Introduction

Ten cities in California are already using four different schemes to tax marijuana: percentage of gross receipts, square footage of business space, square footage of grow space, and number of plants — all in addition to sales tax and an array of license fees. The battle of ideas is joined, and that’s the American way. So far, these tax schemes are producing revenue from only doctor-recommended “medical” marijuana, which is legal in 14 other revenue-hungry states. Meanwhile, the tax schemes we use for tobacco — weight — and alcohol — potency — have not been tried for marijuana. But they show up in proposals in many states to legalize and tax all marijuana. Those proposals, despite federal threats, keep coming.

This article looks technically at existing and proposed laws to tax marijuana:

- whether to give tax breaks for medical marijuana;
- how to identify and track tax-paid product;
- where in the supply chain to collect tax;
- whether state monopoly makes sense as a supplement to taxation; and
- what the effective date should be.

The article examines existing medical marijuana taxes and unenacted proposals to tax legalized recreational marijuana, including introduced bills\(^1\) in the legislatures of California,\(^2\) Massachusetts,\(^3\) and Washington state,\(^4\) and California’s failed Proposition 19,\(^5\) with its mirage-like revenue non-plan to legalize marijuana first and then maybe tax it later.

The article is just about revenue laws. It uses precedent and analogy rather than new economic analysis\(^6\) to study legal rules. It is assuredly not

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\(^1\) An extensive list of proposals appears at Richard Evans, “Cannabis Taxation & Regulation,” available at http://cantaxreg.com/, under “Legalization Proposals” (last visited Dec. 7, 2010). This site is probably the most comprehensive compilation of information about laws to tax marijuana.


\(^6\) Economists do not agree on the level of current consumption, current street prices, the elasticity of demand, the extent of bootlegging after legalization, and more. See Robert A. Mikos, “State Taxation of Marijuana Distribution and Other Federal Crimes,” U. Chi. Legal F. 222 (2010), available at...

(Footnote continued on next page.)
about whether legalization is a good idea. It looks at regulation and enforcement only as ways to make a revenue scheme work, so it leaves aside impaired drivers, impaired workers, underage users, and the possibility of further corporatization of America. It barely touches on the tension between enforcement schemes and civil liberties. It doesn’t estimate revenue.  

In 1933 hearings leading up to reimposition of taxes on alcohol after Prohibition, one witness said tax advocates who “know very little about this business” were “etherizing, futurizing, generalizing, and theorizing.” I’m afraid you will find that kind of thing here, dear reader. But it’s a start.


The latest word in revenue analysis appears in a recent study, Beau Kilmer et al., “Altered State?: Assessing How Marijuana Legalization in California Could Influence Marijuana Consumption and Public Budgets” (Rand Corp. 2010), available at http://www.rand.org/pubs/occasional_papers/2010/RAND_OP315.pdf [hereinafter “Altered State”]. This study seems thorough; admirably, it admits to uncertainty. To be sure, it analyzes only what has been on the table in California, that is, a weight-based tax, not a tax based on potency. Formal proposals in California don’t include measures to defeat post-legalization bootlegging, such as identification and tracking of tax-paid products, so the study does not consider those measures, either. The Rand study did not undertake to suggest effective tax laws, just as this article does not undertake to estimate revenue. 

To Tax or Not to Tax?  

“What are we mad at today?” That’s how many a tax drafting session on Capitol Hill used to begin during congressional recess, when staffs had time and a mandate to look for loopholes. Excise taxes, especially, target things that the public is mad at — more precisely, things that a political authority says are bad.

Today, enough of the public is angry about recreational use of marijuana that it is prohibited. If that anger ever decreases to the point that recreational use is legalized, the public will still be mad enough to want to tax the heck out of it. Folks who don’t consume marijuana could realize in small part the dream that the late Russell Long, former chair of the U.S. Senate Finance Committee, described: “Don’t tax you, don’t tax me, tax that fellow behind the tree.”

Like golden eggs from an unwelcome goose, any revenue vanishes if the shunned source is eliminated.

To be sure, taxing anything that people are angry about is awkward. Like golden eggs from an unwelcome goose, any revenue vanishes if the shunned source is eliminated. Despite that awkwardness, and despite the argument against regressivity, sin taxes11 on tobacco and alcohol bring revenue to every state and to the Union.

Footnote

10See generally Sijbren Cnossen, Excise Systems: A Global Study of the Selective Taxation of Goods and Services (Baltimore: Johns Hopkins University Press, 1977); Theory and Practice of Excise Taxation: Smoking, Drinking, Gambling, Pollution, and Driving (Sijbren Cnossen ed., Oxford University Press, 2005) [hereinafter “Theory and Practice”]. Paternalistic taxes seek to protect individuals (who may lack belief in current or future damage) from themselves, that is, from negative externalities. Pigouvian taxes seek to compensate society for damage the user does to others, that is, for negative externalities. (Often those two categories overlap: cigarettes harm the user and, through secondhand smoke, at least, harm innocent bystanders.) Pigouvian taxes are compatible with the view that a tax should be “neutral in its impact on resource allocation decisions” while allowing for non-neutrality where there are negative externalities or “spillover effects.” Richard K. Vedder and Lowell E. Gallaway, “Some Underlying Principles of Tax Policy,” Joint Economic Committee Study (Sept. 1998), available at http://www.house.gov/jec/fiscal/tx-growth/taxpol/taxpol.htm. (The authors identify but pointedly do not endorse “[t]he economically most neutral of all taxes[,] . . . tax, a levy of, say, $200 on every person.”) A variety of objections to excise taxes appears in William F. Shugart, II., ed., Taxing Choice: The Predatory Politics of Fiscal Discrimination (New Brunswick: Transaction Publishers 1997).

11Jewish and Christian scriptures condemn abuse of alcohol but not alcohol per se. Islam, however, opposes alcohol.
Today we try to tax income from intangibles, which we can hardly locate, much less measure. And we tax payroll, which is the last thing that we want the power of tax to destroy or even diminish. But we can measure marijuana, many citizens are angry about it, and it involves big, big money, so this article looks at taxing it.

There is much skepticism today about the feasibility of a meaningful tax on marijuana. That’s not unprecedented. “Prohibitionists had always argued that the liquor business was inherently unregulatable,” but they were proved wrong. It may still be that marijuana is uncontrollable and untaxable, that vis-à-vis human ingenuity, the weed is to tobacco as the zebra is to the horse.

But there is reason to think American society will be as unsympathetic to evaders of marijuana tax as they are to moonshiners. All along, “making drinkers pay higher taxes for their liquor and punishing tax evaders were state powers most citizens recognized; denying drinkers the right to buy their liquor was state imposition of one group’s morality upon another group.” During Prohibition, the alcohol bootlegger had the powerful, macho image of a wealthy, feared, uncontrollable kingpin (like the Mexican cartel operators today). Now he’s a toothless, clueless hillbilly, sneaking around the backwoods by the light of the moon.

Though we are divided in our views about marijuana prohibition, we come together in our lack of patience with tax cheaters. America’s rebellious yearning for freedom is about self-determination, not about price.

Which Governments?
The article looks first at who might impose tax, and only later at what might be taxed, on what base, how much, how, and when.

The Question of Scale
Consensus ordinarily comes easier in a small group than in a large group. Opinions in a state tend to converge more than opinions in the nation. Similarly, as local option laws for alcohol show, opinions in localities converge more than those in a given state.

Moreover, the fewer the people in a jurisdiction, the less will be the upheaval when experiments with an evolving tax scheme produce unintended consequences. Any new tax scheme is an experiment, like it or not. Although schemes for taxation of beverage alcohol are stable today (including rates that seem to require raising or indexing), it took much trial and many errors to get here. And a process of trial and error can provide lessons for other jurisdictions.

But smaller may not be better. The administration of a tax involves economies of scale. That is, the cost of creating new procedures and new forms from...
scratch can be spread among many people in a populous jurisdiction. Only populous jurisdictions can afford sophisticated approaches, like testing for potency and high-tech identification of tax-paid merchandise, that require high fixed costs.

**A Federal Tax**

A federal marijuana tax won’t be coming soon. Crypto-anarchists and well-meaning but naïve citizens oppose anything called a tax, even a useful tax. We would have to pull out of a multi-lateral drug treaty or override it, as we often do with tax treaties. And the revenue a marijuana tax raised would be a less than a rounding error in a debt reported in tenths of trillions of dollars.

But that pesky debt keeps piling up, so the country may get desperate. Maybe we’ll have a Constitutional Convention. Or maybe a financial collapse will lead to strong-arm rule. In either event, everything will be on the table.

**State Taxes and Federalism**

Any state tax on marijuana would probably need the approval, stated or tacit, of the federal government. States and localities collecting taxes “cannot necessarily block federal authorities from seizing the information they glean from drug distributors.” But the city of Oakland, Calif., has been singling out medical marijuana by collecting a modest gross receipts tax on it since January 1, 2010, without reports of any federal interference. So far...

Oakland’s tax collection is benefiting from the benign neglect the Obama administration has taken toward medical marijuana. Recently, the administration took a hard line against Proposition 19 in

**Any state tax on marijuana would probably need the approval, stated or tacit, of the federal government.**

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20 Any federal marijuana tax will come with less dispatch than the tax on newly legalized alcohol came after Prohibition was repealed on December 5, 1933. Then, the U.S. House Committee on Ways and Means reported a bill on January 3, 1934, that went through the House and Senate in time for President Roosevelt to sign on January 11, just eight days later. Hu, supra note 18, at 81. In that case, Congress had the benefit of studying the results of historic tax rates on alcohol in the United States and both historic and contemporary rates in other countries. See 1933 Hearings, supra note 9.


22 Treaties are not a higher form of law than statutes in the United States (unlike in some countries). “Laws of the United States . . . and all Treaties . . . shall be the supreme Law of the Land.” U.S. Const. art.VI, cl. 2. So “an Act of Congress . . . is on a full parity with a treaty, and . . . when a statute which is subsequent in time is inconsistent with a treaty, the statute to the extent of conflict renders the treaty null.” *Reid v. Covert*, 354 U.S. 1, 18 (1956).

23 To the consternation of some. See N.Y. State Bar Ass’n Tax Section, “Comments on the Proposed Denial of Treaty Benefits for Certain Related-Party Deductible Payments” (May 22, 2010), available at http://www.nysba.org/AM/Template.cfm?Section=Home&CONTENTID=38538&TEMPLATE=/CM/ContentDisplay.cfm. But typically the overridden (and fossilized) tax treaty provision allowed treaty shopping (third country beneficiaries) or some not bargained for, unanticipated loophole. Drug prohibition, by contrast, was at the heart of the 1961 deal.

Overriding treaties, in the tax area at least, stirs up declarations of concern that America’s treaty partners will act or even be offended. Those declarations, added to ordinary legislative inertia, make loopholes discovered in outworn tax treaties hard to close and a gold mine for the crafty. The proper method to close loopholes, according to the Tax Section, is bargaining with partners. But partners will tend to want a quid pro quo. If the U.S.-Venezuela income tax treaty, for instance, develops loopholes, fixing them gratuitously will not be at the top of President Hugo Chavez’s agenda. Renegotiation of the multilateral Narcotic Convention seems even less feasible than trying to fix a bilateral tax treaty. Whether each and every element of that 1961 treaty still makes sense now is open for debate, though. Other countries might even welcome our leadership in enacting a limited, targeted override.


