June 2016

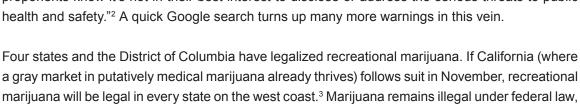
Worry about bad marijuana—not Big Marijuana

By John Hudak and Jonathan Rauch

INTRODUCTION



There is more where that came from. Nowadays, it's hard to have a discussion about marijuana policy that doesn't become a discussion of Big Marijuana. In a March editorial, the *Christian Science Monitor* says, "'Big Marijuana,' which may become akin to Big Tobacco or Big Liquor, could...use its corporate profits to drive up demand for a drug among teens. And in a possible case of 'regulatory capture,' the big firms could use their financial clout to manipulate elected leaders to weaken curbs on pot sales. ... The real addiction in legalization may be in its corrupting profits." In a recent op-ed piece in the *Boston Globe*, Massachusetts's governor and attorney general and Boston's mayor argue against a legalization initiative by warning against the profit motive: "The financial backers of legalization are not neighborhood leaders, medical professionals, or grass-roots activists. They're big businesses and investors. ... Motivated by the profit potential of dominating a new marketplace, proponents know it's not in their best interest to disclose or address the serious threats to public health and safety." A quick Google search turns up many more warnings in this vein.





John Hudak is a senior fellow in Governance Studies at the Brookings Institution.



Jonathan Rauch is a senior fellow in Governance Studies at the Brookings Institution.

¹ German Lopez, "Big Marijuana Is Coming — and Even Legalization Supporters Are Worried," Vox.com, April 20, 2016

^{2 &}quot;The Challenge of 'Big Marijuana," *Christian Science Monitor*, March 7, 2016. Charlie Baker, Maura Healey and Martin J. Walsh, "Mass. Should Not Legalize Marijuana," *Boston Globe*, March 4, 2016.

³ With Nevada and likely Arizona voting on legalization in 2016, there is a chance of a significant western bloc of states that have legal, adult-use marijuana reform policies.

a fact that impedes development of a licit national market. So far, however, the federal government is tolerating state legalization, and in response, corporate capital and muscle are moving in. "The opening of the marijuana industry here [in California] to corporate dollars has caused a mad scramble," reports the New York Times, "with out-of-state investors, cannabis retailers, and financially struggling municipalities all racing to grab a piece of what is effectively a new industry in California: legalized, large-scale marijuana farming."4

Of course, for many decades, the marijuana industry has been in the hands of profit-driven business enterprises criminal ones. That is the problem legalization aims to solve. But legal commercialization raises a new set of issues about the effects of industry dynamics on consumer behavior, and about those effects' potential social costs.

This paper argues against alarmism. In it, we try to think through some implications of the corporatization of marijuana. In brief, we conclude:

- The marijuana industry will remain a diverse one even as large corporations emerge. The Big Marijuana rubric is more misleading than helpful as a guide to policy because it oversimplifies and stereotypes what is in reality a continuum of business scales and structures.
- Big Tobacco in its notorious heyday is very unlikely to be repeated in the case of marijuana. A more likely commercial and regulatory model is alcohol, which is regulated primarily at the state level, combines mandatory with voluntary measures to police industry conduct, does a credible job of preventing antisocial and abusive commercial behavior, and has proven stable over time and broadly acceptable to the public and the industry.
- Intelligently regulated and managed, Big Marijuana can be part of the solution. Corporatization, though not without its hazards, has considerable upsides. It brings advantages in terms of public accountability and regulatory compliance, product safety and reliability, market stability, and business professionalism.
- Policy should concern itself with harmful practices, not with industry structure, and it should begin with a presumption of neutrality on issues of corporate size and market structure. Attempts to block corporatization are likely to backfire or fail. For policymakers, the concern should be bad marijuana, not big marijuana.

WHAT, IF ANYTHING, IS BIG MARIJUANA?

Whatever "Big Marijuana" means, all sides of the debate find something to hate about it. Any discussion of "Big Marijuana" should afford readers a definition of the term. That, however, is not easy. The term is tossed about so freely and flippantly that it has come to be a catch-all moniker with no consistent meaning, except inasmuch as it is consistently pejorative. Some people use it to mean commercial, for-profit marijuana. The term, in this broad sense, implies suspicion of or

even opposition to the profit motive. Although not unreasonable, that skepticism is prone to overlooking that the illicit marijuana industry is no stranger to the profit motive and does not shrink from marketing to heavy users and minors. (Indeed, it employs minors to sell to minors.) A narrower meaning of "Big Marijuana" holds up an archetype of a particular industry structure: one dominated by the equivalents of giant tobacco companies like Altria Group

⁴ Ian Lovett, "In California, Marijuana Is Smelling More Like Big Business," New York Times, April 11, 2016.



or of giant beverage companies like Anheuser-Busch InBev. Opponents of market consolidation worry that the cannabis industry could fall under the control of a few macro-corporations that create substantial social costs while

hiding critical information from the public and manipulating and deceiving regulators. Thus the motto of Smart Approaches to Marijuana (SAM), an anti-legalization group: "Preventing another Big Tobacco."

Whatever "Big Marijuana" means, all sides of the debate find something to hate about it. Public-health advocates and legalization opponents conjure up images of greedy corporations capitalizing on heavy users, luring minors to use, and generally riding roughshod over the public interest—"putting profits before public health," to quote Project SAM. As Jonathan Caulkins, a drug policy expert

An entire book can be written describing the numerous models that cannabusinesses employ, why they exist, and how successful they are.

at Carnegie Mellon University, told the Cannabis Science and Policy Summit recently, "There's a good chance that people in 25 to 40 years will look back and shake their heads and ask, 'What were you thinking? Why did you think it was a good idea to create an industry of titans to market this drug?"5

Ironically, however, those decrying Big Marijuana also include many of marijuana reform's most ardent supporters, who fear that big companies will bulldoze small operators and, with them, the social ideals of marijuana counterculture. As one California grower told The New York Times, "In California, especially in Humboldt [County], we have a code of conduct: Respect the land and respect the people. I don't want that culture to be replaced by guys in \$5,000 suits." In the broad American public, it is hard to find anyone to support big corporations of any sort, let alone when they are dealing drugs.

