyone to sell or purchase. In the U.S., that includes heroin and many other “Schedule I” controlled substances for which there is no federally recognized medical use.<sup>8</sup>

Often, what makes the transaction illegal is that the “wrong” parties are involved. In the U.S., both cocaine and methamphetamine are “Schedule II” substances that have recognized (albeit limited) medical use. If a hospital purchases cocaine from a pharmaceutical company for use in surgery as a topical anesthetic and vasoconstrictor, that transaction is legal. Patients with a prescription may legally buy hydromorphone from a Drug Enforcement Administration (DEA)–licensed pharmacy; but if the patient resells those same pills to a friend, the sale is illegal. Likewise, most illegal gun purchases involve weapons that were legally manufactured and were, or could have been, part of a legal transaction under other circumstances. The same could be said about the smuggling of cigarettes and other goods in order to evade taxes.

Sometimes, the crime is not a matter of who sells, but that there is a sale. Taboo trades pertain to goods or services that are morally neutral—or even praised, when provided freely—but for which any commercial trade is banned. Particulars vary by country; common examples include the sale of organs, gametes, and sexual services.

Trade in some wildlife products is banned outright; elephant ivory and rhino horns are somewhat like heroin in this regard. But often, what makes a transaction illegal is who harvested the species or how it was harvested. Native Americans can harvest Minnesota wild rice on reservations, and the Makah tribe is now permitted to hunt gray whales—both of which are banned for nontribal members.<sup>9</sup>

Illegal, unreported, and unregulated (IUU) fishing operates on a large scale, sometimes estimated as \$15–\$36 billion per year, but what constitutes IUU can be complicated. If a Chinese trawler harvests fish without permission from within another country’s Exclusive Economic Zone (EEZ), the sale of those fish is illegal, even if that country’s own trawlers could have legally harvested the same fish. Similarly, it may only be illegal to fish using certain methods, such as bottom trawling, or during banned times of year.

Licensing a familiar case in which the legality of a good or service depends on who, rather than what, is involved in the transaction. States often restrict the provision of professional services to people who have obtained licenses from the government (hairdressers, taxi drivers, massage therapists, etc.). If unlicensed individuals charge money to cut someone’s hair, give a ride, or offer a massage, they are violating the law and hence participating in an illegal market transaction.



### **Purposes of Prohibition**

There are many motivations for prohibitions. Some reflect a culture's morals or taboos, as is often the case with prohibitions on various foods: for example, many Muslim countries ban pork products. Horse meat is banned in many English-speaking countries, as well as in Brazil and Poland, but it is just another meat in much of the rest of the world. Slaughtering cows is banned in much of India but commonplace elsewhere. Moral considerations can also be at play with respect to bans on intoxicants, sex work, pornography, surrogate pregnancy, and human organs, among other markets.

Many prohibitions have practical objectives. Drug prohibitions aim to protect consumers (and their families, employers, and communities) from addiction, overdose, and harms related to intoxication. By contrast, environmental prohibitions and bans on wildlife trafficking aim to reduce the harms from production, not consumption. (Brazilian rosewood chairs are not dangerous to sit on, but illegal harvesting of rosewood harms the environment.)

Some bans (such as those on money laundering and illegal firearm sales) seek to impede criminals' ability to commit other crimes.

Other prohibitions protect the legal interests of some stakeholders relative to others. For example, prohibitions against patent, copyright, or trademark infringement may help society in the long run—by incentivizing innovation—but the immediate beneficiaries are the holders of those intellectual property rights.

Especially in authoritarian countries, prohibitions may protect the interests of the political leadership but not society overall, such as when an authoritarian government forbids its citizens from emigrating, moving financial assets offshore, or exchanging currency at any rate other than the official exchange rate.

### **Costs of Prohibition**

Prohibitions create costs in many forms, as is illustrated by the familiar case of banned drugs. Arrests, prosecution, and incarceration are costly to taxpayers and also harmful to the offenders, who are punished both directly (fines and incarceration) and indirectly (convictions that reduce legitimate labor-market opportunities). Suppliers of illegal drugs can be violent and corrupting; the scale and nature of the violence associated with drug-trafficking organizations in Mexico are striking. Sometimes, drug trafficking finances revolutionaries and quasi-state actors.<sup>10</sup>

Illegal production outside regulated frameworks can exacerbate the harms per unit of production and use. Illegal gold miners use processes and chemicals such as mercury that are more damaging to the environment per kilogram of gold produced than those of legal, regulated firms.<sup>11</sup> Illegally manufactured drugs can contain harmful adulterants (e.g., xylazine added to illegal opioids) or have doses that vary from package to package in ways that increase the risk of overdose.<sup>12</sup>

Prohibitions also block activity that would have been beneficial. Most people who try dependence-inducing intoxicants suffer no obvious harms; only a minority escalate to problem use.<sup>13</sup> To the extent that prohibition reduces not only harmful addiction but also harmless use, it reduces both the consumer surplus of some would-be users and the freedom to do what one chooses.

Prohibitions—particularly when enforced in uneven or discriminatory ways—can undermine societal trust. Police in free societies depend on cooperation from the citizenry—for instance, to testify against alleged criminals—but racially discriminatory patterns of arrest may damage police–community relations. Some argue that the drive to enforce prohibitions can undermine valued constitutional principles.<sup>14</sup>



## Definitions and Distinctions

Particularly within the drug-policy literature, the words “decriminalization” and “legalization” are often used as shorthand labels. “Decriminalization” typically refers to reducing or eliminating punishment of people who use drugs, whereas “legalization”—particularly in the context of cannabis—often implies legalization of supply, not just possession or use.