25 State and Federal, supra note 6, at 225.

26 Oakland Marijuana Tax, Measure F, July 2009,” *Ballotpedia*, available at http://www.ballotpedia.org/wiki/index.php/Oakland_Marijuana_Tax,_Measure_F,_July_2009 (last visited Nov. 13, 2010). Oakland voters recently raised the rate from 1.8 percent to 5 percent of gross receipts. See Table 1,infra.

27 Attorney General Eric Holder has said, “it will not be a priority to use federal resources to prosecute patients with serious illnesses or their caregivers who are complying with state laws on medical marijuana.” Carrie Johnson, “U.S. Eases Stance on Medical Marijuana,” *The Washington Post* (Oct. 20, 2009), available at http://www.washingtonpost.com/wpdyn/content/article/2009/10/19/AR2009101903693.html.

This benign neglect is a manifestation of standard prosecutorial discretion. If it extended to recreational marijuana, under the Narcotic Convention, supra note 21, foreign countries could complain about the inaction. Then they would have to try to settle the dispute “by negotiation, investigation, mediation, conciliation, arbitration, recourse to regional bodies, judicial process or other peaceful means of [both countries’] own choice.” *Id.* Article 48. After all that, complainers could go to the International Court of Justice, perhaps for some international equivalent of a writ of mandamus, That is far-fetched. The federal government is doing little to enforce drug laws internally now, anyway. See Overlooked Power, supra note 24.
California.\textsuperscript{28} Maybe that hard line would yield to a sensible scheme that was well thought through in advance rather than painted, Proposition 19-style, to localities, free to race to the bottom. Indeed, “drug hawks would probably prefer that California impose some sanction on marijuana [that is, a tax] than no sanction at all.”\textsuperscript{29}

By analogy, the federal government tolerates state schemes that get revenue from the suspect activity of gambling. But the public is probably angrier about marijuana than about gambling.\textsuperscript{30} At the same time, a lot of citizens are mad at Washington and want Washington to leave them alone.\textsuperscript{31} Fiscal conservatives, social liberals, and libertarians may not be a majority of the country, but they have enough influence not to be sneezed at. And the federal government may choose to tread cautiously on revenue sources in states it may need to bail out.

**Revenue for Localities**

States could allow autonomy or provide revenue to localities in various ways.

**Local Option for Legalization**

Many states let localities decide whether to make something legal. In North Carolina, for example, “dry” counties and towns allow no alcohol sales, while other localities allow sales of beer and wine only; for liquor, some allow only package sales for off-premises consumption, while others allow both those and liquor by the drink.\textsuperscript{32} A state could let localities opt into or out of a scheme to legalize marijuana. Legalizers\textsuperscript{33} of marijuana might not prevail in a state without deferring to people in areas that oppose legalization. A state could also allow localities a menu of options, such as on-premises smoking, incorporation of the substance into edibles, and so on.

Even without taxes, a locality could benefit from the economic activity of legal retail marijuana sales.

By analogy, an advocate of liquor by the drink makes this argument: “It allows good quality restaurants to come in and offer good paying jobs to stimulate the local economy.”\textsuperscript{34}

The theory behind medical marijuana is hard to reconcile with local option, at least for possession. It’s hard for a state to say sick people in only some of its localities can use medicine. But allowing medical marijuana in areas where folks object to it may be part of the reason Time magazine asked, “Can a backlash be far behind?”\textsuperscript{35}

AB 2254, the most recent serious California bill, would apply statewide. California Proposition 19, though, would have delegated to local governments the power to authorize commerce in marijuana.\textsuperscript{36}

**Local Taxes in Lieu of State Taxes**

If Proposition 19 had passed, localities would have been free to impose — or not — their own taxes on marijuana. The state could then have decided to tax marijuana in co-existence with local schemes — or not to tax it.\textsuperscript{37} (The measure’s vagueness drew opposition from all sides.\textsuperscript{38}) By choosing to impose no or low taxes, localities might have sought economic activity from their own residents, from nearby residents, or from tourists. That’s a race to the bottom. But there was evidence of a race to the middle, at least in Albany, Calif.: Proponents of a successful ballot measure there argued that a “proposed new tax would be comparable with nearby


\textsuperscript{35}Andrew Ferguson, “How Marijuana Got Mainstreamed,” Time 30, 32 (Nov. 11, 2010), [hereinafter “Mainstreamed”].

\textsuperscript{36}Proposition 19 Text, supra note 5, section 2.B.7. But “if a city decides not to tax and regulate the sale of cannabis, … buying and selling cannabis within that city’s limits remain illegal, but … the city’s citizens still have the right to possess and consume small amounts [up to one ounce].”\textsuperscript{37}

\textsuperscript{37}The state’s authority to tax is expressed subtly in the text of the legislative proposal: See, e.g., id., proposed section 11302(b) of Article 5 of Chapter 5 of Division 10 of the Health and Safety Code: “Any licensed premises shall be responsible for paying all federal, state and local taxes.” Proponents of the Proposition made the authority clear in their official message to voters: “Proposition 19 enables state and local governments to tax marijuana” (emphasis added). California Secretary of State’s Voter Guide to Proposition 19, available at http://www.voterguide.sos.ca.gov/pdf/english/19-arg-rebuttals.pdf (last visited Dec. 2, 2010).

cities that are enacting similar ballot measures for a cannabis dispensary or business.\textsuperscript{39}

Voters in Albany and nine other localities in California faced initiatives on November 2, 2010, to impose local taxes: some on recreational marijuana in light of the possible passage of Proposition 19, and some on the medical kind. They all passed. Table 1 describes them.\textsuperscript{40}


\textsuperscript{40}Parallel sources could supply the information on Table 1. The sources cited were chosen because they furnish enough detail. This footnote lists first the Oakland Measure V for the details of the proposal; then, after a semicolon, for voting results: Albany: Albany Ordinance, supra note 39 (this site expands on the cursory official ballot language); Alameda County Registrar of Voters, “General Election, November 2, 2010,” available at http://www.acgov.org/rov/current_election/index.htm (Click on Local, Albany, Measure Q) (last visited Nov. 11, 2010) [hereinafter “Alameda Results”].


Oakland: Alameda County Registrar of Voters, “City of Oakland Measure V; General Election, November 2, 2010,” available at http://www.acgov.org/rov/documents/local_measures_2010-11-02.pdf (last visited Nov. 11, 2010); Alameda Results, supra (Click on Local, Oakland, Measure V).


\textsuperscript{41}Ann Boonn, “Top Combined State-Local Cigarette Tax Rates” (June 23, 2010), available at http://www.tobaccofreekids.org/research/factsheets/pdf/032067.pdf [hereinafter “Cigarette Taxes”]. This site lists local tobacco taxes imposed in addition to state (and federal) taxes.

\textsuperscript{42}Id.
<table>
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<th>City</th>
<th>Medical marijuana gross receipts tax</th>
<th>Recreational gross receipts tax (if Prop. 19 passed) on for-profits</th>
<th>Square footage taxpayer</th>
<th>Square footage base</th>
<th>Square footage tax rate</th>
<th>Adopted</th>
<th>Voters in favor</th>
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<td>All indoor space $25/ft²</td>
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<td>Berkeley</td>
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<td>All for-profits All indoor space $25/ft² indexed</td>
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<tr>
<td></td>
<td>All nonprofits</td>
<td>All indoor space $10/ft² indexed</td>
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<td>70.8%</td>
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<td>Rancho Cordova H</td>
<td>On for-profits: 12% on first million, 15% thereafter</td>
<td>12% on first million, 15% thereafter</td>
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</table>
What Substances?

To impose tax, a jurisdiction needs a subject (or target), a measuring base, and a rate. This article now focuses on the target of the tax.

A Light and Compact, but Pungent, Weed

Defining taxable marijuana in words is easy. Pinning it down in the world is not.

In thinking about an intoxicant, schemes to tax alcohol are useful. In thinking about a plant that people smoke or consume by mouth, schemes to tax tobacco are useful. Neither provides a perfect model for the battle against marijuana bootlegging.

Some factors make marijuana easier or more lucrative to hide or otherwise more of a challenge to tax than alcohol. First, marijuana is lighter and more compact by value than alcohol. Weight and bulk far outweigh the relative difficulty of transporting a liquid rather than a solid.

Second, during the processing phase, illegal distillation of spirits (which requires observable heat), fermentation of wine, and brewing of beer require hiding the time-consuming transformation of other liquids into alcohol. Marijuana processing is simpler.

Third, consumers understand that store-bought liquor is not poisonous but that moonshine liquor can kill them on the spot; bootlegged marijuana may contain more mold and pesticides that the regulated kind, but it shouldn’t bring on instant death. That makes bootlegged marijuana more marketable than bootlegged liquor.

Some factors make marijuana easier to find and tax than alcohol. First, some marijuana is very pungent. Second, corn, grapes, and other raw materials for alcoholic beverages are legal as they grow in the field, so any illegal activity is detectable only after the agricultural harvest. Contraband marijuana needs to be hidden while it grows, and aerial surveillance is a threat.

Compared with tobacco, marijuana is hard to tax. Its light weight and low bulk make it easier to hide.

Compared with tobacco, marijuana is hard to tax, though is more pungent and it needs to be hidden while it grows. First, marijuana’s light weight and low bulk make it easier to hide. Second, tobacco is notoriously hard to grow. Marijuana grows easily: Primitive strains, at least, have the nickname weed. That factor makes marijuana harder to control and tax. Third, the process of converting sticky fresh tobacco into consumable form is observable, requiring either air-drying, which takes a long time, or artificial heating, which is tricky. Post-harvest processing of agricultural marijuana is simpler, so there is less time and there are fewer clues to find contraband during that phase.

On balance, it’s not hard to conclude that marijuana will be easier to bootleg and therefore harder to tax than both alcohol and tobacco.

Hemp

Federal law bars the cultivation of the hemp plant, legal in many developed countries, which...
provides fiber and other products. Current proposals in the states to tax psychoactive marijuana seek to exempt hemp. California AB 2254 aims to exempt it in this way: “marijuana containing less than one-half of 1 percent tetrahydrocannabinol49 by weight is not subject to . . . [the $50 per ounce tax],”50 but it would not exempt hemp dealers from licensing fees. Meanwhile, the Massachusetts bill would set the threshold at 1 percent THC.51

A more defensible threshold might be the one that Canada and the European Union use to ban marijuana and legalize hemp: less than 0.3 percent THC.52 In addition to a percentage threshold, Canadian regulations provide that “A person who holds a license to cultivate industrial hemp only for fibre shall harvest the crop before the achenes of 50 percent of the plants are resistant to compression.”53 Presumably that head-scratcher for the layperson means the grower must harvest the plant before it matures into psychoactivity. In any event, Canada has figured out how to make the distinction, so states should be able to do so, also, if they decide to, bearing in mind the risk that bootleggers will hide marijuana plants in a hemp field as long as they can.

**Harder Drugs**

This article ignores harder drugs. Balancing the benefits of banning a substance against the fiscal and other benefits of regulating and taxing it is a case-by-case analysis. This article does not make that analysis even for marijuana, much less for substances such as heroin and cocaine,54 whose perceived negative externalities exceed those of marijuana. Beyond the perceived differences in externalities, the bulk, weight, and pungency of marijuana exceed those of many other banned substances, so it is easier to detect, regulate, and tax. Even for absolutists who want to legalize everything, it would be instructive to see how various plans for regulating and taxing marijuana might play out.

**What Base?**

After defining a subject for the tax, determining a tax base is necessary. It could be weight, potency, percentage of sale price, some combination of those factors, or the number of plants. A square footage or property tax on production or business areas is another option.