By definition, for-profit marijuana corporations will put profits first, which is why no one (including these firms) disputes the need to regulate their behavior. And the behaviors the tobacco industry engaged in are certainly worth worrying about and preventing. No one wants the cannabis industry to do to consumers what the tobacco industry perpetrated during much of the 20th century. But neither is it wise to assume that capitalization, consolidation, interstate branding, and other behaviors common to corporate America will give rise to another Big Tobacco. Conversations that employ the term "Big Marijuana" often speak of it dichotomously: either it exists or it does not. That usage glosses over immense diversity in the structure and function of the marijuana industry.

In reality, the industry exists along a structural continuum. On the "small marijuana" extreme is an individual with a home grow that includes a few plants for personal use and occasional gifting. On the Big Marijuana extreme is the not-yet-realized equivalent of Altria or AB InBev. In today's environment, a realistic notion of the "big" end of the spectrum would be corporations that hold multiple licenses, authorizing them to grow tens of thousands or more plants and to sell them at chains of dispensaries with multiple locations in one or more states. Importantly, that continuum also includes everything in between—a staggeringly diverse array of businesses. An entire book can be written describing the numerous models that cannabusinesses employ, why they exist, and how successful they are.

Since 1996, when California first legalized medical marijuana, the industry has grown dramatically, and in multiple directions. A marijuana business can be a legal home grow in Ft. Collins, Colorado; a cancer-patient cooperative

⁶ Ian Lovett, New York Times, op. cit.



⁵ Tim Fernholz, "America's Weed Industry Is Going to Be Massive. Is Big Marijuana a Good Thing?", Quartz.com, April 20, 2016.

farm in Humboldt County; a pop-up clinic in San Francisco's Lower Haight; an antiseptic dispensary in Bristol, Connecticut, staffed by a board certified pharmacist; a wellness center in Washington, D.C., owned by a rabbi; a vertically integrated chain of dispensaries that relies on a set of large grow facilities to supply its consumers; a maker of edibles and oils in Boulder, Colorado; and many more variations.

Given the industry's diversity, the analogy to Philip Morris and the R.J. Reynolds Tobacco Company (RJR) in their buccaneering days is, we believe, a caricature. Caricatures don't make for good policy. To define the "marijuana model" is a fruitless task. From state to state, operators vary because of state regulations, historical legacies, and basic market forces. Even within states, the nature of the marijuana market varies widely. The rules attached to any particular state ballot initiative or law and subsequent statutory and regulatory requirements do much to determine how a market functions. Does a state allow home grows? Does the system include provisions for caregivers or co-ops—groups of producers or patients charged with growing plants for

other medical patients? Does a state have residency requirements for growers, processors, or dispensary owners? Does a state have residency restrictions for investors? Is vertical integration banned? Is it required? In recreational states, are there carve-outs for existing medical producers? Are the licensure and application fees or escrow requirements substantial? Is the number of licenses restricted? Are there restrictions on the number of licenses one entity can hold? There are a vast number of variables.

Given the industry's diversity, the analogy to Philip Morris and the R.J. Reynolds Tobacco Company (RJR) in their buccaneering days is, we believe, a caricature. Caricatures don't make for good policy. The emerging marijuana industry and its consumers deserve a better, more informed, more policy-centered discussion.

In our view, any conversation about marijuana policy should not begin with a debate over firm size or corporate structure. Instead, the discussion should focus on the types of behaviors, outcomes, situations, and costs that should be encouraged or avoided, and how best to generate the incentives that achieve each. Deterring marketing to minors or to problem users, preventing price and market manipulation, assuring appropriate taxation, guarding against regulatory capture and caprice, and assuring reasonable competition: such are the goals that make for effective public policy. Worrying about corporate size or clout per se addresses none of those issues.

OTHER MARKETS, OTHER MODELS: IT'S NOT JUST TOBACCO, STUPID

In thinking through how the marijuana market and its regulatory environment may develop, it's natural and important to look at existing models, including tobacco—but not only tobacco. Three analogs—pharmaceuticals, tobacco, and alcohol—are frequently mentioned, and they are very different from each other.

BIG PHARMA

Pharmaceuticals are strictly regulated by the U.S. Food and Drug Administration. In a long and expensive approval process, drugs must be tested and proved safe and effective before they go on sale. New drugs are subject to patent protection for a period of years, old ones must be produced to rigorous standards, most drugs are available only by prescription, and many are manufactured by only one or a few producers and sold at oligopolistic prices. The industry is heavily and expensively regulated, is dominated by large corporate players, maintains high barriers to entry, and limits market competition from abroad.

The tightly regulated pharmaceutical model clearly has application to pharmaceuticals that derive from marijuana, and indeed already applies to Marinol, an FDA-approved synthetic cannabinoid for nausea, and Epidiolex, a marijuana-based epilepsy drug currently in stage-three trials under FDA fast-track designation. Regulation of some looser sort by the FDA or state regulatory bodies may also make sense for non-pharmaceutical marijuana medicinals. In Connecticut, a reform passed by the state legislature in 2012

Pharmaceutical-style regulation of the recreational marijuana market seems impractical and unlikely.

sought to treat medical marijuana as medicine, giving regulatory jurisdiction to the state Department of Consumer Protection's Drug Control Division, the same state office that regulates prescription pharmaceuticals.

Pharmaceutical-style regulation of the recreational marijuana market, however, seems impractical and unlikely. Smoking marijuana or eating cannabis-infused snacks for pleasure does not qualify as a safe and effective medical treatment, and so the FDA could not regulate recreational marijuana as if it were an ordinary prescription drug. Requiring recreational users to obtain a prescription would drive many consumers to the black and gray markets and, as we've seen with existing medical-marijuana programs, it would also encourage sham prescriptions and illicit diversion to unauthorized users. One can imagine some other intermediate, pseudo-pharmaceutical regime: Uruguay, for example, is preparing to allow the sale of marijuana in pharmacies, where consumers will be able to buy restricted quantities after they join a government registry. It seems very unlikely, however, that Congress would entertain such ideas, especially after multiple states have already established commercial recreational markets and tax revenues have begun to flow. For all those reasons, we think the pharmaceutical model of regulation is relevant only to a few segments of the marijuana industry.

