



# Economic and Social Consequences of Interstate Commerce in Recreational-Use Cannabis

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# I. Introduction

When New Jersey initiated recreational-use cannabis sales on April 21, it was the second large northeastern state to do so, with New York and Connecticut set to follow. In total, eighteen states that account for 44 percent of the U.S. population have passed laws concerning the legalization of recreational-use cannabis and 36 states allow cannabis use for medicinal purposes<sup>1</sup>. Legalization of recreational-use cannabis entails regulation of the legal possession and sale and has sometimes been accompanied by measures to expunge criminal records for those convicted of such offenses in the past. There is growing interest in and considerable public support for legalization at the national level to include retroactive decriminalization, particularly because of the pronounced racially disparate effects of the War on Drugs. Such a step is long overdue from a criminal and racial justice perspective.

Cannabis legalization has entailed fostering and shaping the development of a new industry and cannabis supply chain to displace the illicit cannabis market.<sup>2</sup> Up to this point, with cannabis considered a controlled substance under federal law, the recreational-use cannabis trade has operated under an effective ban on interstate commerce. Federally-regulated financial institutions are barred from serving cannabis businesses, and the IRS prohibits cannabis businesses from taking tax deductions and claiming tax credits (IRS code section 280E). The interstate commerce prohibition has meant that fully-integrated supply chains have developed on a state-by-state basis, and states have fully determined the regulatory regime and economic structure of legal cannabis cultivation, production, distribution, and retail sale to consumers. In order to redress the substantial economic harm caused by racially-disparate criminal justice enforcement, states legalizing cannabis are increasingly developing explicit social equity policies to encourage greater minority access to retailing and other business opportunities in the emerging legal cannabis economy.

State policy priorities related to legalization also encompass sensitivity to the impact on legal market prices and product supply (see Section V below), and an interest in taxing legal sales without making legal market prices uncompetitive with the illicit market.

In every state that has legalized recreational use, policy decisions regarding how to shape this emerging industry, generate revenue, balance health concerns and a desire to divert sales from the illicit to the regulated market, and incorporate social equity priorities have been the subject of extensive debate and compromise. There is justifiable concern that national legalization could jeopardize the policy balancing acts that have played out at the state level and undercut racial equity economic efforts now underway. Market concentration resulting from national legalization and allowing interstate commerce could lead to the dominance of a few large producers with the result that the economic benefits could also become highly concentrated in a few states at the expense of smaller cultivators, processors, distributors, and retailers in other states, thus eroding state and local equity, economic, and revenue gains.

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<sup>1</sup> Legal retail sales have not yet started in all states that have passed legislation.

<sup>2</sup> Note that it is possible to legalize possession yet not allow sales, allowing for personal cultivation and free distribution but not commercial sale. See Mark A.R. Kleiman, "Marijuana Legalization Doesn't Have to Lead to Commercialization," <https://www.nytimes.com/roomfordebate/2014/11/17/is-big-marijuana-inevitable-4/marijuana-legalization-doesnt-have-to-lead-to-commercialization> Accessed 3-13-22.

This report explores the potential risks to state-level progress on economic and equity policies that could result from federal legalization. The next section reviews various indicators of the size and growth of the legal cannabis market. Section III discusses in more detail state policy priorities and approaches, and Section IV summarizes key aspects of proposed Congressional legislation. Sections V through VIII then turn to the potential risks of federal legalization to state-level policy progress. Section IX provides recommendations.

## II. Growth of the state-legal medical and recreational-use cannabis market

The market for legal recreational-use cannabis increased by 60 percent in 2020 and rose by 42 percent to nearly \$15.8 billion in 2021 (Figure 1). Five states legalized recreational-use cannabis in 2021, bringing to 18 the number of such states. These 18 states account for 44 percent of the U.S. population (Figure 2). Thirty-six states allow cannabis use for medicinal purposes. Medical cannabis sales in the U.S. were a little under \$8 billion in 2020.<sup>3</sup>