Even within drug policy, that shorthand is insufficient. Some authors, for example, have distinguished decriminalization (in which an activity is literally no longer a crime but possibly still subject to fines or civil sanctions) from “depenalization,” “defelonization,” “deprioritization,” or policies prohibiting law-enforcement agencies from using government funds to enforce some laws.<sup>15</sup> When thinking beyond drugs, the enormous diversity of illegal markets demands greater precision.

It is important to state what activity is being liberalized. North American cannabis policy reform is often described as “legalization of cannabis,” but the plants were never breaking the law, and that imprecise phrase obscures whether the policy reform was legalization of use or legalization of supply. A more informative—albeit cumbersome—way to describe the reforms of Canada and many U.S. states would be the legalization of use and also of “commercial [or for-profit] production for nonmedical use.” By contrast, Alaska had already legalized home growing, and Spain allowed cannabis social clubs—which can be seen as collective home growing or production for noncommercial distribution only to club members.<sup>16</sup>

Indeed, as of 2024, a more accurate description of the policy in many U.S. states would be de jure legalization of production at the state level combined with de facto legalization at the federal level because the federal government did not change its laws. It simply chose not to enforce those laws against companies that were complying with state laws.

Likewise, it is not accurate to say that the Netherlands legalized cannabis back in the 1970s. Rather, Dutch cannabis policy might be described as de facto legalization of possession, use, and retail sale in coffee shops, even as prohibitions against production and wholesale trafficking are still enforced.<sup>17</sup> Recently, the Netherlands launched an experimental trial, allowing coffee shops in certain jurisdictions to obtain legal, regulated supply.<sup>18</sup>

Clarifying what exactly is affected by the legal change matters because sometimes only one party to the transaction is subject to legal sanction. For example, Singapore does not actually ban chewing gum; it bans only the production, import, or sale of gum.<sup>19</sup>

Who is subject to arrest can vary. At one time, commercial sex workers were arrested, but their customers were mostly only cautioned or embarrassed. Now, under the Nordic model, it is the customers who face greater legal risk.<sup>20</sup>

Sometimes, exactly what is prohibited is nuanced. The U.S. federal government does not ban eating horse meat. It does not even ban selling horse meat per se. Rather, the federal government cut off funding for inspections of abattoirs for horses; and without passing inspection, an abattoir cannot operate legally.<sup>21</sup> Likewise, it is legal to pay donors for blood products; but since 1978, the product must be labeled as such. Since there is essentially no demand for blood from paid donors, the labeling requirement effectively eliminates that market.<sup>22</sup>

Jerome Skolnick and John Dombrink distinguish several ways in which prohibitions can be relaxed or repealed. They use the term “nullification” for instances in which laws simply disappear and are not replaced by regulations of any kind.<sup>23</sup> That can happen when the courts strike down a



prohibition as unconstitutional, as happened with gambling in the U.S. and commercial sex work in Canada. Similarly, Christine Corcos described the complicated history of courts upholding—or not—the free-speech rights of fortune-tellers and other “crafty sciences” against prohibitions that drove the sale of such services into underground markets.<sup>24</sup>

Most legalizations are actually some form of “legalize plus regulate” because most activities in modern societies are subject to regulation. Skolnick and Dombrink further distinguish between a “commodity model,” in which the newly legalized product or service is subject to regulations that apply to all broadly similar activities; a “commercial service model,” in which there are regulations specific to that product or service (such as cannabis-specific excise taxes); and a system that requires specific licensure to conduct the activity.

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## Dispelling Myths

This section challenges six common misconceptions about decriminalization, legalization, and other alternatives to strict prohibition.

### **Myth #1: Legalization Is a Binary**

Typical journalistic coverage of drug policy often gives the impression that legalization is a single, well-defined option, leaving society with a binary choice: legalize or don't.

As we have already seen, this is oversimplified, but more can be said. Take the legalization of supply in the case of cannabis: that could mean legalizing growing only for one's own consumption, with distribution or sale still illegal. If sale is allowed, however, choices remain as to how many licenses are granted and to what types of entities. Canada and many U.S. states permit for-profit companies to produce cannabis for sale, but one could imagine a regime in which production is restricted to nonprofit organizations, for-benefit companies, or government monopolies, so as to prevent profit-minded entities from promoting greater consumption by those who have, or are in danger of developing, a substance use disorder.<sup>25</sup>

There are also options as to what products are allowed. Canada restricted cannabis supply to basic flower products and some oils (not for vaping) for the first year of its legalization. Quebec still bans vapes, products above 30% potency, and edible products deemed to be appealing to youth, such as cannabis-infused gummies and chocolates.

There can be interactions between who gets to sell and what is sold. Some states allow supermarkets to sell beer and wine but not liquor. In Canada, there can be variation based on where the item was produced. All alcohol sales in New Brunswick are through the government. Newfoundland and Labrador are similar but make an exception for beer produced in the province; Quebec makes exceptions for beer and wine bottled in the province.

### **Myth #2: “Decriminalization” Is Halfway Legalization**

Sometimes “decriminalization” (of use) is depicted as being halfway between prohibition and legalization. In one sense, that is true. Legalization (as the term is often used) means legalizing both supply and use, whereas decriminalization (as the term is often used) means reducing or eliminating criminal sanctions only for users but not for suppliers.