BIG TOBACCO

Tobacco's regulatory history is a story of gradual but dramatic transformation, reflecting an equally dramatic transformation of the scientific and popular consensuses about smoking. For many years, tobacco was essentially unregulated; indeed, the U.S. armed forces encouraged its use by giving out free cigarettes. As tobacco's hazards became evident, as public-health activists succeeded in stigmatizing it, and as deceptive and irresponsible industry practices came to light, social attitudes and the regulatory paradigm underwent a sea change.

In 2009, tobacco regulation completed a 180-degree turn with the passage of the Family Smoking Prevention and Tobacco Control Act, which subjects tobacco to stringent federal regulation. It gives the Food and Drug Administration authority to regulate the manufacture, distribution, and marketing of tobacco products; requires large, graphic warning labels on cigarette packaging; regulates the descriptors of cigarettes; prohibits flavored cigarettes; requires approval of new products; and so on.7 Besides being heavily regulated and forbiddingly difficult to enter, the tobacco market

⁷ FDA rules are even more fine-grained. For instance, they prohibit tobacco-brand sponsorship of athletic, musical, and cultural events; require that audio ads use only words (no music or sound effects); prohibit marketing with brands or logos on items like hats and T-shirts; and so on. Some of these rules came under court challenge.



is monitored by a variety of watchdog groups, such as the American Lung Association, the Campaign for Tobacco-Free Kids, and the Public Health Law Center.

One would think, indeed, that those favoring a heavily regulated and restricted marijuana industry would see the current tobacco model as a success story, not a horror story.

Thus, although Big Tobacco is indeed big, it is no free agent, and the days when it was a freewheeling malefactor are past. One would think, indeed, that those favoring a heavily regulated and restricted marijuana industry would see the current tobacco model as a success story, not a horror story.

Moreover, it is a mistake to see big companies as reliable opponents of regulation; at least as commonly, they lobby

for regulation to sew up markets and collect economic rents. (Altria, which owns Philip Morris USA, supported the 2009 tobacco law.) If modern experience with Big Tobacco proves anything, it is that Big Marijuana is regulable probably more so, indeed, than "small marijuana"—and that corporate and regulatory "bigness," far from being antagonistic, go hand in hand.

Indeed, regulation imposes compliance costs and procedures—legal representation, paperwork, inspections, testimony, lobbying—that tend to drive industry toward consolidation, not away from it. Big Tobacco is a case in point: the U.S. tobacco market is effectively a government-supervised oligopoly that provides sinecures for a few very large companies (which earn very large profits). The biggest tobacco company (Philip Morris USA) claims a market share of more than 50 percent; the top three companies together hold a market share of almost 90 percent.8 Brand concentration is comparably high; the top four brands account for 69 percent of sales.9 Although market forces account for some of this "bigness," regulation is also a significant factor. The FDA's process for new-product approval is slow and expensive; as of 2014, the FDA had ruled on only 34 of 4,000 applications for new tobacco products, and only two new cigarettes had been approved. As a result, "The barriers to entry are immense and stacked in favor of existing tobacco companies that have extensive records detailing their earlier products," writes Jacob Grier.10 If someone wanted to encourage the emergence of Big Marijuana, tobacco-style regulation would be a good way to do it.11 By the same token, we suspect that many public health advocates who today decry the prospect of Big Marijuana will over time find themselves gravitating toward industry consolidation because of its usefulness for regulatory control. In any event, even from an anti-marijuana point of view, focusing public debate on corporate size rather than regulatory structure misses the forest for the trees.

Moreover, the cultural and legal histories of tobacco and marijuana could hardly be more different. Tobacco has never been illegal in the United States; to the contrary, for centuries, it has been a mainstay of the American agricultural

⁸ See, e.g., "What Does the Reynolds-Lorillard Deal Mean for Altria?", Forbes, May 12, 2015, and http://www.altria.com/our-companies/ philipmorrisusa/about-philipmorris-usa/Pages/default.aspx.

⁹ Centers for Disease Control and Prevention, http://www.cdc.gov/tobacco/data_statistics/fact_sheets/tobacco_industry/brand preference/. According to the CDC, Marlboro alone commanded an astonishing 41 percent market share in 2014.

¹⁰ Jacob Grier, "FDA Cigarette Regulations Protect Big Tobacco, Not Public Health," Reason, February 27, 2014. Perversely, the extension of FDA regulation to e-cigarettes seems likely to impede the introduction of non-tobacco smoking technologies that are far safer than conventional cigarettes. See Jacob Sullum, "FDA Imposes a Slow-Motion Ban on E-Cigarettes," Reason, May 5, 2016.

¹¹ According to observers we spoke with, this dynamic is already apparent in Colorado and Washington state. "There is an increasingly high cost of compliance in Colorado," Adam Orens of the Denver-based Marijuana Policy Group told us. Regulation, he notes, is "driving things toward consolidation. The Colorado style of regulation is turning it not into who can grow the best product but who can comply with the regulations in the most efficient and profitable manner."

economy and, until 2014, it was a federally subsidized crop. 12 Its cultural role was equally prominent: for many decades, smoking was ubiquitous in public and was regarded as the epitome of glamour. Marijuana, by contrast, emerges from an environment of illegality and cultural hostility, and into an environment of public suspicion and continued stigma. Tobacco, having long been not only legal but socially encouraged, fought every step of the way against being regulated; marijuana, having long been criminalized, must fight every step of the way to be deregulated.

Not least important, legal marijuana percolates in a policy environment that has been informed and shaped by the country's bitter experience with tobacco. Within the marijuana industry, Big Tobacco

"No one shares the values that an executive of Big Tobacco had in the 1970s and 1980s. Everyone here grew up watching the horror of that, and no one here wants to replicate that in any way."

is an object lesson in what not to do. As Zack Hutson, a spokesman for Privateer Holdings, a marijuana-industry private-equity company, told us, "It makes me really angry when people tar and feather us as Big Tobacco. Everyone who works here is more or less under 40. No one shares the values that an executive of Big Tobacco had in the 1970s and 1980s. Everyone here grew up watching the horror of that, and no one here wants to replicate that in any way."

For all of those reasons, the prospect of giant marijuana corporations running amok as giant tobacco companies once did seems farfetched.

BIG ALCOHOL

In the marijuana industry, the alcohol industry and its regulatory regime are widely seen as the most closely applicable parallel, a judgment with which we concur. Alcohol regulation in the United States has a long and colorful history, dating back to the Whiskey Rebellion of 1791. For many years, alcohol production, distribution, and regulation were notoriously corrupt. The so-called "tied house" system allowed manufacturers to integrate vertically, leading to what were widely considered abusive practices by beer and liquor companies. Policy took a sharp turn with criminalization in the 1920s, and then, when Prohibition failed, turned yet again when regulation was largely handed over to the states, with some overall federal supervision.