**Weight**

Weight is an obvious option for the base of a tax on marijuana. “Twenty-one states have laws on the books that tax the sale of marijuana (and other illicit drugs)”55 on the basis of weight, though these dead-letter gotcha taxes are really fines. Weight is used to tax cigarette tobacco56 regardless of tar and nicotine. Weight is the base used in AB 2254, the most recent serious California bill, at a rate of $50 per ounce. Once moisture content is accounted for, a weight-based tax is easy to impose and to analyze. A weight-based tax, though, would tend to drive less potent, cheaper intoxicants out of the market.57

**Potency**

Potency is a rough proxy for the tax base of the whole federal alcohol scheme. The federal tax on liquor is directly proportional to alcohol content.58 The tax on wine jumps from $1.07 per gallon for alcohol content of 14 percent or less to $1.57 per gallon.
gallon for potency of 14 percent and over.\textsuperscript{59} It jumps again, to $3.15, for potency of 21 percent and over.\textsuperscript{60} Only the tax on beer, $18 per barrel of 31 gallons, does not turn on potency.\textsuperscript{61}

The federal scheme extends the potency concept to tax alcohol in hard liquor at a higher rate per ounce than in its less powerful competition,\textsuperscript{62} but generally does not tax alcohol in wine more heavily than in less potent beer. “The federal excise tax rates . . . are approximately 10 cents, 7 cents, and 21 cents per ounce of pure alcohol for beer, wine, and distilled spirits, respectively.”\textsuperscript{63} Maybe these rates reflect the clout of interest groups. Maybe, though, they reflect perceptions of tendency to overindulge with each kind of beverage.\textsuperscript{64}

For marijuana, “Ideally, the tax rate per ounce should be proportional to THC potency.”\textsuperscript{65} Whatever the theoretical merits of taxing on the basis of potency, it involves a new function — testing — whose integrity has to be monitored.\textsuperscript{66} And lines have to be drawn. Alcoholic beverages, being liquid, are more fungible and thus easier to test than a solid vegetable product.

Whether THC potency makes sense as a tax base depends in part on the cost of the testing, split into fixed and variable elements. One would need to decide how many samples need testing, and that decision turns on adequacy of homogenization.\textsuperscript{67}

Some information on cost is available. At a Colorado lab, “Prices currently range from $60-$75 per test, with steep discounts for volume.”\textsuperscript{68} Another source says, “The whole process [involving gas chromatography, flame ionization, and mass spectrometry tests] costs $100 per sample.”\textsuperscript{69}

Another business provides more detail. Steep Hill Lab in Oakland tests potency by using a two-gram sample to represent up to two pounds of medical cannabis. The lab selects material from some 5 to 15 sites in the bulk material.\textsuperscript{70} The lab’s published price to test flowers and concentrates is $120.\textsuperscript{71}

Even if the cost of testing is acceptable, it’s unlikely that a visual selection process would be rigorous enough for a government to use for tax purposes. That is, the subjectivity involved in choosing material to test from 5, 15, or some other number of sites may make potency too unreliable to be the tax base. Pushing a blender to liquefy could yield a product adequately homogenized, but so powdery that consumers might prefer what the bootlegger is selling.

A proxy for homogenization has been used in nontax testing of cigarettes for tar and nicotine.\textsuperscript{72} Independent buyers visit stores in 50 unannounced locations and buy packages of cigarettes. The buyers mail them in for testing to a lab, whose results, brand by brand, are the average of the results of the

\textsuperscript{59}Id.

\textsuperscript{60}Id.

\textsuperscript{61}Id.

\textsuperscript{62}Alcohol taxes that came back to life after Prohibition ended were “designed to discourage the consumption of distilled spirits as contrasted with light wines and beer.” “Report to the Secretary of the Treasury of Recommendations of Informal Interdepartmental Committee Relative to Taxation and Control of Alcoholic Beverages,” supra note 9, at 331 [hereinafter “Interdepartmental Recommendations”].


\textsuperscript{64}Cheap fortified wines may be associated with low-income heavy drinkers rather than moderate drinkers.

\textsuperscript{65}See Economics of Legalization, supra note 11, at 8.

\textsuperscript{66}The California State Board of Equalization staff was investigating a potency base before the defeat of Proposition 19: “Staff has discussed the possibility of using potency as a component of an excise tax scheme. Right now it is an option to consider . . . when and if marijuana is legalized, and the legislature moves to impose an excise tax.

\textsuperscript{67}With properly crafted legislation and sufficient resources staff believes it is doable.

“Staff agrees there are issues around testing and certification . . . to be addressed to support a potency based tax. The question that goes with that is compliance. Legalization itself will move distribution from an underground economy to a regulated industry. Will the industry buy into that level of regulation? No one knows.” E-mail from BOE spokeswoman Anita Gore to the author (Oct. 12, 2010, 8:24:16 p.m.), quoted in “Potency as a Base for a Tax on Marijuana — BOE,” available at http://newreveneue.org/2010/12/08/potency-as-a-base-for-a-tax-on-marijuana-boe/ [hereinafter “BOE Potency”].

\textsuperscript{68}Tobacco buyers in the days of the chanting auctioneer of the Lucky Strike ads would bid in seconds, hardly breaking stride as they walked by a pile, by lifting leaves up to see what they were buying. The fungibility of tobacco in a particular pile was enough for an immediate evaluation.


\textsuperscript{70}David Downs, “Is Cutting-Edge Marijuana Lab the Future of Legitimate Pot?” East Bay Express (Mar. 5, 2009) available at http://www.alternet.org/drugs/130163/is_cutting_edge_marijuana_lab_the_future_of_legitimate_pot/?page=en
tire (last visited Oct. 12, 2010).

\textsuperscript{71}E-mail from Wilson Linker, Steep Hill Lab, to the author (Dec. 5, 2010, 9:43 p.m.), excerpt available at http://newrev
enue.org/2010/12/06/potency-testing-mechanics/.

\textsuperscript{72}Steep Hill Cannabis Analysis Laboratory, “Potency Analysis,” available at http://steephilllab.com/services/pot
cency-analysis/ (last visited Dec. 6, 2010).

purshased packs. But that testing is the work of a private industry group, whose work the Federal Trade Commission merely oversees as part of its duty to prevent deceptive claims in advertising. That system does not seem rigorous enough to impose tax, and does not seem suited for the proliferation of brands that might accompany legalization.

Potency testing might happen even without a potency-based tax. Regulations might require that packages of marijuana disclose THC content as a kind of warning or as ordinary consumer information. If so, the cost of testing could be attributable to the regulatory system. Even absent any tax or regulatory requirement, sellers might publicize content so consumers could comparison-shop; if so, consumer protection agencies might monitor sellers’ claims. Either of these independent reasons to test would weaken the argument that a potency-based system is too expensive. But nontax testing may not be rigorous enough, especially on homogenization and sampling, for a tax scheme.

The Massachusetts bill, alone among current proposals, uses potency as a base. In a potency scheme, consumers will tend to favor tax-paid products displaying official government numbers over iffy competition from bootleggers, whom they can hardly sue for misrepresentation or worse.

Retail Price
An excise tax could be imposed on retail sales, in addition to any standard sales tax. (The sales tax base could include or exclude excise taxes; most include them.) Or marijuana could be exempt from sales tax, but taxed at retail at a percentage greater than that imposed on standard items. That kind of higher, separately stated tax applies to services such as lodging and car rentals in many localities. Several California jurisdictions have also adopted gross taxes; most include them. (Or marijuana could be exempt from sales taxes encounter this argument: “Almost all the dispensaries in California are illegal,” said William Panzer, an Oakland lawyer who helped draft Proposition 215. They’re (Footnote continued in next column.)

To the extent that retail price reflects potency, a tax based on retail price is a proxy for one based on potency. But retail price may reflect other factors, such as branding and convenience of the retail location. Taxing fancy products more highly than basic products tends to reduce regressivity. But to the extent that “the harm caused by a unit . . . is unrelated to its price,” a tax based on retail price misses taxing what citizens are angry about. That is, if products of identical potency sell for different pretax prices, a tax based on price looks like a luxury tax or a revenue raiser, while a tax based on weight looks like a measure to discourage consumption.77

A tax based on price looks like a luxury tax or a revenue raiser, while a tax based on weight looks like a measure to discourage consumption.

A retail price base creates opportunities for evasion because it allows much untaxed marijuana into the community before a retail sale takes place. That is, it creates uncertainty about whether tax will be paid.78

A Combination of Approaches
The European Union uses a “greater of” approach: “excise duties levied on cigarettes must

78The text accompanying note 126, infra, describes the proposal to use potency.
74See Table 1, supra.
77States with sales taxes apply them to sales of marijuana. See State Board of Equalization, “Special Notice: Information on Sales Tax and Registration for Medical Marijuana Sellers” (June 2007), available at http://www.boe.ca.gov/news/pdf/173.pdf. Some argue that the BOE’s position applies to a null set, with the following reasoning: (1) California’s medical marijuana law does not allow sales of marijuana to patients. (2) Transfers are instead distributions from a cooperative. In a simple example, if two people finance, plant, tend, and harvest from a garden, the division of its fruits between them is not a sale. So (3) no sales tax is due. Operations paying sales taxes encounter this argument: “Almost all the dispensaries in California are illegal,” said William Panzer, an Oakland lawyer who helped draft Proposition 215. They’re (Footnote continued in next column.)
account for at least 57 percent of price, and must be at least $64 per 1000 cigarettes. The federal tax on large cigars uses a “lesser of” approach: it is 52.75 percent of the sales price but not more than $402.60 per 1,000 units.

A marijuana tax scheme could follow the European Union in combining approaches. It is possible to use all three of the factors weight, potency, and percentage of sale price. But to the extent that potency and price are correlated, weight and one other factor would be plenty.

**Square Footage or Number of Plants**

Voters in several California cities adopted initiatives in November 2010 that would use the square footage of certain property as the base for some taxing entities. The entities using this base are primarily nonprofits that are exempt from gross receipts tax, which is the standard tax for other entities.

This fallback approach seems crude because square footage does not seem tightly correlated with the intoxication that the public is angry about. But if you can’t tax exactly what needs taxing, you can tax a proxy. The United States would like to tax the net income of offshore insurance companies selling policies here, but we can’t measure it. So Code section 4371 puts a 4-percent excise tax on gross premiums that U.S. persons pay to them.

An analogy for these square footage taxes is not chickens before they hatch, but the size of the coop. In conformity with preexisting local models, the taxes typically count not only all interior space such as hallways but also “garages, carparks, [and] porches.”

Most of the taxes apply to all business space, owned or rented; most rates are $25 per square foot or less. Including office space, for example, creates an incentive to source back office and other work elsewhere (at home, at a coffee shop, to a third-party provider of services, and so on).

Rancho Cordova imposes a more targeted tax that counts just grow areas, hydroponic or natural, with an alternate base of number of plants. On indoor operations, the highest rates is the greater of $900 per square foot or $900 per plant. On outdoor operations the rate is $900 per 12.5 square feet, that is $72 per square foot, or $900 per plant. But external measurements are less intrusive than measurements of grow areas. A tax on grow areas could target intoxication somewhat better by counting not just square footage, but also the number of crops produced in a year.

California localities use square footage taxes in large part because they are limited by an old voter initiative, Proposition 13, to 1 percent in ad valorem property taxes. A square footage tax avoids valuation disputes, but that makes it cruder. The tax applies at the very beginning of the supply chain, so it minimizes the problem of post-tax leakage. And unlike an excise tax based on weight or potency, or a property tax requiring valuation, it requires little lead time to implement.