In many jurisdictions, the majority of drug arrests are for possession, so decriminalization might even reduce arrests by more than half. However, decriminalization would not shrink by half the illegal market, or its associated violence, corruption, and other harms. Liberalizing only use and possession of amounts suitable for personal consumption leaves supply in the hands of illegal actors. Furthermore, to the extent that decriminalizing use reduces the risk of punishment or social approbation, it could lead to greater consumption and hence a larger illegal market.

This effect is perhaps best studied for cannabis, where the effects appear to have been modest. Three reviews find increases in cannabis poisonings, use by adults, and rates of car-crash drivers testing positive.<sup>26</sup> However, other reviews stress that the effects are small or inconsistent, and they are certainly small, compared with the increases in use seen throughout the entire period of policy liberalization.<sup>27</sup>

Some jurisdictions have more broadly decriminalized drugs beyond cannabis. Oregon's 2021 Measure 110, for example, has received considerable scholarly attention. After passage, drug arrests fell dramatically. But crime and overdose deaths rose, and police expressed frustration at losing a tool for maintaining public order. Some conclude that Measure 110 caused overdoses to rise, but the alternative—and perhaps more likely—explanation is that fentanyl happened to reach Oregon at that same time.<sup>28</sup> At any rate, Oregon then reversed course, as did several other jurisdictions in the Pacific Northwest that had liberalized policies in some way.

### **Myth #3: Illegal Markets Are Always Dominated by Violent, Organized Crime**

This rolls two myths into one. The first is that all illegal markets are violent; but many are not. The counterfeit goods market—which supplies everything from handbags and medicines to airplane parts—is one of the largest by dollar value but produces little violence. The markets for illegal fish, wildlife, and commercial sex can involve violent exploitation of workers but not much random street violence. Internet-based distribution of drugs, stolen identities, and pirated software provide little opportunity for violence if transaction partners never meet in person. Peter Reuter notes that even most drug markets are “generally peaceable” despite notorious exceptions, such as retail crack markets of the 1980s and Mexican markets after the late 'aughts.<sup>29</sup>

The second myth is that criminal supply is controlled by a few major players. Notwithstanding common references to drug “cartels,” the distribution of illegal drugs is usually accomplished through the collective actions of thousands of separate actors, either individuals or relatively small organizations. The markets for diverted prescription opioids can be even more decentralized, with much supply being effectively peer-to-peer because people with opioid use disorder are sources of supply via doctor shopping and other retail scams.

Even when organized crime is involved, not all illegal markets are particularly violent. Until recently, drug markets in Europe tended not to be very violent, especially when compared with those in the U.S., and the mafia-controlled bookmaking and numbers rackets in New York City were not particularly violent.<sup>30</sup>

This is not to suggest that violence and organized crime are not serious problems in some illegal markets but only that they are not inevitable consequences of product illegality.

### **Myth #4: Legalization Is Same Old, Same Old, but Without the Arrests**

Illegality can shape the structure, conduct, and performance of almost every aspect of the supply chain. This is readily seen with cannabis. Before liberalizations, most cannabis seized in the U.S. was relatively low-potency, “commercial-grade.” Now sinsemilla—a variety known for its high THC content—dominates the flower market. Before prohibition, most cannabis was smoked botanical material. Now there is a profusion of product forms, including solid and liquid edibles,



vapes, dabs, tinctures, lotions, and even suppositories, most produced with or from extracted concentrates. Production facilities are enormously larger and take advantage of modern scientific agricultural practices.

Similarly, legalized sports gambling offers far more betting options than did bookmakers of the past, including “in-play betting” (betting during a game, not only pre-game); and betting on outcomes for individual players, not only teams, and complex parlays (bets that pay off only if a combination of outcomes occurs). The location and form also changed. Betting used to involve travel to a casino or racetrack; now it is available 24/7 through cell-phone apps.

### **Myth #5: Prohibitions Almost Always Fail**

There is widespread dissatisfaction with drug policy for many reasons including its expense and its inability to prevent catastrophic levels of overdose death in the fentanyl era.<sup>31</sup> A search for the terms “drug policy” or “drug war” and “failure” yields many hits—including from such prominent organizations as the American Civil Liberties Union and the Global Commission on Drug Policy.<sup>32</sup>

This does not mean that all prohibitions fail. For example, the history of U.S. prohibitions—and subsequent liberalizations—on fireworks parallels its prohibitions on cannabis in various ways. Those fireworks prohibitions appear to have reduced harms—notably, ocular injuries—without generating illegal markets or public controversy on a scale even close to that of cannabis prohibition.<sup>33</sup>

Myriad product safety regulations involve the prohibition of one version of a product while permitting another, safer version that siphons demand away from the prohibited item. For example, the U.S. prohibits the sale of walk-behind rotary lawn mowers that lack a “dead man’s switch” (known formally as a positive blade control system).<sup>34</sup> It is hard to know how many injuries that prohibition averts, but it clearly has not been undermined by violent criminal organizations selling banned lawn mowers.

Even alcohol prohibition may not deserve all the scorn it receives. It probably reduced drinking notably and may not even have increased violence overall.<sup>35</sup> And programs that revoke an individual’s “license to drink” after several alcohol-involved offenses (e.g., 24/7 sobriety programs) have been found to reduce arrests for drunk driving, domestic violence, and even all-cause mortality.<sup>36</sup>

Whether the pros of any given prohibition outweigh its cons is a value judgment, but successes are easy to overlook precisely because the associated illegal markets, if any, are not problematic. For example, in all or parts of the U.S., horse meat, foie gras, unpasteurized milk, haggis, and fugu fish are banned, but organized crime groups are not getting rich selling those products.