Though the states do things differently, today's norm is a so-called three-tier model, separately licensing production, distribution, and sale of alcohol. With certain exceptions, manufacturers must hand off their products to distributors, who, in turn, retailers must buy from. 13 Alcohol advertising and marketing are regulated primarily by a voluntary industry code of conduct (though bottle labels need federal approval), which restricts advertising in outlets likely to be viewed by minors and employs messaging around such themes as "Don't Serve Teens." Although imperfect, selfregulation seems reasonably effective and, according to the Federal Trade Commission, has improved over time.¹⁴

¹⁴ See, e.g., U.S. Federal Trade Commission, Self-Regulation in the Alcohol Industry, March 2014. The FTC concludes (p. 34) that it "continues to support self-regulation of alcohol marketing to reduce the likelihood that such marketing will target those under the legal drinking age" and that "since 1999, the alcohol industry has substantially improved in self-regulation."



¹² From 1995 to 2014, the U.S. government spent almost \$2 billion on tobacco subsidies. See Environmental Working Group's Farm Subsidy Data Base at https://farm.ewg.org/progdetail.php?fips=00000&progcode=tobacco.

¹³ The three-tier system aimed to deter the vertical integration of the tied-house days, but now is controversial with critics who argue that the distribution tier is oligopolistic. "The second tier is the choke point," Kevin Kosar, a senior fellow at the R Street Institute and author of Whiskey: A Global History, told us. "If you want to keep the small players in the market, then the small producers should be allowed to sell direct to retail outlets. That's the absolute key."

The regulatory regime for alcohol is not without its shortcomings and controversies. Public health advocates would like to see less advertising reaching minors, and they argue that alcohol taxes are too low to cover social externalities and deter use. The industry argues that taxes are already punitively high.15 Because regulatory practices and taxes differ across states and change over time, generalizing is complicated. On the whole, however, the regulatory regime for alcohol does a credible job of restraining antisocial and irresponsible practices, has proved to be broadly

In the marijuana industry, the alcohol industry and its regulatory regime are widely seen as the most closely applicable parallel.

acceptable to the public and the industry, and has also proved to be stable and sustainable. In those important respects, modern regulation of Big Alcohol is a success story.

Although alcohol is very different than marijuana, some similarities are notable. Both substances are intoxicants, are potentially dependency-forming, can bring pleasure

and benefit when used responsibly, but are harmful when abused (alcohol arguably more so than marijuana). Both have, at times, been outlawed by the federal government and by individual states. Both are substances that most people agree minors should stay away from. Both are easy to produce at small scale and come in a wide variety of forms, concentrations, and flavors. Both are hospitable to craft and artisanal producers as well as mass-market producers, and both have spawned connoisseur subcultures. Alcohol is primarily regulated by the states, usually by state liquor boards, and the same has been true, so far, of marijuana; in legalizing recreational marijuana, Alaska, Colorado, Oregon, and Washington all bestowed regulatory authority on the agencies that regulate alcohol.

Many in the marijuana industry, moreover, look to the alcohol industry for clues as to how their own market may develop. Alcohol consists of three major segments—spirits, beer, and wine—occupying different spots on a consolidation continuum. In the distilled spirits industry, consolidation and concentration proceeded apace after Prohibition ended, until, according to Reid Mitenbuler, the author of Bourbon Empire: The Past and Future of America's Whiskey, "by the year 2000 you've got eight companies that were making close to 99 percent of all the distilled spirits sold in the United States."16 The beer industry is also highly concentrated. Budweiser is nicknamed "king of beers" for a reason: AB InBev holds nearly half of the U.S. beer market and more than 20 percent of the global market.¹⁷ The wine business is less concentrated, with a dizzying diversity of products and price points.18 You can spend \$3 or \$300 on a bottle and buy Gallo's mass-produced Barefoot Wine or a boutique cabernet from a local winery. The beer industry, while more consolidated and more hospitable to mass-market brands than wine, nonetheless offers products for every taste and is currently undergoing a boom in craft brews. "Today, there are more breweries in the United States than ever before—more than 4,100—making a kaleidoscope of styles and style iterations," reports the Washington Post.19 Even in distilled spirits, the alcohol industry's most concentrated segment, newcomers

¹⁹ Tom Acitelli, "Why Budweiser Is the Last Beer that Should Call Itself 'America," Washington Post, May 11, 2016.



¹⁵ The Distilled Spirits Council of the United States complains that 54 percent of the retail price of a typical 80-proof bottle goes to taxes and fees. The Beer Institute similarly complains that more than 40 percent of what Americans pay for beer goes to taxes and fees. See, e.g., http://www.discus.org/policy/taxes/ and http://www.beerinstitute.org/policy-issues/excise-tax. The industry has had success defeating proposed tax increases in a number of states. See Elaine S. Povich, "Liquor Lobby Fights Off Tax Increases on Alcohol," Stateline (Pew Charitable Trusts), October 3, 2013.

¹⁶ Reid Mitenbuler, Bourbon Empire: The Past and Future of America's Whiskey (Viking, 2015). Quotation is from interview with

¹⁷ In beer, Anheuser-Busch InBev and MillerCoors together held a market share of more than 70 percent in 2013. See http://www. statista.com/statistics/199024/ab-inbev-beer-market-share-by-country/ and http://marketrealist.com/2015/03/competitive-forces-rules-usbeer-industry/. If those market-concentration numbers seem alarming, bear in mind that concentration in the soft-drink industry—among others—is similar.

¹⁸ In wine, the three biggest companies held a market share of just over 50 percent in 2011, according to Philip H. Howard of Michigan State University. See https://msu.edu/~howardp/wine.html.

and artisanal products are enjoying a surge. "The room's getting crowded and you're seeing the small producers starting to jostle." Mitenbuler told us. In the world of alcohol, then, "big" means different things in different industry segments, and giant corporations and brands coexist with smaller-scale producers, each appealing to different portions of the market.