**Indexing**

Indexing happens automatically when the tax base is a percentage of price, because as prices go up, taxes do, too. An unindexed tax based on weight or potency, though, freezes the nominal tax burden in dollar terms and reduces the inflation-adjusted tax burden. But none of the pending statewide proposals provides indexing for inflation. Indexing is common in the income tax; it is rare (too rare) in excise taxes. The flat square footage taxes on marijuana businesses in the city of Long Beach, Calif., are indexed. Good idea.

**What Rate?**

With a subject and tax base identified, the discussion moves to setting rates. Economics provides no clear answers, so history and analogy may help. The discussion that follows mostly uses weight as the tax base, but the same kind of analysis would apply to potency, price, or any other base.

When the taxes on alcohol were reimposed after the repeal of Prohibition, the legislation was “inevitably a work of hopeful ignorance. No one had a solid foundation to analyze what the tax should be, or what revenues might be reasonably expected.”

Similarly, today, with marijuana, uncertainty prevails about elasticity of demand, street price, responses of bootleggers, and much more. Proposition

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80 IRC section 5701(a)(2).
81 Long Beach Resolution, supra note 40.
82 See Table 1, supra.
84 See Table 1, supra.
19, criticized here for ponting to localities, at least acknowledged the difficulty of setting a rate by setting no rate at all.

Starting With Street Price
One criterion in arriving at a tax rate for marijuana is that of maintaining its street price at least at the current level. Legalizers are not asking for a price cut. People who are angry about marijuana don’t want one, either.

Data on street prices is available. A federal site lists prices between $75 and $400 per ounce in one-ounce quantities. The Rand Corp. estimates a street price in California for sinsemilla-grade marijuana of $250-$400 per ounce. Other sites purport to list street prices, as well. The reliability of data is in question to the extent that incentives for law enforcers lead them to overstate the value of their seizures. In states where medical marijuana is legal, the picture is further clouded, because leakage to non-medical users should create more supply and drive prices down.

A tax rate that maintains the current street price would let a state attempt to soak up the prohibition premium, the above-normal return from commerce in marijuana that arises from the risk of getting caught. But a Rand study suggests that tax rates maintaining the current price would be so high as to be counterproductive. That is, bootleggers would triumphantly undercut the tax-paid price, and consumers would largely prefer the cheaper, riskier product.

Balancing Revenue and Compliance
Matching street price may be a weak proxy for the two principal goals of policymakers setting a tax rate for marijuana. One goal is to set a rate high enough to maximize net revenue. The other is to keep the rate low enough to make compliance high and bootlegging rare. President Roosevelt’s group designing reimposition of taxes on alcohol in 1933 put it this way:

Recommendations have been designed to eliminate the organized illegal liquor industry. . . . Rates of excise tax were calculated to yield maximum revenue without necessitating a price to the ultimate consumer of legal basic alcoholic beverages . . . high enough to enable the illegal product to compete.

Deciding whether bootlegging is rare enough is a matter of opinion, except in extreme cases, such as when a tax is so high that few choose to pay it, or so low as to produce negligible revenue. A jurisdiction

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86One analysis indicated that the pretax retail price of legalized cannabis could be as low as $2 per ounce in 1994 dollars. See Economics of Legalization, supra note 11. Street prices then were in the $100 to $600 range. The analysis suggested a tax rate of about $500 to $1,000 per ounce of THC content, or some 50 cents to a dollar per joint, in 1994 dollars. That rate was said to make the market pay what it would bear, and would have produced a post-tax price of roughly $75 to $150 per ounce.


may choose to sacrifice revenue, even in the long term, to keep bootlegging at a subjectively acceptable level.

The tax rate is a critical element of a potential bootlegger’s analysis in deciding whether to compete illegally against a tax-paid product.

If marijuana is legal and taxed, current bootleggers and new businesses may choose to operate legally, illegally, or not at all. The tax rate is a critical element of a potential bootlegger’s analysis in deciding whether to compete illegally against a tax-paid product. The framers of post-Prohibition alcohol taxes were so nervous about a price war against bootleggers that they urged the legal alcohol industry voluntarily to “forsgo excessive profits.”

The potential bootlegger of any substance would consider factors beyond price, like the likelihood and consequences of getting caught, consumer preference for legal products, and the burden of compliance. In a game-like or circular way, taxwriters would consider the bootlegger’s analysis in setting rates.

Lessons From Alcohol

Taxwriters in years gone by looked at excise tax rates as a percentage of cost of manufacture, which did not include distribution and selling costs. When a $2-per-gallon tax amounted to eight to 12 times the “average cost of manufacture” of whiskey in the Civil War, bootlegging ran rampant. A reduction in that tax by 75 percent in 1868 to two or three times the cost of manufacture, “practically stopped illicit distillation” and more than doubled revenue from the tax. Two times the cost of manufacture was a rough standard used in the reimposition of tax after passage of the 21st Amendment, too. Whiskey then thought to cost $1 or a little more per proof gallon to produce bore a federal tax of $2, with the understanding that state taxes would add to the final price to the consumer.

Analyzing alcohol taxes as a percentage of retail price would help, but good data are hard to come by. The liquor lobby estimates federal and state taxes at 39 percent of the retail price of spirits nationally, but Rand says federal and state excises amount to just 11 percent of the price in California. An alcohol watchdog group says excise taxes make up 11 percent of the retail price for beer. Those rates seem low compared with those in other countries. “Across 22 countries in [a] sample, the unweighted mean tax burden [‘‘as a percentage of retail price’’] on beer was 35 percent[ ] . . . for wine . . . 30 percent[ ] . . . and for spirits 61 percent.”

Report to the Secretary of the Treasury of Findings of Fact and Law of the Informal Interdepartmental Committee Relative to Taxation and Control of Alcoholic Beverages,” Supplement to Hearings, supra note 9, 304, 308 [hereinafter “Interdepartmental Findings”].

See State and Federal, supra note 6, at 232.

See BOE Potency, supra note 66.

One would expect the extent of tax evasion to be affected to some degree by mechanics of the tax’s design, collection, and enforcement, as well as its size. Hence, it would seem prudent for jurisdictions contemplating imposing marijuana taxes of this magnitude to invest substantial energy in crafting wisely the particulars of those mechanics.” Jonathan P. Caulkins et al., “Smuggling and Excise Tax Evasion for Legalized Marijuana” 7 (2010), available at http://www.rand.org/pubs/working_papers/2010/RAND_WR766.pdf [hereinafter “Smuggling”].

Id, supra note 18, at 42.

Id. States in that era imposed license fees rather than gallonage taxes.

That was the statement of Lovell H. Parker, chief of staff of the Joint Committee on Internal Revenue Taxation, about the price of good quality, 100 proof whiskey. 1933 Hearings, supra note 9, at 11. Various witnesses had different estimates of the average cost of production; $1.20 was the figure supplied by Harry Laurie of the Tariff Commission. Id. at 83.


Federal taxes were said to take up 18 percent of a consumer’s price; state and local taxes take up 21 percent, but that presumably includes sales taxes; and “indirect” taxes, including “personal income, corporate income, payroll and property taxes,” take up 20 percent. Distilled Spirits Council of the United States, “Excessive Tax Burden, Distilled Spirits, 2005, United States,” available at http://www.discus.org/pdf/2005bottle.pdf#xml=http://search.americaneagle.com/discus/index.asp?cmd=pdfhits&DocId=997&Index=f%3a
discus&HitCount=1&hitss=b&hc=23&req=property (last visited Nov. 10, 2010). Those indirect taxes are of the kind borne by businesses and consumers generally, and they are not part of the standard analysis.

Smuggling, supra note 101, Table 1, at 4.


Lessons From Tobacco

Tobacco taxes often make up a significant part of what consumers pay for the product. In California, state cigarette excise taxes are 87 cents and federal taxes are $1.01 per pack (a proxy for weight). One study, excluding sales tax, estimates that excises alone there amount to 47 percent of the after-tax price and 89 percent of the pretax price. That tax burden does not include the some $246 billion that tobacco companies pay states over a 27-year period under the Master Tobacco Settlement Agreement.

California’s tobacco tax is lenient by some standards. Other states have much higher taxes, and Europe taxes cigarettes ferociously. Total European taxes, including value added taxes, reportedly make Europe taxes cigarettes ferociously. Total European tax price and 89 percent of the pretax price. One study, excluding sales tax, estimates that excise duties are $1.01 per pack (a proxy for weight).

Percentages that look and feel official because they comply with the packaging rules in the low-tax jurisdiction where they were originally sold. So, rate-setting must involve consideration of taxes in other jurisdictions.

In addition to cross-border smuggling, weak governments may face clandestine local operators. “In Pakistan’s tribal areas,” some of them Al Qaeda-infested, “the problem of illicit sales stems largely from small-scale manufacturers . . . that are not paying taxes on the cigarettes they sell, or at least are not paying the full level of taxes due.”

An Initial Rate for Marijuana

Illegal production of marijuana varies by state, though it may reach nowhere the level of alcohol bootlegging at the time of the repeal of Prohibition, when “the illegal industry was entrenched, organized, and efficient.”

AB 2254 would tax sales of marijuana at $50 an ounce. But that bill aims only to fund drug education and rehab programs, so a board would reduce the rate to match the needs of those programs. As a percentage of the current street price of contraband, that $50 per ounce is in the low double digits.

If legalization drives pretax prices down, though, $50 per ounce takes up a bigger portion of total price to the consumer. A Rand study estimates that 58.6 percent of the final price would go to pay taxes. Taxes would amount to 207 percent of the producer’s costs — that’s in the range of the percentage found sustainable for liquor by 1868, and near the percentage Congress imposed on liquor in 1934.

But marijuana is harder to tax than liquor, so the 58.6 percent of final price the Rand study foresees bottom on Transparency International’s notorious Corruption Perceptions Index, and some politicians have indeed been implicated in the illegal cigarette trade. But the root of the problem clearly lies elsewhere: Without Brazil’s 80 percent cigarette tax rate, there would be little incentive to break the law.


Interdepartmental Findings, supra note 98, at 307.

That figure includes sales taxes. Altered State, supra note 8, at 20-21. A typical producer would receive only some 28.3 percent (including profit) of the final price that the consumer pays. Retailers and distributors make the total add up to 100 percent.

Matthew C. Farrelly et al., “State Cigarette Excise Taxes: Implications for Revenue and Tax Evasion” 2 (May 2003), available at http://www.rti.org/pubs/8742_excise_taxes_fr_5-03.pdf. And here is an example, from afar. Paraguay, a low-tax country, manufactures more cigarettes per year than its population could hope to smoke in a lifetime. The majority of its exports are reportedly sold illegally in Brazil. Of course, part of this could be attributed to corruption — Paraguay ranks near the
may be too high. An oft-cited study suggests an upper limit of 50 percent of final price, and uses a more modest 25 percent of final price as a basis for analysis.

To complete the discussion of rates by turning to a potency base, the Massachusetts bill sets the following:
- $250 per ounce of marijuana if THC content is 10 percent or more;
- $200 per ounce if THC content is as much as 5 percent but less than 10 percent; and
- $150 per ounce if THC content is more than 1 percent and less than 5 percent.