### **Myth #6: Prohibition Always Leads to More Concentrated Products**

Richard Cowan’s “Iron Law of Prohibition” suggests that banning a drug creates incentives to supply that drug in more concentrated forms, making it easier to smuggle and hide.<sup>37</sup> This could be particularly true for alcohol, which is bulky; during Prohibition, it was easier for bootleggers to smuggle whiskey than beer. Cowan’s logic is sound but pertains to only one of many factors that influence potency—and not necessarily the most important. Referring to it as an “Iron Law” is an overstatement that was seized on and oversold by critics of Prohibition.<sup>38</sup>

The empirical evidence has always been more nuanced. With heroin, for example, there is considerable dilution even upstream in the international supply chain;<sup>39</sup> today, much fentanyl enters the U.S. in the form of counterfeit pills containing about 2 milligrams of fentanyl per 100- or 120-milligram tablet, which is much less concentrated than typical fentanyl powder.<sup>40</sup> Apparently, drug traffickers do not always value compactness enough to smuggle first and then dilute; instead, they often dilute before transporting drugs across international borders.



Cannabis provides another contradiction to the so-called Iron Law. The THC content of seized marijuana never exceeded 5% before 2000; but soon after legalization, the labeled potency of flower sold in state-licensed stores routinely exceeded 20%, and those botanical products are now supplemented by a variety of extract-based products with THC content of 60% or even 90%.<sup>41</sup>

Charles Fain Lehman observes something similar with psychedelic mushrooms.<sup>42</sup> As laws are liberalizing, potency is increasing. And although it is hard to define “potency” for pornography, the liberalization of norms and laws does not seem to have made content gentler or safer.

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## Historical Examples, Existing Literature, and Lack Thereof

There is a large literature on decriminalization or legalization of drugs that include alcohol but less literature for other illegal markets. A search of the literature for “legalization” or “decriminalization” and no keywords related to drugs yields almost as many scholarly investigations than does a search limited to drug-related decriminalization or legalization.

Indeed, outside the drug context, the meaning of “legalization” can be nearly the opposite of reducing legal controls. It can refer to extending legal rules and constraints over activities that had previously been outside the law, as when nation-states submit to international treaties and associated enforcement mechanisms, such as the World Trade Organization’s Appellate Body or the Law of the Sea Tribunal.<sup>43</sup>

When the word “legalization” is applied to liberalizing policy toward markets other than drugs, it mostly refers to the removal of prohibitions against vices. This may reflect a growing reluctance to use the law to enforce common or once-common views of morality, but it is not an entirely new trend. Writing in 1978, Skolnick and Dombrink were already struck by the extent of retreats from morality-based criminalization of victimless crimes. They termed this “legalization of deviance,” and their examples included alcohol, gambling, marijuana use, abortion, pornography, and consensual sexual acts between adults. That is not to say that nothing has changed in the four or five decades since. They were writing about decriminalization of marijuana use, not legalization of large-scale commercial production. They were commenting about casinos, horse racing, and state lotteries, not betting on almost any sporting event from a smartphone.

Not all legalizations pertain to legalizing deviance. Here we will use a different categorization: (1) large markets that are well studied; (2) large markets that are less well studied; (3) legalizations that are important even though they involve small markets or no market at all; and (4) other legalizations (or new prohibitions) that are worth noting just as a reminder that the overall phenomenon is larger than would be suggested by studying only the “famous few.”

### **Large Markets That Are Well Studied**

The repeal of American (Alcohol) Prohibition and the recent legalization of the supply of cannabis in Uruguay, Canada, and many U.S. states have engendered large literatures. It is not possible in this report to review those literatures,<sup>44</sup> but the general view is that even though legalization increases use and some use-related problems, it is preferred by the median voter for alcohol and probably also for cannabis. Also, the forms of legalization that win politically in the U.S. are more business-oriented and involve lower taxes and fewer regulations than would be preferred from a public-health perspective. It is easier to design a health-oriented legalization regime than it is to



get it to prevail in the political process. That said, other countries have shown more interest than the U.S. in middle-ground approaches to cannabis supply, such as grow and give, cannabis social clubs, and models with heavy government regulation.<sup>45</sup>

Quite a bit has been written about full legalization of drugs other than alcohol and cannabis, but that material is more speculative or philosophical. Modern history offers few examples of legalizing their supply.

There are instances of decriminalization of possession of small amounts of drugs other than alcohol and cannabis, some of which (Italy, Oregon, Washington, and arguably British Columbia) involve both decriminalization and re-criminalization.<sup>46</sup> That would seem to offer fodder for scientific evaluation, but it is not clear that these examples produce any consensus. If there is one, perhaps it is that merely reducing, but not eliminating, penalties for possession and use—while continuing to prohibit supply—has modest effects on consumption, but outcomes are context-dependent. Also, the location and visibility of public use may change more than the total quantity of use.

### **Large Markets That Have Been Studied Less, at Least from a Market Perspective**

Gambling, counterfeit goods, and commercial sex support three large markets that have been decriminalized or legalized in some jurisdictions but remain understudied. Each is described briefly, and a few others are mentioned as well.