Many marijuana observers suspect that if and when federal liberalization occurs and national-scale commercialization becomes possible, their industry might end up somewhere between wine and beer on the diversity/concentration continuum, though with a substantial home-grow and amateur component. They also tend to believe that alcohol's model of state-led regulation with federal oversight makes sense for marijuana—though without alcohol's ban on vertical integration.20

To be sure, the alcohol industry and its regulatory regime are not without their controversies or questionable practices. But the alcohol model is not particularly scary or dysfunctional.

In short, although industry observers caution that marijuana is not like alcohol or anything else and that analogies are misleading,

there is little reason to believe that the market will evolve along the lines of the Big Tobacco of a generation ago. To the contrary: that seems among the least likely of outcomes. Much more likely is a regulatory landscape resembling the wine or beer industry. To be sure, the alcohol industry and its regulatory regime are not without their controversies or questionable practices. But the alcohol model is not particularly scary or dysfunctional. That may be one reason it is talked about so much less.

SLIPPERY SLOPES: DOWNSIDES OF CORPORATE CANNABIS

Amid the diversity of business and regulatory models in the world of legalized marijuana, one kind of player, it is important to note, does not exist, and cannot exist until federal policy changes: the large national corporation. Today, even companies that are big fish by the standards of the marijuana industry are minnows compared with companies in other sectors. "Even the biggest ones are employing only a few hundred people," Aaron Smith, the executive director of the National Cannabis Industry Association, told us. The question, then, of how nationally scaled marijuana companies might behave is entirely conjectural.

That said, it's possible to do a meaningful mental reckoning of cons and pros of large-scale marijuana commercialization. We emphasize considering both cons and pros. To design a policy structure that favorably balances benefits against risks, it is important to consider both sides of the ledger.

We begin with some commonly cited downsides of commercialization at scale. Big Tobacco scenarios may exaggerate current or future marijuana industry dynamics. Still, as power clusters and deepens within the industry—as it will—there are potential trouble areas that the public, activists, and regulators should watch.

²⁰ When Colorado legalized marijuana, it required vertical integration.

ANTISOCIAL MARKETING

The most important concern is that, as the marijuana industry grows, it will be subject to the same incentives that drove other industries to target the young. That concern is not unfounded. At various times, other "vice" industries sought to appeal to underage consumers as market opportunities. With tobacco, it took decades of investigations to reveal just how significant those efforts were. Although a firm of any size can target underage consumers, big corporations can deploy large national marketing campaigns and shape public perceptions in ways that small players

Although a firm of any size can target underage consumers, big corporations can deploy large national marketing campaigns and shape public perceptions in ways that small players cannot.

cannot. They are also more likely to target the mass market than are smaller, artisanal companies, which may prefer the discriminating consumer and thus be less tempted to chase young consumers whose main interest is in getting the cheapest product in the easiest manner.

States that have liberalized marijuana laws have enacted measures seeking to limit firms' ability to target young people: for example, limits on advertising, creation of safe zones around schools and other youth-oriented

facilities, and restrictions on the form and packaging of edible products. Should federal liberalization happen, similar restrictions are a foregone conclusion. As reform continues to spread and the licit recreational market develops. one cannot necessarily expect the status quo to meet the needs of a changing system. Regulatory efforts will need to be adaptive and flexible in the face of a dynamic economic and cultural market.

Young people are not the only group that can come into the crosshairs of vice-industry advertising. Problem users tend to power industries like alcohol, tobacco, and, yes, marijuana. Whiskey companies are not profitable because of the woman who indulges in a mint julep on Derby Day. Nor does the tobacco industry make money from a man who smokes a few cigarettes on a monthly night out with the guys. Similarly, the marijuana industry depends—and will depend—on users who smoke (or otherwise use) marijuana heavily. Drug policy experts such as Jonathan Caulkins and New York University's Mark Kleiman estimate that the 20 percent or so of people who use marijuana daily or near-daily account for more than 80 percent of consumption.²¹ "So while the public interest is in making cannabis available for moderate use by adults, the commercial interest is in creating as many heavy users as possible," writes Kleiman. "That commercial interest will be expressed in marketing and in lobbying, as it now is in the marketing and lobbying effort of the alcohol industries, unless we legalize cannabis without commercializing it."22 In the U.S., however, noncommercial models—notably government distribution or distribution by designated nonprofits—have not gained traction, and seem unlikely to do so.²³ For better or worse, the U.S. appears committed to the commercial model and the public-health risks it entails.

REGULATORY CAPTURE

Another concern involves industry power over regulators. In all regulated industries, firms possess private information and keep it from regulators. When a market consolidates, there is greater opportunity for a few firms to withhold

²¹ As Washington Post's Chris Ingraham points out, similar consumption dynamics are true of alcohol, as well. https://www. washingtonpost.com/news/wonk/wp/2014/09/25/think-you-drink-a-lot-this-chart-will-tell-you/

²² Mark A.R. Kleiman, "Six Undeniable Facts About Cannabis (That Some People Are Still Denying)," Huffington Post, April 11, 2016.

²³ Government distribution would require an overhaul of federal law, which currently bars any level of government from participating in the marijuana trade.

key information and systematically manipulate the information regulators receive. In addition, elected officials may be swayed by industry donations to political campaigns, and bureaucracies may become dependent on industry revenues. Through those and other avenues, powerful corporate interests can wield disproportionate and potentially insidious influence on regulation.

The problem of regulatory capture and influence is, of course, not unique to marijuana. Nor is it unique to large corporate players. Washington is chock full of trade associations that powerfully represent small and medium-sized businesses and organizations—and even individuals. The National Federation of Independent Business and AARP. to name but two such lobbies, lack nothing by way of clout. Still, there is reason to suppose that a consolidated industry with fewer firms responsible for a higher share of output may be in a position to exert influence more consistently and coherently than can a fragmented industry. In their companion paper, Philip Wallach and Jonathan Rauch assess in greater detail risks of regulatory capture by a concentrated interest, and conclude that the antipodal problem—regulatory incoherence—is the more likely and worrisome problem. Nonetheless, regulatory capture remains a risk, and is to some extent inevitable in any regulated industry.²⁴

CONCERNS OF PATIENT ADVOCATES

Although recreational legalization is currently the talk of the town and the trending policy reform, medical marijuana remains the dominant form of the legal U.S. industry. Over 162 million Americans live in states with authorized medical marijuana programs, and advocates for medical-marijuana consumers project their voices loudly in those states. Among those advocates, concerns abound that consolidation of the marijuana industry will reduce the availability or quality of specific products and strains, increase the price of medicinal cannabis, or degrade the overall experience patients have in the medical marijuana system. Many also worry that the distinct recreational and medical systems will be merged, to the detriment of the minority of users who rely on cannabis for therapeutic benefit.