**Figure 1**

### State recreational-use cannabis sales estimates (\$ millions)

	sales began	2018	2019	2020	2021
Arizona	1/22/2021				\$600
California	1/1/2018	\$1,943	\$2,719	\$4,447	\$5,205
Colorado *	1/1/2014	\$1,212	\$1,417	\$1,737	\$1,851
Illinois	1/1/2020			\$669	\$1,379
Maine	10/9/2020				\$82
Massachusetts**	11/20/2018		\$390	\$658	\$1,294
Michigan	12/6/2019			\$517	\$1,845
Nevada ***	7/1/2017	\$485	\$616	\$713	\$961
Oregon #	10/1/2016	\$554	\$682	\$931	\$1,046
Washington	12/6/2012	\$1,005	\$1,097	\$1,413	\$1,490
<b>Total, these states</b>		<b>\$5,199</b>	<b>\$6,920</b>	<b>\$11,085</b>	<b>\$15,751</b>
<b>percent change from prior year</b>				<b>60.2%</b>	<b>42.1%</b>
<b>5 states with sales data 2018-2021</b>			<b>25.6%</b>	<b>41.5%</b>	<b>14.2%</b>
<b>8 states with sales in 2020 &amp; 2021</b>					<b>36.0%</b>

*Note: Recreational use sales on a calendar year basis.*

\* Colorado sales imputed using 15% retail excise tax

\*\* Massachusetts sales imputed using 10.75% retail

\*\*\* Nevada sales imputed using 10% retail excise tax

# Oregon sales imputed using 17% retail excise tax

Source: State revenue or marijuana regulatory offices, and authors' estimates.

<sup>3</sup> Matej Mikulic, "Medical cannabis market size in the United States from 2019 to 2025," <https://www.statista.com/statistics/1244517/us-medical-cannabis-market-size/>. Accessed 10-24-21.



**Figure 2**

**18 states that have legalized sale of recreational-use cannabis**

<b>State</b>	<b>Year Legalized</b>	<b>1st Legal Sale</b>
Colorado	2012	Jan. 2014
Washington	2012	Jul. 2014
Alaska	2014	Feb. 2015
Oregon	2014	Oct. 2016
Nevada	2016	Jul. 2017
California	2016	Jan. 2018
Massachusetts	2016	Nov. 2018
Maine	2016	Oct. 2020
Michigan	2018	Dec. 2019
Vermont	2018	May 2022
Illinois	2019	Jan. 2020
Arizona	2020	Jan. 2021
Montana	2020	Jan. 2022
New Jersey	2021	Apr. 2022
New York State	2021	tbd
Virginia	2021	tbd
New Mexico	2021	Apr. 2022
Connecticut	2021	tbd

With moderate growth in medical cannabis sales in 2021, total medical and recreational-use sales likely totaled \$24 billion in 2021. Researchers at RAND estimated total expenditures in the U.S. on cannabis (legal and illicit market) of \$52 billion in 2016, a 24 percent increase over 2010.<sup>4</sup>

The 60 percent legal recreational-use annual sales growth in 2020 and the 42 percent growth in 2021 are due largely to two factors: a Covid-19 effect that also saw sizable growth in alcohol consumption, and the fact that legal sales were just ramping up in Massachusetts, Michigan, Illinois, and Arizona. The Covid-19 effect likely won't continue, but the extensive growth from the five states legalizing recreational-use

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<sup>4</sup> Gregory Midgette, Steven Davenport, Jonathan P. Caulkins, and Beau Kilmer, "What American's Users Spend on Illegal Drugs, 2006-2016," RAND Corporation RR3140, Santa Monica, CA, 2019.

cannabis in 2021 (NJ, NY, VA, NM, and CT) will be concentrated in the next few years<sup>5</sup>, along with high growth for another year or two in Michigan and Illinois, and from other states that act to legalize.<sup>6</sup>

Recreational-use cannabis sales generated \$2.8 billion in state tax revenues in 2020 and \$3.9 billion in 2021 (Figure 3). While the ratio of state tax revenue to recreational sales ranges from 16 percent in Michigan to 44 percent in Washington, the average for the 10 states shown in Figure 2 is a little under 25 percent.