#### **Gambling**

Legalization of gambling has come a long way since New Hampshire created the first state lottery in 1964. All but five states now sell lottery tickets, with annual sales reported to exceed \$100B.<sup>47</sup> States enjoy the resulting revenues, but they are essentially highly regressive taxes.<sup>48</sup>

Casinos have expanded beyond Las Vegas and Atlantic City. According to the American Gaming Association, commercial casino revenues totaled about \$67B in 2023, a figure that approaches \$110B when adding gaming on tribal lands.<sup>49</sup> About half of states permit casinos; interestingly, the map of such states does not closely match the map of states that have legalized commercial cannabis markets.

Various state bans on sports betting were augmented in 1992 by the federal Professional and Amateur Sports Protection Act (PASPA), which essentially banned gambling on sports other than horse and dog racing and jai alai. The law was overturned by the Supreme Court in the 2018 case *Murphy v. NCAA*. Since then, sports gambling has blossomed in 40 states and generates over \$11B in annual revenue. Again, the map of states that legalized sports betting differs from the map of states legalizing cannabis sales, e.g., Alaska and California were leaders on legalizing cannabis but holdouts on sports betting; North Carolina allows sports betting but not even medical marijuana.<sup>50</sup>

Gambling legalization occurred over roughly the same period as cannabis and is a substantially larger market, but the public debate was less contentious. One can speculate as to why. Gambling prohibition was never as strictly enforced and was essentially decriminalized by 1992.<sup>51</sup> Its “users” (gamblers) came from all strata of society. Compulsive gamblers were never as closely associated with crime as the stereotypical heroin “addict,” who was seen—often rightly—as especially likely to commit burglary and other income-generating crimes. What became legalized is derivative of something (competitive sports) that was always legal.

That is not to say that liberalization of gambling laws has been without controversy. A particular concern is undermining the integrity of sports. The modern era has not seen anything akin to the infamous 1919 Black Sox scandal, but several NBA, MLB, and NFL players have been sanctioned,



and the Toronto Raptors' Jontay Porter was banned from the game for life for betting on the sport and for throwing his personal statistics.<sup>52</sup> In this aspect, there may not be strong parallels between gambling and other illegal markets. With sports gambling, corruption or compulsive behavior could harm the underlying sports activity that has long been legal.

### **Counterfeit Goods**

The markets for counterfeit goods are enormous and enormously diverse. There are counterfeit pharmaceuticals, designer handbags, and airplane parts, among other goods, all of which differ in terms of harms and control options. Collectively, counterfeit goods are one of the largest illegal markets but are often neglected, perhaps because of the relatively low rates of violence.

Efforts to quantify the scale of these markets should be taken with more than a few grains of salt, but OECD estimates that counterfeit and pirated goods accounted for up to 3.3% of world trade in 2016 (\$509B) and 5.8% of EU imports (\$134B) in 2019.<sup>53</sup>

Prohibitions against counterfeiting seek to control a variety of harms. Counterfeit medicines that do not meet quality standards may harm patients. Counterfeit airbags are in the news for similar reasons.<sup>54</sup> But some counterfeit apparel matches the authentic brand product in terms of quality; and with digital piracy, the counterfeit may be identical to the original. In these cases, the harm is to the trademark owner whose intellectual property rights were infringed, not the consumer.

There may be few examples of intentional legalization of counterfeit products, but enforcement intensity varies. Street vendors selling \$5 Rolex watches can benefit from a de facto decriminalization. By contrast, the Pharmaceutical Security Institute (PSI) reports that 4,172 people were arrested in 2021 for counterfeiting pharmaceuticals or for kindred crimes.<sup>55</sup> Indeed, the very existence of PSI is an indication of the energy that pharmaceutical companies invest in assisting in the prosecution of those distributing counterfeit medicines.

### **Commercial Sex Work**

Many countries have legalized prostitution either de facto (e.g., Belgium), de jure (e.g., the Netherlands and Germany), or via court rulings (e.g., Canada's Supreme Court in 2013). Others, such as New Zealand and some Australian states, have policies more akin to decriminalization. Commercial sex work has been legal and regulated in several counties in Nevada since 1971, and Rhode Island had a fascinating and complex history of policy reversals and nullifications that did not culminate in formal criminalization of indoor sex work until 2009. However, the U.S. as a whole remains fairly conservative regarding sex-work legalization, despite expansions in other forms of sex for sale, including pornography, strip clubs, and Internet-based services of various forms.<sup>56</sup>

Nina Luo, who advocates for the decriminalization of commercial sex work, reports that in 2020, perhaps for the first time, the majority of Americans surveyed favored decriminalization.<sup>57</sup> Mere decriminalization is different from—and perhaps more acceptable to the U.S. public at this time than—the explicit legalize-and-regulate model.

In 1999, Sweden introduced the so-called Nordic model as a fourth way, distinct from decriminalization, legalization, or prohibition. It removes penalties for the seller of sex services but maintains or increases them for the purchaser. In some sense, this is the opposite of what is often meant by decriminalization in the drug-policy context. In drug markets, the drug supplier is more often seen as the person with power, since the customer may be drug-dependent—whereas stereotypically in commercial sex transactions, the buyer (often male) may have greater power than the seller (who may have relatively few other job prospects).