There are few if any peer industries to look to for pointers on how such scenarios might unfold, and we hazard no prediction. However, we see no inherent reason why commercial interests cannot serve two distinct markets simultaneously. If anything, product diversity is a strength, not a weakness, of commercialization.

BARRIERS TO ENTRY AND CORPORATE CROWD-OUT

Another concern, especially among advocates of legalization, is that consolidated corporate marijuana will raise barriers to entry and squeeze out small businesses. One way large marijuana businesses might reduce competition is through the support of specific regulation, as has happened in the tobacco industry, among many others. But some in the industry argue that scale itself will tend to force smaller operations to the sidelines or will impede their growth outside of niche markets, because competitiveness will require an operational scale that new entrants can't reach. A combination of market and regulatory forces can also drive consolidation; telecommunications is an example. Marijuana could develop in that direction; in a future with numerous publicly traded marijuana companies, buyouts, takeovers, and mergers could enable larger firms to consolidate the market. That happens in many industries every year, and many in the marijuana industry expect it to happen there, as well. As one Colorado company owner told us, "There's a game all of us play in the industry of who's going to rush in and take over the world and push all us little guys out."

²⁴ Philip Wallach and Jonathan Rauch, Bootleggers, Baptists, Bureaucrats, and Bongs: How Special Interests Will Shape Marijuana Legalization (Brookings, June 2016).



It seems plausible that commercialization will have a homogenizing influence on the industry's distinctively countercultural ethic and will squeeze out individualistic but inefficient operators.

But marijuana could also develop along quite different lines. There are many models in which large and small operators and brands coexist and cater to distinct markets; alcohol is one of them. There are also many models in which large and small players form networks and corporate relationships. Frito-Lay does not grow all its own potatoes for its nationally branded chips; rather, it relies on farmers who sell exclusively to the company for production. Similarly, in Milwaukee, you might board a plane with United Airlines livery, but the crew and the aircraft are actually part of Air Wisconsin, a much smaller

airline that partners with United. The argument that market power inherently kills competition oversimplifies and misunderstands markets. "I think larger companies will actually contribute to making the smaller companies better." one cannabusiness analyst told us.

However, it seems plausible that commercialization will have a homogenizing influence on the industry's distinctively countercultural ethic and will squeeze out individualistic but inefficient operators. We leave it to the reader to determine how troubled to be by those prospects, but neither, in our view, should be a preoccupation of public policy.

NOT TO BE OVERLOOKED: BENEFITS OF BIG MARIJUANA

Rarely does the public conversation get around to discussing whether Big Marijuana might convey benefits, but it should. The potential advantages are significant.

REGULATORY COMPLIANCE

The stereotype of big corporations as scofflaws is, for the most part, just that—a stereotype. Corporations have fixed addresses, legal departments, and long-term stakes, all of which create incentives and means to follow the rules. "What a corporate model brings with it is a level of accountability," says Adam Orens, a founding partner of the Marijuana Policy Group, a consulting firm based in Denver. "When somebody is profiting off of marijuana, they can be easily held accountable for risks like diversion."

In the nascent years of marijuana regulation among the states that have opted for reform, some of the biggest challenges for state regulators have come from small-scale producers, whether they are co-ops in California or home grows in Colorado. That is not to say that most, or even many, small operators are bad actors. But regulation in America relies on voluntary compliance with often complex and costly rules, and that is something big companies are very good at.

Larger corporations and their personnel are well-known to state regulators, and thus are comparatively easy to monitor. Violations can damage or even shutter a large organization with many stakeholders (employees, customers, suppliers, investors, shareholders). With so much at stake, and with so many stakeholders invested, large companies face internal pressure to play by the rules. Their broader capital bases and bureaucratized structures also give them a leg up when it comes to maintaining legal expertise and internal oversight. Of course, some large corporations will exploit loopholes, skirt legal boundaries, and engage in bad acts, as the recent case of Volkswagen demonstrates. But Volkswagen also highlights how much a major company has to lose if it gets caught cutting corners, and how hard it is for a major company to elude scrutiny.

We are not saying that only large companies obey the law. "You don't have to be large to be compliant," says Nancy Whiteman, the co-founder and co-owner of Wana Brands, a Colorado manufacturer of cannabis edibles, oils, and medicinals. With 90 employees, the company employs a regulatory compliance officer and another quality-assurance officer. It also uses outside lawyers. And it plans to replicate its compliance efforts in every state where it operates. The point, rather, is that compliance is an expensive and complicated undertaking—and, other things being equal, is easier for large companies to afford and manage. And, again, it is easier for state regulatory bodies to monitor fewer, large businesses than numerous smaller ones.

Moreover, capital markets and outside investment can bring additional layers of discipline. Privateer Holdings says it employs several former law-enforcement officials to oversee compliance, among them its general counsel (who formerly led a narcotics task force). It also employs a former Federal Reserve bank-examiner to handle financial compliance. "Smaller players aren't taking the precautions and don't have the level of documentation and risk-management procedures that we do," argues Brendan Kennedy, Privateer's CEO, "It's very important to our investors that we comply with all regulations, because they've invested significant capital. We're not going to take the risk of doing anything below board. That's a really positive implication of a more professional industry run by experienced managers." One need not accept such claims at face value to recognize that corporatization brings professionalization, and that professionalization is one of the signal advantages of legalizing a black market.

Yes, someone fearful of corporate marijuana can point to historical examples of big businesses that contravened regulation regularly and brazenly. Such examples can be and often are adduced as evidence that big business cannot be trusted. Far more common, however, are examples of large corporations playing by the rules. And larger marijuana corporations will exist in a unique environment that may specifically incentivize them not to break the law, subvert regulations, or push the envelope. Marijuana enterprises, arguably more than companies in any other product market in the United States, have emerged in an environment brimming with scrutiny and skepticism ex ante—something Big Tobacco did not face until well after it became a booming, mature industry. That preexisting suspicion implies that many watchful eyes will be on the industry, and that a wary public may react strongly to a misbehaving cannabusiness—particularly a large one feared to be Big Marijuana.