**Figure 3**

**State recreational-use cannabis tax revenue (\$ millions)**

	<u>sales began</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>
Alaska	10/1/2016	\$15.7	\$21.7	\$27.2	\$29.6
Arizona *	1/22/2021				\$219.4
California **	1/1/2018	\$397.3	\$638.3	\$1,110.5	\$1,294.6
Colorado	1/1/2014	\$254.3	\$290.4	\$375.9	\$410.7
Illinois	1/1/2020			\$185.9	\$424.2
Maine	10/9/2020			\$1.2	\$11.9
Massachusetts	11/20/2018		\$66.2	\$112.0	\$219.8
Michigan	12/6/2019			\$81.7	\$291.8
Nevada	7/1/2017	\$86.9	\$107.4	\$123.7	\$166.8
Oregon	10/1/2016	\$94.2	\$115.9	\$158.3	\$177.8
Washington ***	12/6/2012	\$437.2	\$477.3	\$614.5	\$648.0
<b>Total, these states</b>		<b>\$1,285.6</b>	<b>\$1,717.3</b>	<b>\$2,790.8</b>	<b>\$3,894.6</b>

\* Includes revenue from medical cannabis sales.

\*\* Includes California's cultivation tax.

\*\*\*Washington revenues for 2021 estimated based on change over first 9 months

Sources: State revenue departments; and Marijuana Policy Project, *Cannabis Tax Revenue in States That Regulate Cannabis for Adult Use*, Jan. 2022.

Recreational cannabis sales also generate significant amounts of local government revenues, usually through a local option tax or local sales taxes. In 2021, local taxation of cannabis sales generated \$28 million in revenues in Oregon, \$39 million in Massachusetts, and \$43 million in Washington State. In these three states, local taxation ranged from 2.7-3.0 percent of recreational sales. The Marijuana Policy Project

<sup>5</sup> In our 2021 New York study, we estimated that recreational-use cannabis sales could reach \$1.9 billion in 2025. That estimate may be on the conservative side since it was developed before data was available showing the very strong 2020 and 2021 sales growth in other states. James A. Parrott and Michele Mattingly, "Economic and Revenue Impact of Marijuana Legalization in New York State—A Fresh Look," February 2021.

<sup>6</sup> States reported to be actively considering recreational-use legalization include Florida, Maryland, Minnesota, and Pennsylvania. These four states have a combined population slightly greater than that of the five states that legalized in 2021.

reports that the City of Denver’s 5.5 percent local sales tax on recreational sales had produced \$238 million on a cumulative basis through November 2021.<sup>7</sup>

While it is challenging to precisely determine the number of cannabis businesses from state licensing data since a single business might have multiple permits, the trade publication Marijuana Business Daily (MBD) estimates that there are roughly 60,000 to 74,000 cannabis businesses operating in the United States. Roughly 40 percent of cannabis businesses directly deal with cannabis and related product (i.e., these are considered “plant-touching”), and 60 percent provide ancillary services such as legal or consulting services. Figure 4 provides MBD’s estimates for a likely range for the number of “plant-touching” businesses for each market segment.

**Figure 4**

**Marijuana Business Factbook Estimages of “Plant-touching” U.S. Cannabis Businesses, 2021**

Wholesale cultivators	9,000	to	11,000
Medical dispensaries/adult-use retailers	7,200	to	8,800
Product manufacturers	2,700	to	3,300
Vertically integrated producers/processor	2,700	to	3,300
Producers/processors	2,300	to	2,800
Testing labs	300	to	450
<b>Total "Plant-touching"</b>	<b>24,200</b>	<b>to</b>	<b>29,650</b>

Source: Marijuana Business Daily, Annual Marijuana Business Factbook, 2021.

In its annual Marijuana Business Factbook, MBD estimates that there are between 340,000 and 415,000 full-time equivalent employees in 2021 in the 60,000 to 74,000 “plant-touching” and ancillary cannabis businesses, with retail stores accounting for the majority of the cannabis workforce.<sup>8</sup> The total cannabis workforce exceeds the combined number of employees working in beer, wine, and liquor stores and convenience stores nationwide in 2019, before the pandemic.<sup>9</sup>

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<sup>7</sup> Marijuana Policy Project, Cannabis Tax Revenue in States That Regulate Cannabis for Adult Use, January, 2022. For local taxation of adult-use cannabis sales, see Urban Institute, Marijuana Taxes, <https://www.urban.org/policy-centers/cross-center-initiatives/state-and-local-finance-initiative/state-and-local-backgrounders/marijuana-taxes#>

<sup>8</sup> Marijuana Business Daily, Annual Marijuana Business Factbook, 2021, p. 6.