A board could adjust those rates up or down, to maximize revenue and to prevent bootlegging. In an apparent bow to street price, the Massachusetts bill’s sliding scale reverses the pattern of the federal tax on beverage alcohol, which taxes hard liquor more per ounce of pure alcohol, for example, than it taxes beer: The Massachusetts bill tends to reduce the tax per unit of intoxicant as the potency goes up.

**Adjusting the Marijuana Tax Rate**

Any new tax scheme is likely to need fine-tuning, or even wholesale rewriting. Decades ago, the story goes, congressional staff discovered a loophole that one industry was using and drafted a proposal to close it. Estimators assigned a billion-dollar revenue gain to the proposal; Congress adopted it; the industry got around it. Then staff would come up with a new plan to close the loophole and raise that same billion dollars, and the cycle would repeat.

Maybe that story is apocryphal, but starting to tax a product whose market has sought the shadows is likely to produce lots of new and fresh and ideas and some especially spectacular blunders. In the price war with bootleggers that would inevitably follow legalization, taxwriters will probably start by setting a rate that is too high and encourages bootlegging, or too low, leaving revenue on the table.

Even if taxwriters set the best possible rate, bootleggers will react to and take advantage of it if it is static. Bootleggers will know the market better than taxwriters, at least at first, and they tend to be more entrepreneurial, more flexible, and less risk-averse than government. A tax mechanism providing nimble tweaking from the outset will facilitate trial and shorten the pain of error.

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124 A Rand study argues that the proposed rate is too high: As compared with other familiar excise taxes, a $50 per ounce excise tax on marijuana is either very high or truly unprecedented depending on the metric employed. . . . California should not rule out the possibility that tax evasion would wipe out essentially all of the potential revenues from a $50 per ounce excise tax. Smuggling, supra note 101, at 7.


126 Supra note 3.

127 One idea in 1933 to deal with the foreseeable and gradual elimination of the bootlegger was to codify a tax rate that rose over time. 1933 Hearings, supra note 9 (statement of Harry L. Lourie of the Tariff Commission staff, suggesting a tax of $1.10 per proof gallon in the first year and $2.20 in the second year). But a deferred higher rate would have incentivized the bootlegger to hold inventory to compete against higher tax-paid prices. Id. at 33 (statement of Joseph H. Choate, Jr., of the Federal Alcohol Control Administration).

128 Supra note 8.

129 Hu, supra note 18, at 73.

130 Id. at 75.
period while the illegal industry is still organized and well financed. It would probably require a considerably higher price to revive a defeated illegal industry than it would to keep a well entrenched one in business. This price could be facilitated by keeping the tax burden on legal alcoholic beverages comparatively low in the earlier post prohibition period in order to permit the legal industry to offer more severe competition to its illegal competitor. When that competitor has been driven from business the tax burden could be gradually increased. Investigators . . . estimate that it will require three years of such competition to break the organization of the illegal industry.\textsuperscript{131}

As the reimposers of alcohol taxes hoped, bootlegging faded fast: “The syndicated type of illicit operation was virtually destroyed by the end of 1937, and since that time the control of production and distribution of illegal distilled spirits became largely a problem of coping with relatively small violators.”\textsuperscript{132}

Quickly, legitimate business moved in to take the bootlegger’s place.

Once it ceased to be outlawed, the alcohol industry was no longer dominated by unregulated, illicit entrepreneurs. . . . The leaders of the major alcohol industries are members of the economic establishment with an investment in maintaining order and obedience to law. . . . Now [in 1991], over a half-century since prohibition, it is easy to forget that all this was the outcome of self-conscious public policy and not the “natural” result of market forces or national zeitgeist.\textsuperscript{133}

The tax increases that the framers of the 1934 tax envisioned were indeed gradual at first. Congress increased the 1934 rate on liquor, $2 per proof gallon, to $2.25 per proof gallon in 1936 and to $3 in 1940. Then World War II changed everything. In 1942 the rate rose to $6; in 1944, to $9.\textsuperscript{134} That increase was 450 percent (414 percent in real terms) within 12 years.\textsuperscript{135}

An even earlier example shows the need for flexibility when first taxing a drug. James I of England took years to make needed adjustments (with 12 pence (d.) per shilling (s.)):

James I’s abhorrence of tobacco is well known, and it is not surprising to find that he should select tobacco to bear a very heavy duty. In 1602 he charged a special impost of 6s. 6d. [78d.] per pound on all imported tobacco. Prior to this date it had been charged at 2d. per pound as “other merchandise not specially mentioned”. The effect of this high duty was a vast increase in smuggling. . . . In 1620 the duty was reduced to 1s.[12d.] per pound, and it was de creed that all tobacco should bear a government stamp.\textsuperscript{136}

James’s failed rate was 39 times higher than the original rate, and 6.5 times higher than the ultimate rate. The tax then was a customs duty, not an excise tax, but the lesson applies: The first try can be really wrong.

The Massachusetts bill would create a board that could adjust statutory rates up or down.\textsuperscript{137} California AB 2254 allows for only reductions of the statutory rate — and only annually.\textsuperscript{138} A one-way ratchet seems less than ideal. Allowing only one tweak per year, meanwhile, makes for predictability, but not for nimbleness.

An individual can react more nimbly than a board, so an official could be charged to regulate commerce in and to collect revenue from legalized marijuana. Elected insurance commissioners in some states are responsible for protecting the public and, by capping rates, establishing the price the consumer pays.\textsuperscript{139} An appointed or elected official could influence the after-tax price of marijuana by changing the tax rate from time to time.\textsuperscript{140}

Although delegating power to set liquor prices in state-owned stores or lottery prices is routine, delegating power to set tax rates seems unlegislative or extraordinary. But legislatures could sunset the delegation and regain the power to set rates after a

\textsuperscript{131}Interdepartmental Findings, supra note 98, at 308-309.
\textsuperscript{132}Supra note 18 at 95. Hu goes on: “Mash seizures provides [sic] a fairly reliable index of illegal production. It is significant that this series showed a drop of 65 percent between 1935 and 1938.” Id. at 96.
\textsuperscript{133}Lessons, supra note 13.
\textsuperscript{134}All the rates come from Ripy, supra note 105, at 14, Appendix B.
\textsuperscript{135}Cumulative inflation between the imposition of the $2 tax in January 1933 and the imposition of the $9 tax in April 1944 was 35.66 percent. “Inflation Calculator,” available at http://inflationdata.com/inflation/Inflation_Calculators/Inflation_Calculator.asp#calcresuits (enter the appropriate months) (last visited Dec. 2, 2010).
\textsuperscript{136}Supra note 3, section 10.
\textsuperscript{137}Supra note 2, section 33 (proposed statutory section 34032). The 2010 voter initiative in the city of Berkeley, California, to impose taxes on marijuana allows the city council to eliminate or reduce them at any time. Berkeley Ordinance, supra note 40, section 3. Hu, supra note 17, is vehement about providing transition rules when rates change (in his discussions of floor stocks taxes, passim).
\textsuperscript{140}Beyond the scope of this article is the question for legislatures whether to empower a more nimble governmental authority to speedily ban, or even to regulate and tax, designer drugs like “K2, or ‘fake marijuana,’” which is essentially a legal, smokable form of psychoactive potpourri.” The quotation is from Mary Carmichael, “Fake-Pot Panic,” Newsweek (Mar. 4, 2010), available at http://www.newsweek.com/2010/03/03/fake-pot-panic.html.
designated period for experimentation and for flushing out bootleggers. Compared with ceding power to choose or change the tax base, ceding rate-setting power is more circumscribed and should be more acceptable.

Cliffs
Discontinuities or cliffs occur when some incremental changes in the amount that the tax base measures result in a tax change that is disproportionate (and when other changes in the amount measured result in no change in tax).

We still use a cliff to tax wine. At 14 percent alcohol (the threshold for fortified wine), the federal tax per bottle jumps from 21 cents to 31 cents, rounded. Maybe that’s why a lot of wine has 13.9 percent alcohol.

Sometimes, the rationale for cliffs is clear. Before reform to a continuous ad valorem percentage method, the federal cigar tax was based on seven price ranges. Each range had its own specific tax stamp. Those brackets were needed to “keep to a reasonable level the number and denomination of stamps that had to be printed.”

The problem of cliffs is not restricted to excises. Comic book character Scrooge McDuck once became exasperated when an incremental penny of income pushed him into a higher tax bracket. Even today, with rounding, an incremental penny of income can produce as much as $14 of extra federal tax.

In the Massachusetts bill, an ounce of marijuana with 10 percent THC content would bear a tax of $250; an ounce with 9.9 percent THC content would bear a tax of only $200. An ounce with 5.1 percent THC content would bear that same tax of $200. That’s arbitrary. A smooth, percentage-based rate solves that problem.

What License Fees?
Growers and Sellers
Oakland has enacted an annual fee of $211,000 for each of four “marijuana factories.” Propositions that predate that ordinance lack its ambition. The Massachusetts bill would charge $500 for a cultivator’s license; $1,000 for a processing license; $3,000 for a trade license for transporters, warehousemen, wholesalers, and distributors; and $2,000 for retailers. AB 2254 would charge up to $5,000 each for a cultivator’s, manufacturer’s, and wholesaler’s license the first year and $2,500 each later year. There would be no fee for retailers.

A thorough approach is to impose fees for licenses on everyone in the supply chain, including, in conformity with evolving international standards for tobacco, retailers. The amounts could be substantial. Licensing not only would create a revenue source but also help keep track of tax paid marijuana. Making licenses expensive or otherwise restricting them narrows the supply chain at a possible choke point. Lower fees for small businesses are a complication but are common.

Consumers
Mark A.R. Kleiman, who wrote a book on drug policy, says:

Personal drug licensure, particularly with quantity limitations, seems to represent a wild, even Orwellian, extension of government meddling in private life if we apply it to alcohol or tobacco. By contrast, as applied to currently illicit drugs such a system looks like a virtually complete legalization.

In many cases, individuals have to pay for a license before they can buy something. A young-looking person needs to pay for a driver’s license or a cultivator’s license before they can buy something.
other official photo ID card before buying alcohol. Those cards don’t cost extra for the purchasing privilege, but they aren’t free. More to the point, many states charge patients fees to be able to buy medical marijuana. Colorado charges a $90 fee; Michigan charges $100; California charges $66, and counties there may charge extra. Some of those states reduce fees, but usually not to zero, for patients receiving means-based government healthcare assistance.

Requiring licenses to purchase will not seal the system. Even if purchasers need a license, an intransient could find its way to folks without licenses through straw-person buyers, in the way that teenagers without fake IDs lurk near convenience stores in hopes of finding someone who will buy them beer. Too high a price for a license will lead to straw transactions.

Licenses to possess marijuana make no sense. States now realize some revenue by selling licenses for fishing and hunting, which are inherently observable. Possession of marijuana is not.

Special rates for nonresidents of the taxing jurisdiction could be set low to encourage marijuana tourism or high to discourage it. Or nonresidents could be ineligible for licenses, like out-of-state patients who cannot buy medical marijuana.

To be theoretically complete, a sliding-scale fee for individual licenses to purchase marijuana could achieve some progressivity. That scale could have a minimum fee, like those imposed on applicants for medical marijuana. And it could have a maximum, so the superwealthy couldn’t beat the system by sending agents to do the purchasing. Sweden, Finland, and other countries fine traffic violators on the basis of income, so high earners pay higher fines than others. Those countries, though, are relaxed about income tax information; America is not ready to disclose people’s incomes to agencies outside revenue services.

### What Special Breaks?

An excise tax aims mainly at collecting revenue or at discouraging something we’re angry about. But special rules may find their way into the tax law to benefit or burden activities or classes of taxpayers or to make the law more administrable.