REPUTATIONAL ACCOUNTABILITY

The best regulation is the one that doesn't need to be imposed, because reputational accountability or market pressures solved the problem first. In May, news broke that McDonald's had "ended a controversial practice of giving nutrition advice to students in schools, pulling back on a program that critics said was a subtle form of fast-food marketing."25 McDonald's didn't act because a government regulatory body demanded the change, or because of a judicial order or court-approved settlement. It acted because an internal corporate decision was made to protect the brand and preempt what might have become a public-relations donnybrook.

We cite this example not in judgment of McDonald's program but as an example of how large companies' high visibility can impose extra layers of reputational accountability. Anything McDonald's does will receive public scrutiny,

²⁵ Roberto A. Ferdman, "McDonald's Quietly Ended Controversial Program that Was Making Parents and Teachers Uncomfortable," Washington Post, May 13, 2016.



A big brand is much more likely to be held accountable for the way it markets its products than a lot of small fragmented producers are, because they'll be the focus of a lot more attention.

and McDonald's has a lot of reputation to protect. We expect the same would be true of Big Marijuana. "A big brand is much more likely to be held accountable for the way it markets its products than a lot of small fragmented producers are, because they'll be the focus of a lot more attention," Privateer's Kennedy argues.

That is not to say that corporate branding and advertising are always benevolent. There are examples of companies using their market clout and large advertising budgets to

manipulate public perceptions or self-promote in ways that depart from reality; Big Tobacco is the modal case. The point, rather, is that larger corporations come under particular scrutiny and can be particularly susceptible to public pressure, especially when public controversies are involved. After the Deepwater Horizon oil spill in 2010, BP's chief executive, Tony Hayward, initially said that the calamitous spill was "relatively tiny" compared with the "very big ocean" before reversing course, acknowledging the scale of the damage, and losing his job.26 Every aspect of the company's subsequent efforts to respond to the crisis, including ads it ran apologizing and promising to "make it right," were met with intense and often skeptical public scrutiny (from the President of the United States, among others). BP's (profit-driven) desire to protect its brand and reputation induced it to respond to the disaster, energetically working to restore public trust.²⁷ Our point, here again, is not to evaluate BP's performance overall, but to underscore that this very large company was subject to powerful incentives and constraints. Similar incentives and constraints will be at work in a future marijuana industry in which big companies thrive.

Robert Hoban, a prominent cannabis lawyer based in Denver, points out that large companies are also often better able to anticipate and adapt to changing consumer preferences and regulatory demands. He cites the example of pesticides, which cannabis consumers are increasingly conscious of. Removing pesticides entails significant investment, which larger, more deeply capitalized companies are better able to undertake. "Better funded businesses tend to take into account those consumer concerns before they put the product into the marketplace, rather than waiting for regulation," Hoban says.

Finally, other things being equal, larger players are often better at self-policing. This is not to say that concentrated industries always self-police well (far from it); only that voluntary measures to discourage controversial conduct for instance, restraining advertising in youth-friendly media—are harder to agree on and maintain in a fragmented market. Similarly, public-health advocates who want to run public education programs about problems like cannabis dependence disorder will have an easier time partnering with, or serving as watchdogs over, a few bigger companies than hundreds of smaller ones. Larger corporations are often also better able to monitor each other's behavior, and large-firm competition gives them an incentive to do so.

BUSINESS ACUMEN

Corporate cannabis also has a leg up over its small-scale peers in terms of basic business understanding. Many people are motivated to enter the industry because they know how to grow marijuana, sometimes of very high

²⁶ Tim Webb, "BP Boss Admits Job on the Line over Gulf Oil Spill," The Guardian, May 13, 2010.

²⁷ The company ultimately paid in excess of \$50 billion in claims and recovery costs over the Deepwater Horizon spill. Daniel Gilbert and Sarah Kent, "BP Agrees to Pay \$18.7 Billion to Settle Deepwater Horizon Oil Spill Claims," Wall Street Journal, July 2, 2015.

quality. However, many of these people know little about business. "Being a good grower does not necessarily mean they should own a business," Hoban, the Denver cannabis lawyer, told us. "There are plant people and there are people people, and they don't necessarily mix." Either proficiency without the other is a sure-fire way to exit the industry.

A small company that operates like an oversized home grow faces daunting challenges on the path to being a successful business.

A small company that operates like an oversized home grow faces daunting challenges on the path to being a successful business.

Larger corporate entities that treat their endeavors as traditional businesses that produce a nontraditional product are much more likely to succeed. Frequently, large-scale producers are better positioned to offer the stability, salaries, and career prospects that attract top-tier business talent. By doing so, they complement the work of growers and other "plant people." The result is a (large) team that is well-equipped to provide the consumer with high-quality cannabis and the industry with a high-quality company.

PRODUCT CONSISTENCY AND QUALITY

One challenge that the marijuana industry has faced is the dramatic variability in production standards and product consistency. In what has been a largely underground and fragmented economy of tens of thousands of producers across the U.S. and abroad, the market can only minimally ensure that producers know what they are bringing to market and that strains of the same name or declared origin are similar from farm to farm, dispensary to dispensary, and harvest to harvest.

In a licit market, larger producers have an inherent interest in ensuring that standards are met and product is consistent. As large corporate entities build reputations and brands across multiple markets, consumers come to expect consistent quality, and that each time they purchase a product—no matter where or when they bought it—they are getting the same experience as last time. Producing at scale generates efficiencies, in-house know how, and wellregulated production systems that enable larger corporations to meet those consumer demands and expectations.

Eliminating consumer guesswork is particularly important for intoxicating products. Unexpected variations in dosage, potency, or quality can have disquieting or even dangerous consequences. Today, Americans take for granted the consistency and quality of alcoholic beverages. You know what you're drinking and how potent it is. It's easy to forget what a hard-won accomplishment this is. In the days before Big Alcohol, a bottle labeled "Kentucky whiskey, 10 years old" often was none of those things.

Some adventurous consumers enjoy artisanal products with quirky characteristics. Typically and for most products, however, consumers like knowing what they are getting, and that is where large-scale production matters and large firms excel. Legal marijuana is new, as are legal-marijuana consumers. Over time tastes will evolve, expectations will harden, and brands will be established. When that happens, consumers—even if they don't want to admit it—may enjoy Big Marijuana more than a mom-and-pop pot shop.