### **Other Large but Understudied Markets**

New environmental legislation has led to a new illegal market for fake certifications of compliance with regulatory rules or the authenticity of carbon offsets, which could grow to become quite large. In his 2009 discussion of these markets, Larry Lohmann states the key point concisely, if not too alarmingly: “Everyone who participates in or studies the carbon offset market knows that it is a haven for con artists.”<sup>58</sup> What distinguishes this from conventional fraud is that a purchaser of fraudulent certifications might know that they are bogus, or might choose to be ignorant of their dubious provenance, because the purchaser does not consume the bogus product. Purchasers merely need to convince other people that they have purchased something real. For the purchaser, the item need only not to appear obviously fake; purchasers do not actually need the item to be real. This meets, or comes close to meeting, the definition of an illegal transaction being between two willing participants.

Another example that will not be discussed extensively because it is beyond my expertise is the relaxation of prohibitions on certain types of financial transactions, such as the 1999 Financial Services Modernization Act repeal of the 1933 Glass-Steagall Act’s prohibition against commercial banks, investment banks, securities companies, and insurance companies participating in one another’s markets. Note: the gradual elimination of prohibitions on charging interest on loans (“usury”) between the 16th and 19th centuries in Europe could have been one of the more important legalizations ever in terms of effects on economic development,<sup>59</sup> but it, too, is outside the scope of this report.

### **Important Legalizations That Pertain to Small—or Nonexistent—Markets**

In several instances, social movements led to the legalization of behaviors once deemed deviant but whose prohibitions generated little to no illegal market activity. The absence of a major illegal market distinguishes these cases, but examining unusual or “edge” cases can shed light on the phenomenon of interest. The very fact that these legalizations occurred means that concerns about illegal markets is not the only thing that motivates legalization.

### **Sodomy and Same-Sex Marriage Laws**

Prohibitions on sodomy and same-sex marriage generated essentially no illegal markets because they are fundamentally not market activities.

All U.S. states had sodomy laws, many with very severe penalties. According to Riccardo Ciacci and Dario Sansone, “between 6,600 and 21,600 people—mostly men—are estimated to have been arrested each year from 1946 to 1961 for non-conforming gender or sexual behaviors.”<sup>60</sup>

De jure liberalization began in 1950, when New York reduced sodomy to a misdemeanor. In 1961, Illinois removed all criminal penalties. Over the ensuing 40 years, an additional 35 states eliminated sodomy laws, and others stopped enforcing them. All remaining laws were deemed unconstitutional by the 2003 Supreme Court case *Lawrence v. Texas*.<sup>61</sup>

The estimated proportion of the world’s population subject to sodomy laws fell from 74% in 1969 to 27% in 2018, with much of the decrease driven by China’s repeal in 1997 and India’s in 2018.<sup>62</sup> Today, most countries with such laws are in Africa and Asia.

Legalization of same-sex marriage came later but progressed more quickly. The first state to legalize same-sex marriage was Massachusetts in 2004; by 2015, the U.S. Supreme Court had legalized it nationwide.

For both sodomy and same-sex marriage, maps showing which states led legalization overlap with maps of early cannabis legalization. States leading legalization were concentrated on the West Coast, the Northeast, and a few other places, with states in the Southeast lagging.



### Abortion, Assisted Suicide / Death with Dignity, and Surrogate Pregnancy

The next set of examples—abortion, assisted suicide, and surrogate pregnancy—involves the legalization of medical procedures, which, in turn, became market activities, with “suppliers” being paid more or less the same way medical providers are paid for other procedures. Before legalization, there was essentially no illegal market for assisted suicide, but there was one for illegal abortions.

Edward Duffy estimates that there were 50 to 350 abortions per 1,000 live births in the 1960s.<sup>63</sup> Since there were about 4 million live births per year at that time, the number of “customers” could have been close to 1 million per year, at a time when the country’s population was only 60% of what it is today. Given that the cost of an abortion has been estimated at \$400–\$1,000,<sup>64</sup> total revenues in the illegal market may have been \$100M–\$1B per year.

States began imposing restrictions on abortion, with Connecticut in 1821. State bans first spread and later ebbed, until abortion was legalized nationally via the Supreme Court’s 1973 *Roe v. Wade* decision. In 2022, the Court overruled *Roe* in *Dobbs*, which returned control to the states and thus led once again to considerable variation across states.

The states that, according to the Center for Reproductive Rights (CRP), have expanded abortion access<sup>65</sup> overlap considerably with the states that were early adopters of cannabis legalization. Similarly, the states in which, according to CRP, abortion has been made illegal<sup>66</sup> overlap considerably with states that were late adopters or that still have not legalized cannabis supply.

As Daniel Hillyard and John Dombink noted, the legalization of death with dignity follows broadly similar geographic patterns.<sup>67</sup> Assisted suicide was legalized first in Oregon in 1994, followed by Washington, Vermont, California, Washington, DC, Colorado, Hawaii, New Jersey, Maine, and New Mexico. (Montana’s Supreme Court ruled that assisted suicide violates no state law but that there is no law explicitly allowing it.) Likewise, nations mentioned as leaders in medical assistance in dying overlap with the list of nations with the most liberal policies on cannabis. Canada is a world leader in cannabis legalization and stands out for having legalized euthanasia (where the medical professional administers the killing dose), not only assisted suicide (where the doctor prescribes but the patient self-administers). Canada also has some of the most permissive eligibility criteria, including nonterminal conditions.<sup>68</sup>

A final example, surrogate pregnancies, differs in interesting ways. For one, transactions are infrequent and high-value: surrogates can be paid \$35,000–\$100,000 per pregnancy. Also, evasion of the prohibition is more likely to involve a customer traveling to a jurisdiction where supply is legal, rather than the service being delivered to a jurisdiction in which it is banned. The total global market is fairly large, with estimates (of uncertain provenance) claiming growth from \$14 billion in 2022 to \$129 billion by 2032.<sup>69</sup> It is unclear what proportion of surrogate pregnancies involves purchases by customers where transactions are banned, but it seems plausible that the amount spent could be in the billions of dollars.