#### Small or Large Businesses

Today, special tax rates favor small alcohol producers. For example, the general federal rate for beer is $18 per 31-gallon barrel, but brewers who produce less than 2 million barrels annually pay only $7 per barrel on the first 60,000 barrels. More help may be on the way: S. 3339, sponsored by 17 U.S. senators, would set excise taxes at $3.50 per barrel for the first 60,000 barrels and $16 for the next 1.94 million barrels for any brewer producing not more than 6 million barrels in a year.

**Ease of tax administration is an argument for a concentrated industry with few taxpayers.**

A similar rule benefits wine businesses that produce no more than a quarter million gallons a year: They get a drastically reduced tax rate on the first 100,000 gallons. For wine, at least, there is no cliff: The benefits phase out gradually.

Some view with alarm the prospect of big corporations taking over the marijuana trade. One counterargument is that big corporations are more reliable taxpayers because they want to protect their reputations and won’t fly by night. That argument may be generally accurate, though a watchdog group...
alleges many “examples of cigarette company complicity in cigarette smuggling.” 158

Still, ease of tax administration is an argument for a concentrated industry with few taxpayers, and appears to be the rationale behind Berkeley’s lower square footage tax rate for nonprofit operations with over 3,000 square feet of space. 159 But Berkeley limits facilities to 30,000 square feet, much smaller than the industrial scale operations allowed in nearby Oakland. Berkeley’s overall scheme aims to serve the additional purpose of encouraging existing dispensaries and cultivators, who have generally not caused problems locally, to open licensed cultivation facilities.

Environmentally Friendly Operations

Some indoor grow houses have reportedly taken 180 gallons of diesel fuel to produce one pound of marijuana. 160 “At indoor grow sites, Humboldt County environmental officials report finding tubes of used antifreeze, leaking fuel lines, pesticide containers, and nutrient-laden potting soil that runs off into streams during rains, feeding algae blooms that suffocate fish.” 161

A tax scheme could favor marijuana grown outdoors, using the natural light of the sun over that grown indoors, in energy- and water-intensive grow houses.

A tax scheme could favor marijuana grown outdoors, using the natural light of the sun over that grown indoors, in energy- and water-intensive grow houses. Rancho Cordova voters set a precedent for differential rates in 2010. A rate as high as $900 now applies to each square foot of indoor cultivated area or each indoor plant; outdoors, the top rate is $72 ($900 per 12.5 square feet). 162 The rationale for that difference is not concern for the environment, though: It reflects a judgment that growers can produce 12.5 times more plants in a given space indoors than outdoors. 163

In deciding whether to grow outdoors, producers would consider not just differential tax rates, but also factors such as different costs for farmland compared with buildings and different costs for security needed to prevent theft. 164

Home Growers

Economists tend to downplay the amount of revenue at stake with consumers who will grow their own marijuana instead of buying the taxed, commercial kind. A recent Rand study suggests that home growing, at least if limited, would largely succumb to competition from legal mass producers benefiting from economies of scale. 165 Years ago a legalizer wrote: “The inducements to home cultivation should not be exaggerated: in Alaska, where it was the only legal way to get marijuana before 1991, pot continued to be sold illicitly at prices around $250 an ounce, proof that many pot smokers are quite disinclined to grow on their own.” 166

If the cost of taxed marijuana is relatively low, consumers will tend to avoid the hassle of home horticulture. In addition to after-tax price, the decision will be informed by other factors, such as the perceived quality, reliability, and branding of taxed alternatives; the availability of a secure location for plant growth; the consumer’s interest and experience in cultivation; and the regulatory environment.

However small the interest in home growing may be, a tax scheme will have to have some rule, yea or nay. To govern the production of taxed substances for personal use, federal law provides three possible models:


159 Berkeley Ordinance, supra note 40.


161 Id.

162 Rancho Cordova Ordinance, supra note 40.

163 The tax base outdoors is the greater of the actual area used or 12.5 square feet per plant; indoors, it’s the greater of the actual area used or one square foot per plant. Id.

164 An application for a Rhode Island medical marijuana business permit illustrates the commercial value of untaxed marijuana: the applicant’s “building is already equipped with bullet-proof glass and three time-lock vaults which makes it ideal for establishing a Compassion Center.” Alternative Therapeutics, “Application for Operation of a Medical Marijuana Compassion Center” (May 12, 2010), available at http://www.health.ri.gov/news/temp/mmp/AlternativeTherapeutics.pdf. Taxing products based on where they are grown in an excise or ad valorem scheme would involve more complication.


166 Economics of Legalization, supra note 11, at 4.
• absolutely no production, for liquor;\textsuperscript{167}
• limited production (100 gallons per individual, 200 gallons per household), for beer and wine; and
• unlimited production, for tobacco.

The personal use permitted under the last two schemes allows gratuitous transfers, but no sales, of legally produced substances.

The following discussion examines those models for marijuana.

\textbf{Prohibition}

If home growing is prohibited, the decision to grow one’s own is the decision to buy from a bootlegger writ small. Small, noncommercial growing would be hard to detect, though a federal agency lists 14 ways of noticing that a neighbor may be growing substantial amounts of marijuana.\textsuperscript{168} A tax stamp or other marker is particularly useful if any marijuana anyone possesses has to be tax paid.\textsuperscript{169}

\textbf{AB 2254 effectively prohibits home growing: ‘‘The fees and the regulations on growing . . . preclude the growth of marijuana for personal consumption.’’}\textsuperscript{170}

\textbf{Limitations}

A leading commentator says “California could not feasibly license or tax home-grown marijuana, any more than it could license or tax home-grown tomatoes.”\textsuperscript{171} That’s like saying a government can’t \textit{outlaw} home-grown recreational marijuana, but they all try to, effectively or not.

Weight would not be a good de minimis standard for home growing, because field measurement is not feasible and plants could grow beyond plan. Even if weight or potency is the tax base, any threshold of possession should be based on something measurable in the field, like area under cultivation or number of plants.

Proposition 19 would have allowed individuals to cultivate marijuana in an area up to 25 square feet. That would have made tax enforcement difficult: “Suppose there is four pounds of marijuana at my house. Why, officer, that’s the results from my last legal 5-foot-by-5-foot personal garden harvest. What, you don’t see any 5-by-5 growing space? Well, I used to grow, but I took down my garden and sold my equipment after my last harvest.”\textsuperscript{172} Maybe enforcement efforts would be slack. By analogy, a friend who brews lots of his own beer reports no enforcement of the 200 gallon limit on his operations. He expects no governmental interest unless he starts selling his home brew.

Any limit would have to be high by current standards. One source reports “an average domestic plant yield of 448 grams or approximately 1 pound per plant.”\textsuperscript{173} Even that average would yield an amount that is over 10 times the felony threshold in North Carolina.\textsuperscript{174} A Rand report estimates average consumption per user of about 100 grams per year, or less than four ounces.\textsuperscript{175}

\textbf{Tax Exemption}

An unlimited tax exemption for homegrown marijuana would, of all the options, forgo the most revenue and most tempt growers to engage in illicit commerce.\textsuperscript{176} But although tobacco is harder to grow than marijuana, unlimited, tax-free home cultivation of tobacco remains an uncommon hobby.\textsuperscript{177}

In the Massachusetts bill, “Like making one’s own beer or wine today, personal cultivation and possession is outside the statute.”\textsuperscript{178}

\textbf{Medical Users}

\textbf{Current Law}

\textbf{Medicinal Alcohol}

A medicinal exemption from the federal alcohol tax is based on the character of the product, not the condition of the user.\textsuperscript{179} No federal alcohol tax is


\textsuperscript{169} See the discussion at “Identification,” infra.

\textsuperscript{170} “Analysis of Ammiano Bill,” Legalization Wiki (Mar. 30, 2010), available at http://legalizationwiki.org/Ammiano_Bill_AB_390. That analysis also applies to the successor bill, AB 2254, supra note 2.

\textsuperscript{171} State and Federal, supra note 6, at 237.

\textsuperscript{172} State and Federal, supra note 6, at 237.

\textsuperscript{173} Drug Policy Alliance, “Cannabis Yields 1992,” available at http://www.drugpolicy.org/marijuana/medical/challenges/litigators/legal/plantyeilds/deaplantyields.cfm. Yields of over five pounds per plant were reported at the upper end of the range.

\textsuperscript{174} That threshold is 1.5 ounces. N.C. Gen. Stat. section 90-95(d)(4).

\textsuperscript{175} Altered State, supra note 8, at 18. See Beau Kilmer et al., “Reducing Drug Trafficking Revenues and Violence in Mexico” 11 note 1 (Rand Corp. 2010), available at http://www.rand.org/pubs/occasional_papers/2010/RAND_OP9255.pdf [hereinafter “Mexico”] (listing other sources for an estimate in this range), and id. at 11-12 (discussion of the uncertainty involved in this estimate).

\textsuperscript{176} For completeness, another scheme would allow a home grown exemption only for consumption on the premises, indoors or outdoors, of the grower.


\textsuperscript{178} Massachusetts bill, supra note 3, Introductory Material.

\textsuperscript{179} That said, Wisconsin has a rule that exempts from excise tax “liquor sold to hospitals for medicinal purposes.” (Footnote continued on next page.)
imposed on “medicines, medicinal preparations, food products, foods, flavors, flavoring extracts, or perfume containing distilled spirits, which are unfit for beverage purposes.” But a doctor friend who recommends spirits for elders losing weight from lack of appetite reports that pharmacies he works with had never heard of filling a prescription for medicinal alcohol. Medicare and other insurers don’t pay for spirits, just as they don’t pay for gluten-free products.

“Sale or use for beverage purposes is indicative of fitness for beverage use” in the federal scheme. A product may also be found fit for beverage use on the basis of either “the content and description of the ingredients” on a required form or “on organoleptic examination” by a panel of tasters. The alcohol tax is so low, though, that the after-tax price is lower than the prices of many patented pharmaceuticals.

Even before the process of the repeal of Prohibition finished playing out, Congress removed all restrictions on the medical use of alcohol. Legalization of medical marijuana may someday be seen as a precursor to full legalization.

**Marijuana**

Medical marijuana is legal on the basis of a physician’s recommendation in 15 states and the District of Columbia. Its legality turns on the observed or reported condition of the user, not the more objective character of the product. Although marijuana differs from the typical prescribed pharmaceutical because it lacks standard dosing regimens, its efficacy has been reported in some controlled clinical tests. Substantial numbers of scientists, doctors, patients, and voters — and some legislatures — say marijuana has medicinal uses. This article wholeheartedly stipulates that it does.

Since January 1, 2010, Oakland has imposed a tax on medical marijuana, the only kind legal under California law. Now nine other California cities do.

A specific tax on medical marijuana doesn’t necessarily mean that a city is angry about it. The city may instead be singling out a highly profitable business that can afford to pay a blunt-instrument gross receipts tax. In Berkeley, for example, taxes per $1,000 of gross receipts are 60 cents for grocery stores (a low-margin business), $3.60 for doctors’ and other professional offices (with higher margins than grocery stores), $100 for professional sports events (presumably a cash cow), and $150 for gun shops.

The California cities that voted to tax medical marijuana in November 2010 all would have taxed recreational marijuana, too, if Proposition 19 had passed. Some cities would have taxed both kinds at the same rate, presumably for one or more of three reasons: similar profitability, administrative convenience, and concern about imposters. Other cities, like Berkeley, would have sacrificed administrative convenience and taxed sellers of recreational marijuana (at $100 per $1,000 of gross receipts) more heavily than sellers of medical marijuana ($25 per $1,000).