MARKET STABILITY

As states have legalized marijuana—first medical, then recreational—people have applied for licenses, set up grow facilities, and opened dispensaries, only to see those operations collapse. "That's business!" one might say. Fair enough. In all industries, most startup businesses fail, for a variety of reasons. In the marijuana industry, the idea that cannabis is a "weed" implies it's easy to grow. But licensees often learn when their businesses tank that producing bud that meets consumer expectations is a difficult agricultural endeavor requiring more than seed, soil and sun.

Those business failures create volatility in the market that affects business owners, their employees, families, investors, and the secondary and tertiary markets. Larger corporate entities are less likely to be subject to such failure (though surely not immune). In fact, those larger entities can help stabilize failing or struggling smaller producers by buying them out. Larger firms often have the liquidity, assets, and size to better withstand short-term losses and market fluctuations that could doom a small producer. Thus larger operators can help stabilize supply and ensure the consumer experience is more predictable.

Some states that have legalized recreational marijuana have tried to induce such stability. In Colorado and Oregon (and in proposals put forth in Nevada and California in 2016), existing medical marijuana growers received initial preference to serve the recreational market. The goal was to allow the market to launch with known, successful actors who were already abiding by state rules. These carve-outs may have made sense at launch; however, in the longer run such preferential treatment can induce market consolidation and rent-seeking by giving a privileged few a head start. That said, any new industry in a legally and economically uncertain environment starves for morsels of stability, and big business can offer some solace.

We conclude, then, that in a commercialized environment—probably the only feasible context for legalization in the United States—the emergence of large marijuana corporations offers a variety of potential benefits. Of course, Big Marijuana is no more a panacea than it is a bogeyman. Still, we think the advantages of corporatization are substantial and underappreciated. Sensibly regulated, Big Marijuana can be part of the solution.

GOVERNING BIG-AND NOT SO BIG-MARIJUANA

How, then, should state governments (and eventually the federal government) think about Big Marijuana? Should they fear the Philip Morris-ization of marijuana? Yes, but not very much. Worries that industry members may advertise in ways that appeal to children, or may hide information from regulators, or may slant research, or may manipulate products to maximize dependency, are not fanciful. But marijuana is not like tobacco; the 2010s and 2020s are not like the 1960s and 1970s; and the bad example of tobacco provides a powerful prophylactic. The notion of an effectively unregulated marijuana industry doing as it pleases to the children of America is ahistorical and implausible.

The advantages of corporatization are substantial and underappreciated. Sensibly regulated, Big Marijuana can be part of the solution.

Our view is that, in thinking about how public policy should approach the brave new world of legal marijuana, the starting point should be neutrality as to corporate size and structure. Regulating too aggressively against corporatization may only substitute one set of problems for others. It would layer distortions on an already heavily regulated market, without a clear policy goal or payoff.

For example, a strong temptation for states that legalize cannabis is to protect their marijuana markets from out-ofstate investment. Initially Colorado, Washington, and Oregon did exactly that. Ostensibly the goal is to shield small local producers from Big Marijuana, but in fact, critics plausibly charge, the result is more like cronyism, resulting in a system that favors a handful of locally powerful incumbent players. Moreover, industry observers in Colorado said that the use of proxies and "half-fake owners" allows unscrupulous actors to circumvent the rules while depriving regulators of visibility into who actually controls cannabis enterprises. "That rule of making sure that owners were residents of Colorado for two years is like putting your finger in the dyke and holding the flood back," Miles Light, of the Marijuana Policy Group, told us. Such policies may be unsustainable as well as ineffective. While initial policies barred out-of-state investment. Oregon has subsequently amended its marijuana laws to expand investment opportunities. Washington is currently promulgating a rule to the same effect, and Colorado is actively considering similar legislation.²⁸ Those attracted to the use of marijuana regulation as an industrial policy favoring small or local cannabis operators might do well to remember that heroic efforts to protect small-scale farms for other crops in the United States have performed miserably, transferring countless billions of taxpayer dollars to the wealthy without materially impeding agribusiness consolidation.

Rather than attempting to prejudge or shape the emerging marijuana market, government should seek to create a regulatory environment in which markets can be successful at doing what markets do well: capitalizing businesses, ensuring regular supply, finding and generating efficiencies. Government, industry, consumers, activists, and their communities should set clear goals about what they want the marijuana industry to do and what they do not want it to do. The role of public policy is to develop regulations, pass laws, levy taxes, and foster incentives with an eye toward avoiding specific harmful practices. Regulatory boundaries should target corporate behavior, not corporate size. Basing policy decisions on a stereotypical notion of "Big Marijuana" is like bringing a hatchet into a surgical suite.

We cannot foresee what shape the marijuana marketplace will take, what kinds of problems will arise, and on what terms policymakers and regulators will be able to address those problems. Our own expectation is that the commercialization, professionalization, and corporatization of the marijuana industry will be, if sensibly regulated, more helpful than harmful. In a world where widespread use of marijuana is a fact and legalization is a growing trend, large business organizations have an important and positive role to play. True, regulating this new marketplace will not be easy.²⁹ But regulating against a bogeyman will make that job even harder.

²⁸ See Rick Anderson, "How New Rules in Two States Could Give Birth to Big Marijuana," Los Angeles Times, March 24, 2016.

²⁹ In Bootleggers, Baptists, and Bongs: How Special Interests Will Shape Marijuana Legalization, op. cit., Philip Wallach and Jonathan Rauch discuss some of the challenges regulators face.

GOVERNANCE STUDIES

The Brookings Institution 1775 Massachusetts Ave., NW Washington, DC 20036 Tel: 202.797.6090 Fax: 202.797.6144

brookings.edu/governance

EDITING

Elizabeth Sablich

PRODUCTION & LAYOUT Nick McClellan

EMAIL YOUR COMMENTS TO GSCOMMENTS@BROOKINGS.EDU

The Brookings Institution is a nonprofit organization devoted to independent research and policy solutions. Its mission is to conduct high-quality, independent research and, based on that research, to provide innovative, practical recommendations for policymakers and the public. The conclusions and recommendations of any Brookings publication are solely those of its author(s), and do not reflect the views of the Institution, its management, or its other scholars.

Support for this publication was generously provided by the Charles Koch Foundation.

Brookings recognizes that the value it provides is in its absolute commitment to quality, independence, and impact. Activities supported by its donors reflect this commitment.