Surrogacy bans are also interesting because surrogacy technology did not exist before about 1980, so there was no original prohibition to repeal.<sup>70</sup> Rather, different jurisdictions developed their original legal position relatively recently, with wide variation, including states with surrogacy-friendly regulations such as California, as well as states like Pennsylvania, in which there are no statutes or case law that either prohibit or protect the practice. Surrogacy-friendly states mostly overlap with cannabis-friendly states, but there are exceptions: Arkansas’s 1989 Act 647 made it a leader on surrogacy; Florida is surrogacy-friendly; but Michigan did not legalize surrogacy until the 2024 Michigan Family Protection Act.

Internationally, there is a negative correlation between legal support for surrogacy and liberal drug policy. Russia, Belarus, Ukraine, and Kazakhstan join the U.S. in allowing commercial surrogacy, whereas many European countries ban surrogacy outright (France, Germany, Italy) and others (Netherlands, Portugal) permit only altruistic, not compensated, surrogacy.



### Other Examples

There are myriad smaller or less important prohibitions. As James Hodge and Megan Scanlon detail, federal and state governments routinely ban products. For example, New York City restricted lead-based paint in 1959, and the Consumer Product Safety Commission banned lawn darts in 1988. Besides the Controlled Substances Act, prominent U.S. laws that underpin such prohibitions include the Food, Drug, and Cosmetics Act (1938); the Federal Insecticide, Fungicide, and Rodenticide Act (1947); and the Consumer Product Safety Act (1972).<sup>71</sup>

Many, if not most, such bans engender little to no illegal market activity—proving that not all prohibitions are undermined by illegal markets. However, in some cases in which consumer goods were banned to protect public health and safety, evasion created market activity defying that ban—and then the bans were at least partially relaxed. We give two examples.

Kristina Vaia Reimer and I describe parallels between the imposition and repeal of bans on cannabis and consumer fireworks (aka “safe and sane” fireworks).<sup>72</sup> For example, toward the end of full U.S. cannabis prohibition, there were roughly 10 emergency-department (ED) events per \$1 million spent on fireworks and about 10 visits per \$1 million spent on illegal cannabis. For both, prohibitions began at the state level early in the 20th century and were later supplemented by federal prohibition. Federal law still limits what fireworks can be accessed by the general public, but state limits—which used to be stricter—have almost all been lifted in recent decades.

Joanne Whitehead and Bryony Lake discuss bans on raw (unpasteurized) milk and ban-defying behavior. The number of states with some form of legal access to raw milk increased from 32 in 2004 to 43 in 2017.<sup>73</sup> Just as there are various forms of legal access to cannabis, ranging from grow-your-own to medical-only to commercial production, there are different types of legal supply of raw milk. Some states permit sale only from the farm, some permit off-premises sale, and some permit herd-share programs, which evade restrictions on sale by allowing the “customer” to buy an equity share in the herd and receive that share of the herd’s raw milk production. Interestingly, advocates for liberalization, such as the Raw Milk Institute, often use arguments and language similar to those that drug-legalization advocates use—for example, that (ineffectual) prohibitions may increase the harmfulness of the raw milk production that will inevitably persist.<sup>74</sup>

New prohibitions constantly emerge. South Korea recently banned farming, slaughtering, and sale of dog meat, and the U.S. recently banned white asbestos and plans to phase out certain synthetic food dyes.<sup>75</sup> And previous liberalizations get reversed; for example, Philadelphia has begun aggressively enforcing laws restricting the peer-to-peer lodging-rental market, including Airbnb.<sup>76</sup> Thus, the number of minor illegal markets that are candidates for eventual decriminalization or legalization may continue to grow.

# Conclusion and Future Directions

## Summary

Decriminalization for customers and legalization of supply are two ways of relaxing former prohibitions but are not the only alternatives to prohibition. The Nordic model, for example, decriminalizes the sellers of commercial sex services.

Decriminalization is not merely a halfway step to legalization; it can persist for decades, as it did for gambling until recent legalizations. Nor does decriminalization have “half” of all the effects of legalization. Decriminalizing drug possession could reduce drug arrests by more than half, have none of legalization’s effects on product variety, and increase—rather than decrease—revenue for drug traffickers.

Liberalizations can occur through at least five mechanisms: legislatures changing laws, voter initiative (prominent for cannabis in the U.S.), courts striking down laws (e.g., commercial sex prohibition in Canada), authorities lacking the capacity to enforce laws (retailing of counterfeit Rolex watches), and authorities no longer caring to enforce those laws (prostitution in places with *de facto* decriminalization).

Decriminalization, legalization, and other alternatives to prohibition pertain to far more than illegal drugs. The correlation across jurisdictions between those who liberalize in one area and those who liberalize in another is not always high. California was a leader in legalization of same-sex marriage, cannabis, and death with dignity, but not sports gambling. Canada has the most liberal national policies on cannabis and medical assistance in dying but is the most conservative among the G-7 on raw milk. The Netherlands is more liberal than Sweden on drugs but more conservative on fireworks.<sup>77</sup>

## Suggestions for Further Research

Many papers have been written about relaxing prohibitions of drugs (including alcohol); far fewer exist in most other domains, which is problematic for two reasons. First, studying a general action in only one context risks presuming that what is true in that particular context is necessarily true in all contexts (just as studying swans only in Europe could lead one to conclude that all swans are white). Second, it is harder to develop general theories if one does not consider a variety of contexts.