**Legalization Proposals**

Unenacted proposals to legalize marijuana for all adult users run the gamut of analogies, from penicillin to Pabst Blue Ribbon, about whether to tax medical marijuana. At one extreme, AB 2254 provides: “no fee shall be imposed under this part on marijuana used medicinally with a doctor’s recommendation.” At the other extreme, the Massachusetts bill simply taxes all marijuana, medical or not.

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188 That tax is a modest 1.8 percent of gross receipts. City of Oakland, “A Resolution Submitting, on the Council’s Own Motion [various matters to voters]” (July 23, 2010), available at http://clerkwebsvr1.oaklandnet.com/attachments/25613.pdf.

189motion

180 Special Report

184 See Table 1, supra.


185 Supra note 24, at 146-147.

186 CNBC’s documentary *Marijuana Inc.* shows a reporter in a marijuana pharmacy or “dispensary” asking, “what’s different about” varieties of medical marijuana for sale, and being told by owner Richard Lee, sponsor of Proposition 19, that it’s like “red and white wine, you know, different flavors of wine.” CNBC, *Marijuana Inc.: Inside America’s Pot Industry* 24-minute mark (first broadcast July 17, 2009), available at http://www.cnbc.com/id/15840292?video=1185791780&play=1

187 See Table 1, supra.

188 See Table 1, supra.

189 AB 2254, supra note 2, proposed section 34004 of Division 2 of the Revenue and Taxation Code.

190 Massachusetts bill, supra note 3.
Healthy Imposters

One anti-marijuana source alleges, “The vast majority of those using crude Marijuana as medicine are young and are using the substance to be under the influence of THC and have no critical medical condition.” A superficially more objective source, a documentary produced by CNBC, shows a reporter saying, more subtly, that medical marijuana cards are “remarkably easy to come by.”

Even sympathizers show irritation with posing. “We all support [medical marijuana],” [Los Angeles City Council member Dennis Zine] says. “It’s been abused, and it’s simply a mask for the recreational use of marijuana, with the doctors who write prescriptions at will for a different dollar value, whether it is $65 or $100 or $200. . . . People are abusing it, and they are simply using it to get high.”

This article takes as given that a nonnegligible number of people get recommendations for medical marijuana that they use for recreational purposes.

Arguments for Special Rules

Users and suppliers of medical marijuana make several arguments against its taxation. Compassion should preclude taxation. Medicine is not something that people are or should be angry about; on the contrary, we tend to subsidize it. Prescribed medicine bears no sales taxes or European-style value added taxes. Taxes on medicine tend to be more regressive than taxes on ordinary necessities, because sick people are not so able to earn a wage as healthy ones. Any recreational impostors should not be allowed to burden sick people.

Arguments Against Special Rules

Affordability

Four factors may offset the financial burden of a tax on medical marijuana, at least in a jurisdiction that moves from prohibition directly to legalization:

• Total cost to the patient after legalization will probably go down, at least in the short run, as government keeps taxes down to compete with bootleggers. A Rand study raises the possibility of a price decrease of around 75 percent from current street prices, even after taxes are paid.

• If there were no distinction between users on the basis of medical need, new patients wouldn’t have to scrape up a doctor’s fee because they wouldn’t need a recommendation.

• States typically charge nontrivial application or other fees for medical marijuana patients, though California cuts its fee from $66 to $33 for less well-off Medical patients. Those fees would disappear.

• Patients may be able to use standard help available for pharmaceuticals generally. Private insurance companies, disparage them as we may, decide routinely who is sick and what medicine sick people need. (Tax authorities don’t.) Private charities may help.

In tax policy, simplicity is the enemy of fairness. Any special tax rule for medical marijuana hands government the task of making or monitoring decisions about people that categorize later events when the tax break is claimed. That is a challenge.

Tax rules routinely draw bright lines between substances, as the federal government does when taxing wines with alcohol content of 13.9 percent and of 14 percent at different per gallon rates. But categorizing human beings can be more difficult.

To be sure, there are easy categorizations, like the extra federal tax exemption for individuals 65 and over (though the circumstances of one’s birth may serve more help. But maybe not enough.

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To be sure, there are easy categorizations, like the extra federal tax exemption for individuals 65 and over (though the circumstances of one’s birth may serve more help. But maybe not enough.
The extra tax exemption for blindness on the Form 1040 draws bright numerical lines\(^{202}\) that are objective on their face, though they depend on a doctor who submits a report to the IRS.

Some standards (the presence of AIDS, ALS, cancer, and much more) for medical marijuana recommendations are objective. Others are not. Thirteen of the 15 states that allow medical marijuana do so for pain that is variously described as chronic, severe, severe chronic, debilitating, or intractable.\(^{203}\) Ninety-four percent of Colorado marijuana patients say they suffer “severe pain.”\(^{204}\) Drawing bright lines between people whose chronic pain is enough to warrant medication and everyone else is difficult. No one is perfectly whole. A friend puts it this way: “We all have chronic pain in the soul.”

In tax policy, simplicity is the enemy of fairness.

Drawing medical lines can expand into an industry. Determination of Social Security disability has led to so many disputes that lawyers make it a specialty.\(^{205}\) The stakes in those disputes are high enough to pay lawyers on both sides. But for medical marijuana determinations, the case-by-case game is not worth the government’s candle.

Once government has identified patients eligible for tax relief, it needs to provide that relief to patients but not to others at transaction time. Some California cities may have considered parallel distribution channels, with patients buying only at tax-favored dispensaries, and recreational users paying full tax at stores. But current schemes that exempt charitable purchasers from sales tax seem more workable: sellers sell to all comers, and provide relief at the point of sale, ordinarily on the basis of an official document. Such a document would work like a commercial coupon or food stamps, but could be lent or counterfeited.

What if a patient buys medical marijuana for recreational use? There, we may have only the honor system.

Lying

Any special rule based on reports of unprovable symptoms creates an incentive for individuals seeking recreational use to lie. Unpoliced, that kind of rule leads to disrespect for the law. It may even lead to disrespect for the medical profession, because some doctors might get the reputation of believing all or nearly all claims that lead to a recommendation for marijuana.

Self-Perception

An incentive to see one’s self as a victim leads to the opposite of positive thinking. If healthy people want something and have to say they are sick to get it, they may come to think they are sick or even become sick, like the child who hates school and develops a stomachache in the morning. But that incentive, like that for lying, is also present in any disability insurance plan, public or private. Seeing one’s self as a victim finds noble expression in fighting for one’s rights or well-being. Seeing others as victims calls well-meaning people to action. But the incentive to save a little money through a tax break for medical marijuana seems less powerful than the incentive to be able to consume it legally at all, which is the incentive that folks in medical marijuana states face today.

Revenue

Any special break diminishes the tax base. The fiscal drain may extend beyond patients: If the tax differential is significant, patients may sell illicitly to recreational users or bring medicine to share with healthy people at a potluck.

A Nontax Solution: Tighter Rules on Doctors

One way to protect the tax base from recreational users who pose as patients is to tighten standards for honoring doctors’ recommendations. States that have allowed doctors to specialize in marijuana recommendations are already facing a backlash.\(^{206}\) Bright-line rules could address the problem. For instance, during Prohibition, the federal government limited the number of prescriptions that doctors could write for medicinal alcohol.\(^{207}\) More recently, Colorado allowed doctors to write marijuana recommendations for no more than five patients.\(^{208}\)

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\(^{202}\) Reg. sec. 1.151-1(d). A person is blind with no better than 20/200 vision in the better eye with correcting lenses, or if the widest diameter of her or his visual field subtends an angle no greater than 20 degrees.


\(^{204}\) Mainstreamed, supra note 35, at 36.


\(^{207}\) See 1933 Hearings, supra note 8, at 18.

What Tax Enforcement?

Identification

Sophisticated markers, like high-technology stamps, can identify tax-paid cigarettes: “Currently, 47 states require proof — via marking the cigarette packages with stamps — that state cigarette taxes have been paid.” My tobacco-friendly state of North Carolina requires no stamps, though, because smugglers (even some with terrorist ties) increase the state’s revenue. In Canada, monitoring of tear tape, “the pressure-sensitive plastic ribbon that is wrapped around a package of cigarettes to facilitate the opening of the cellophane wrapping that encloses the package,” also aims to prevent evasion. The U.S. Treasury has proposed a “track and trace” system, using bar codes or the like, for cigarettes.

Knowing of technology used to enforce the California cigarette tax, staff of the State Board of Equalization investigated stamps for identification of tax-paid marijuana in case Proposition 19 passed. Colorado officials are “considering mandating that medical pot include radio-frequency identification devices, somewhat like coded tags on library books, to keep track of who’s getting what.”

Seals or stamps could mark not only a pack of cigarettes, but also a pouch like those in which pipe tobacco is sold. A seal or stamp could also mark packages of infused brownies, sodas, olive oil, chewing gum, or whatever policymakers allow sold.

An open container, even empty, could give a rebuttable presumption of legality for the quantity it can contain.

An open container, even empty, could give a rebuttable presumption of legality for the quantity it can contain. To be sure, that presumption would allow evaders to refill an open container with contraband, in the style of my friend who pours cheap Scotch into single malt bottles to impress his guests. As a corollary, there could be a rebuttable presumption of evasion for any unpackage amount that would not fit into the largest legally sold package. In that scenario, users would need to finish one package before opening the next one.

Consumable markers are conceivable. We dye tax-exempt home heating oil, for example, to distinguish it from otherwise identical taxable diesel fuel. In distinguishing tax-paid marijuana from non-tax-paid marijuana, any consumable marker would have to be nontoxic, hard to counterfeit, inexpensive to apply, and easy to detect in the field. Individual paper cylinders (once out of a sealed package) could bear a nontoxic mark, using technology like that used to fight counterfeiting of currency. Users who didn’t want to smoke would take the marijuana out of its paper tube before, say, incorporating it into food.

Genetic markers of the kind that seed companies use to identify plants whose material and offspring they claim to own might someday allow identification of tax-paid marijuana. That kind of genetic engineering sounds far-fetched, but scientists are working on an analogous task: “A desirable step towards the goal was made in 2007 when a team from the University of Sydney published a paper in the journal Nature suggesting that it was feasible to create a gene that could cause a seed to germinate only if the resulting plant warranted it. The gene called ‘gene of destination’ was designed to respond to the presence of a hormone released by the human body when a cancerous tumor is present.”

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214. (Footnote continued in next column.)
[toward eliminating confusion between hemp and psychoactive Cannabis] is to make drug-free plants visually recognizable. Since the hairs can be seen with a magnifying glass, this could be accomplished by engineering a hairless Cannabis plant.” But even allowing government enough power to require such markers might not preclude cloning or other bootlegging techniques.

### Tracking

From the outset, governments can track taxable substances by monitoring the raw materials that go into them. Beer makers are advised, “Since you must report the usage of malt and hops and beer loss, agents can spot reports that may be fraudulent. Also, when the TTB comes in for an audit they will look at brewing records, raw material invoices and whatever else they wish to examine to determine if your operation is legit.” Similarly, “monitoring of raw leaf tobacco [to] . . . control the supply of raw leaf tobacco from grower to manufacturer” is part of Canada’s comprehensive excise system.

During the production phase, until the federal liquor tax scheme was dramatically relaxed in 1979, there was a “system of joint control under which IRS agents were kept on the premises and their presence required when certain actions were performed to insure collection of the taxes. Spirits were kept under government lock and seal until denatured, the tax had been determined, or the spirits removed for a legitimate tax exempt or tax free purpose. Generally, taxes were determined when the spirits were removed from the bonded premises.”

There’s more. Since shortly after the repeal of Prohibition, the federal government has banned post-production transportation of liquor in containers holding more than one gallon. Keeping track of liquor bottles, a distinct form of packaging, still helps the federal government collect taxes on spirits.

Technology offers new forms of tracking. In Colorado, “Owners will soon be required to place video cameras throughout their cultivation sites and dispensaries.” The cameras will “trace the movement of every marijuana bud from the moment its seeds are planted to the point of sale,” and will capture the face and photo identification card of every patient. “The video will be transmitted to a website accessible to regulator round the clock.”

The better a tracking scheme works, the more likely it is to cost too much and to intrude on privacy. Workable schemes lie between the honor system and the diamond mine.

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222Ripy, supra note 105, at 9-10.
Collection Point

Principles

A principle of excise administration is to assess tax at a choke point where the supply chain constrains to involve a small number of people and locations. Then fewer people have to learn the rules (and there should be fewer mistakes), fewer entities need auditing, and both taxpayers in the aggregate and government spend less time and incur less cost in making the system work.

Another principle is to assess tax near the beginning of the supply chain, so that the substance does not leak out of that chain untaxed. Taxes imposed at the end of the chain, like sales taxes, make leakage more likely.

Finding an appropriate assessment point for a newly legalized substance depends on how the industry will be organized. Although governments could take a passive role, let the industry evolve, and impose taxes at the best choke point in the structure that turns up, they could instead mandate an organization for the industry that will help meet fiscal needs.

Analogies

For alcohol in the United States, the federal choke point is near the beginning of the chain, as raw materials become alcohol. This process takes place in secure locations. Tax is imposed as or before beverage alcohol is removed from the choke point.

For tobacco, the choke point is found in the middle of the supply chain, after the time when and distance from the place where the curing or drying process makes harvested tobacco smokable. Smokable tobacco from tens of thousands of domestic farms travels untaxed to manufacturing plants where tax will eventually be assessed.

Options

Putting the choke point at the beginning of the chain for marijuana could involve limiting by license the number of farms or grow areas and placing them under scrutiny. That scheme, involving consolidation of the industry, would conflict with the independent traditions of marijuana growers. But although taxation and regulation may have helped to consolidate the liquor and cigarette industries, they can coexist with a more fragmented industry, like wine. And capital intensity is a separate cause of consolidation in all those industries.

For marijuana, on balance, the middle of the supply chain may be the best assessment point.

For marijuana, on balance, the middle of the supply chain may be the best assessment point. Staff of the California Board of Equalization, which “typically recommends that excise taxes or fees be imposed as high in the distribution chain as possible,” advised against collecting taxes on marijuana from “the highest point in the distribution chain[,] . . . growers[,] . . . [because], growers normally sell in bulk volume, which would not be conducive to a unit-based tax.” The staff instead recommends collecting at the level of the distributor or processor, where repackaging would allow for the use of tax stamps.

The staff concluded that assessment that close to the middle of the chain would be adequate:

Generally speaking, growers would be licensed and inspected regularly. By knowing the size of a grower’s crop, we know the approximate amount of product produced. Just like alcohol, some product may go out the back door that the taxing agency is not aware of. This can never be completely controlled. There is no fool proof system to stop all evasion schemes. But by using indicia, licensing all the levels including retailers, and doing regular inspections, the state of California can reduce the evasion level.

The end of the supply chain, the point of retail sale, is an ineffective collection point. Shoplifting, pilferage by employees, casual sales, and theft during transit are examples of tax evasion enabled by failing to collect tax early in the process.

To combine the benefits of a retail price base with those of an early and narrow choke point, the Basic
World Tax Code and Commentary, by Ward Hussey and Don Lubick, suggests imposing excise tax at the time of production as a percentage of “the retail price current at the time of production to achieve a uniform and large base without competitive advantage to vertically organized enterprises.”\textsuperscript{236} The advantage the world code seeks to avoid is this: If one company or an affiliated group owns all of a supply chain, there is no third-party time-of-production transfer price to base tax on — the taxpayer has an incentive to understate it. In response, the government has only the wishfully named arm’s-length method of guessing at tax pricing, a tool grown so feeble that it has turned the international tax schemes of the mightiest nations into laughing-stocks.\textsuperscript{237} The world code avoids that trap.

But the world code’s approach is not the one to start with. There is no “current retail price” of a product just entering a legal market. Moreover, as the market develops, brands and enterprises may come and go quickly; and deposit of estimated tax up front is only a partial solution. The world code’s approach will be useful for marijuana taxes only if and when companies are few and brands are stable.

\section*{A Public Option?}

The line between revenue from excise taxes and those from state monopolies may be hard to draw. “Arguably, profits of government-owned tobacco, alcohol, and gambling monopolies should also be considered part of the excise tax system.”\textsuperscript{238}

A public marijuana monopoly offers advantages over an entrepreneurial model. First, a public seller can tweak prices more quickly than a legislature can adjust tax rates, so it can offer stiff and nimble competition to bootleggers in the inevitable price war.

Second, a state monopoly should and apparently does tend to maximize net revenue generally. Virginia’s retail monopoly on sales of liquor, for example, raises gross revenue that is reportedly an order of magnitude greater than taxes produced in neighboring Maryland and the district.\textsuperscript{239} That monopoly, combined with taxes, yields this result: “In the District and most of Maryland, just a dollar or two from a fifth of Jack Daniel’s goes to government. But in Virginia, where whiskey and every other kind of liquor is sold in state-run stores, more than $13 of the retail price goes to the state.”\textsuperscript{240} However, gross and net are completely different. The district and Maryland incur no costs for facilities or people to conduct a retail business.

\subsection*{A public marijuana monopoly offers advantages over an entrepreneurial model.}

Third, monopoly offers more stable long-term revenue. A report from the Marin Institute says:

It is rare for states to raise excise tax rates on alcoholic beverages because the alcohol industry powerfully lobbies against any such increases. As effective tax rates on alcohol erode over time, states that privatize alcohol sales will find it difficult to match the revenue they previously realized from state-run stores by raising state alcohol tax rates.\textsuperscript{241}

A similar argument would apply to legalized marijuana taxed on the basis of weight or potency without indexing.

Fourth, public monopoly offers more regulatory controls. The mayor of Juarez, Mexico, expresses that view this way: “If you want to end the violence and the corruption it creates, . . . you only need to turn the business over to governments.”\textsuperscript{242}

A monopoly has disadvantages. First, private industry is ordinarily more efficient than a state

\begin{itemize}
  \item Gender
  \item Race
  \item Age
  \item Income
  \item Education
  \item Occupation
  \item Marital status
  \item Children
  \item Number of dependents
  \item Housing status
  \item Home ownership
  \item Rent
  \item Housing costs
  \item Transportation costs
  \item Health care costs
  \item Food costs
  \item Utility costs
  \item Entertainment costs
  \item Personal care costs
  \item Travel costs
  \item Recreation costs
  \item Membership costs
  \item Tobacco costs
  \item Alcohol costs
  \item Marijuana costs
  \item Other costs
  \item Total costs
\end{itemize}
monopoly, though efficiency may not help sell a plan to a public that is to some extent angry about marijuana use.

Second, state monopoly can lead not only to inefficiency but also to waste, conflicts of interest, sweetheart deals, and corruption. In North Carolina, for instance, liquor for off-premises consumption, a state monopoly, has proved susceptible to embarrassing scandal.243

Third, the argument that a state taxing undesirable goods tends to become compromised in its opposition to them applies a fortiori to a state that sells those goods.

Fourth, and most seriously, in the short run at least, a monopoly would move the state into the marijuana business. That move would put the state itself in violation of federal law, and would need from the federal government benign neglect of a new and high order,244 involving a special kind of comity.

On balance, state monopoly combined with excise taxation and license fees should provide the richest revenue source. Monopoly is also likely to provide the most bulletproof regulatory scheme. In states now without medical marijuana, it would face no entrenched opposition from legally operating entrepreneurs. A final and perhaps overriding factor is that states have only one chance to set up a monopoly; a state can always switch from monopoly to a private model, but it can’t ordinarily switch the other way. Faced with the unknown and the choice of use it or lose it, “use it” is often the shrewd and prudent answer.

The Washington bill245 imposes no tax. But it would allow each city, town, and unincorporated area to decide, by petition and referendum, to allow marijuana sales through state-owned stores. The state would take revenue by marking the price up, as it does now for liquor: A state board would “from time to time” set the price of marijuana as it does now for liquor, with a cap of 35 percent (presumably of gross revenue from sales).246

**Effective Date**

AB 2254 would be effective 30 days after adoption of regulations.247 Under Proposition 19, marijuana would have become legal immediately under operation of California law. The BOE staff anticipated that after enactment of any statewide weight-based tax scheme, eight months would be needed to implement it.248

To avoid confrontation with the federal government, state legislation could delegate authority to the executive branch to bring the scheme into force. For instance, an official could stand ready to promulgate final regulations (which would trigger effectiveness) if the federal government said OK or if the official decided it had winked or blinked.

**Sunsetting**

With a sunset, legalization and taxation could expire after some number of years unless voters or the Legislature approved extension. Sunsetting an untried scheme puts inertia, inherent in the legislative process, on the side of caution.249

At the federal level, Congress’s repeated sunsetting of tax benefits has been criticized as sacrificing tax policy to political expediency — to the point of giving sunsetting a bad name.250 Sunsetted or expiring tax benefits tend to give lobbyists sinecures and to keep campaign contributions flowing. They understate cost because they lose revenue for only a part of the relevant fiscal window. Tax burdens require a different analysis. Sunsetting them understates revenue gain.

But sunsets have a legitimate purpose: to reverse the burden of going forward when rules are experimental. Legalization of marijuana and everything associated with it would be a series of experiments. For a new marijuana tax, a sunset date could terminate legislative delegation (to a nimble official) of the power to set rates. After a set period of time thought adequate to fight a tumultuous price war, rate-setting power would automatically return to the deliberative legislature. The legislature could always extend the time of delegation, but only by an affirmative vote.

**Conclusion**

As it scratches the surface of a new area of tax law, this article reaches several conclusions. Marijuana is hard to tax, so any schemes to tax it have to be flexible. Tax rates on marijuana need to be low at first to gain advantage in the inevitable price war against bootleggers. As taxing authorities win that occur no later than July 1, 2005.” The reader is left to wonder about that inappropriate effective date.249

244**BOE Analysis, supra note 214, at 11.
245**Legislative inertia is an even bigger problem with tax treaties, which cry out for indexing. See supra note 23.
war, they can raise rates and generate more revenue. Indexing of dollar amounts is essential. The tax can omit special rules for medical marijuana. State monopoly is a viable option. But this article reaches no conclusion on other issues, such as whether the ideal potency base is feasible, what to do about home-grown marijuana, and whether any scheme would bring in enough revenue to be politically palatable.

History tells us that, “it took a full-time, multi-year effort for . . . researchers and planners . . . to come up with a workable beginning blueprint for post-prohibition alcohol control [and many other players participated eventually]. Furthermore, this system has been constantly adjusted ever since.”

Any new revenue scheme starting from zero is bound to leak, overreach, or otherwise need fixing as time brings unanticipated consequences to light. It will require the work of many minds.

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251 Lessons, supra note 13.