Theory development may be hampered by the fact that more research is done by experts in a single issue area than by those with expertise in general phenomena like decriminalization and legalization. A paper about legalization in domain X is more likely to be written and read by people who specialize in domain X than by people who specialize in understanding legalization broadly.

Hence, there is a need for more studies of decriminalization and legalization of things other than drugs and alcohol. There is also a need for more people to examine patterns and parallels across domains.

## Illegal Market Impact Assessments (IMIAs)

Prohibitions can have a range of effects, not all of which are easy to anticipate. It would be easy for proponents to focus on potential benefits and overlook costs—particularly, delayed and indirect costs that can result if markets emerge in defiance of the prohibition.



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Even when bans are intended to follow from objective scientific analysis (e.g., as with regulations of pesticides), the range of outcomes considered may not always encompass possible market adaptation. The process for deciding whether to schedule a new drug does not explicitly consider the potential for illegal market response. Instead, the analysis focuses on the drug's potential for abuse and dependence, pharmacological effects, risks to public health, and history and current patterns of use.<sup>78</sup> Jack Henningfield and colleagues, for example, provide a comprehensive analysis of kratom's safety and toxicology "as a guide for ongoing efforts to regulate kratom" but say nothing about current or potential future markets.<sup>79</sup>

It may be useful to pass a law or an executive order requiring that—before any new ban is imposed, or an existing one is repealed or altered—there first be a dispassionate, market-informed analysis of the likely effects, including the possibility that illegal markets will supply the banned product or service.

Meta-rules forcing this type of deliberation already exist. In the U.S., the 1969 National Environmental Policy Act requires an Environmental Impact Statement (EIS) before actions that can significantly affect the environment, and many other countries have some such process for EIAs. Regulatory Impact Assessments (RIAs) serve a similar purpose but for a wider range of outcomes. Other examples in the U.S. include the Paperwork Reduction Act of 1980 and the Unfunded Mandates Act of 1995.

These meta-rules do not forbid projects that might affect the environment, regulatory burden, or unfunded mandates; they merely force such potential consequences to surface and to be considered before proceeding. Requiring IMIAs at the federal or state level might likewise reduce the number of illegal markets that are created without sufficient planning.

IMIAs might also reduce the risk of unintended consequences from liberalizations. It was predictable that cannabis legalization would greatly reduce the price per milligram of THC,<sup>80</sup> but that aspect nonetheless was not factored in to estimates of revenue from ad valorem taxes. Likewise, Off-Track Betting (OTB) was created partly to rival illegal gambling, but it failed to do so for reasons that might have been foreseeable. As a contemporary example, the proposed rescheduling of cannabis to Schedule III would mean that it could be dispensed only via DEA-registered pharmacies, but DEA might not have sufficient staffing to handle the regulatory workload. There are nearly as many state-licensed cannabis operations in California as there are pharmacies, so the number of establishments that DEA diversion officers would need to monitor could grow appreciably.

Because of practical challenges to implementing an IMIA requirement, the proposal might be more conceptual than literal. For one, impact assessments are designed to slow government action, but sometimes fast action is important to get ahead of a problem, before a market gets established. In 1984, Congress amended the Controlled Substances Act specifically to allow DEA to make emergency scheduling decisions without going through the usual notice-and-comment rulemaking processes when "necessary to avoid an imminent hazard to public safety."<sup>81</sup>

Another practical challenge relates to how the requirement for an IMIA would be triggered—which, in the environmental review context, is often tied to the economic scale of a proposed action. For example, since 1993, Executive Order 12866 has required a benefit-cost analysis for actions with "an annual effect on the economy of \$100 million or more or adversely affect[ing] in a material way the economy, a sector of the economy, productivity, competition, [or] jobs."<sup>82</sup> However, the illegal market would not exist before a ban was imposed, so it would be hard to know without doing an IMIA whether the potential illegal market would reach any given threshold.



Many prohibitions are created by statute, not by regulatory action. Congress is not itself generally constrained by meta-rules that it creates and imposes on agencies. Congress, for example, can prohibit a new drug without going through the Administrative Procedures Act steps that regulatory bureaucracies must follow.

For now, the notion of conducting IMIAs before imposing new prohibitions or altering existing ones may be more of an ideal or a vision than a concrete proposal. The spirit, though, is soundly rooted in the wisdom of Mark Kleiman, who was mentioned above. Choosing between prohibition and liberalization never makes all problems disappear; it merely chooses what type of problem that society confronts—and before exiting the frying pan, it may be prudent to ask how hot the fire will be.

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## Acknowledgments

Partial funding for this research was provided by a National Science Foundation EAGER Grant on Detecting and Disrupting Illicit Supply Networks via Traffic Distribution Systems (2146230). John Coleman, Meredith Gore, Beau Kilmer, Kimberly Krawiec, Charles Fain Lehman, Pat Oglesby, and Peter Reuter made many helpful comments on earlier versions of this report. All views and opinions expressed here are those of the author and do not necessarily reflect the views or opinions of any organization with which the author is affiliated.

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