<sup>9</sup> Bureau of Labor Statistics, current employment statistics, 2019 annual averages.

### III. Key topics being addressed via state and local policy

Legalization of cannabis involves more than simply removing legal prohibitions on possession, cultivation, or sale of the substance. It entails a host of policy choices. Redressing the damage caused by the War on Drugs, creating equitable opportunities in a new legal industry to divert sales from the illicit market, protecting public health and the environment, and ensuring safe workplaces and jobs with family-supporting wages are all at stake.

In discussions regarding legalization, social equity has become increasingly prominent. In this context, the term “equity” can refer to actions that aim to distribute the benefits of legalization in an equitable manner. For instance, it can pertain to geographic and socio-economic equity, when policies are crafted to ensure benefits flow to distressed farmers and rural communities, as well as those in urban centers. New York’s recent legalization law specifies a goal of awarding 50 percent of adult-use cannabis business licenses to “social and economic equity applicants,” a category defined to include struggling small-farm operators and those belonging to groups historically underrepresented in farm ownership.<sup>10</sup> Many of the state’s hemp farmers are eager to enter the cannabis market.<sup>11</sup> However, for the most part, references to equity stem directly from acknowledgement of the racially-disparate impacts of the War on Drugs on individuals and communities and the consequent demands that legalization policies serve to repair the harm done.

To this end, a number of states and municipalities have adopted social equity policies in connection with legalization. Social equity policies can take different forms. One focus has been the expungement or sealing of records pertaining to the convictions of people charged with cannabis-related offenses. A criminal record—even for a non-violent offense—can impact an individual in a myriad of ways, including with respect to employment, housing, and public assistance.<sup>12</sup> While early-legalizing states such as Colorado, Oregon, and Washington made expungement or sealing of cannabis-related convictions available through petition, California, New Jersey, and New York have made the process automatic.<sup>13</sup> Another focus is investing in communities that were disproportionately affected by the War on Drugs. In Evanston, Illinois, local cannabis tax revenue is funding down payments, mortgage payments, and home repairs for Black residents who lived in the city between 1919 and 1969, as well as the descendants of these individuals.<sup>14</sup> (Housing discrimination was banned in Evanston in 1969.)

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<sup>10</sup> New York State Senate, Marihuana Regulation and Taxation Act, S854A, 2021-2022 Legislative Session, <https://www.nysenate.gov/legislation/bills/2021/S854> Accessed 10-9-21.

<sup>11</sup> Michael Hill, “Swap the crop? New York hemp farmers eager to grow marijuana,” <https://apnews.com/article/new-york-us-news-retail-sales-marijuana-9eb5ca9b52a251541218db14e04a218f> Accessed 10-8-21.

<sup>12</sup> Rebecca Vallas and Sharon Dietrich, “One Strike and You’re Out: How We Can Eliminate Barriers to Economic Mobility and Security for People with Criminal Records,” December 2014, [https://cdn.americanprogress.org/wp-content/uploads/2014/12/VallasCriminalRecordsReport.pdf?\\_ga=2.75518236.863695706.1633823805-1532921141.1633823805](https://cdn.americanprogress.org/wp-content/uploads/2014/12/VallasCriminalRecordsReport.pdf?_ga=2.75518236.863695706.1633823805-1532921141.1633823805) Accessed 10-9-21.

<sup>13</sup> Collateral Consequences Resource Center, “Marijuana legalization and expungement in early 2021,” Spring 2021, <https://ccresourcecenter.org/marijuana-legalization-and-expungement-in-early-2021/> Accessed 10-9-21.

<sup>14</sup> City of Evanston. Local Reparations: Restorative Housing Program. <https://www.cityofevanston.org/home/showpublisheddocument/66184/637677439011570000> Accessed 2-21-22.

A third thrust of equity efforts is assisting disproportionately-impacted individuals establish businesses in the legal cannabis industry. Support can take the forms of licensing priority, fee waivers or reductions for license applications or renewals, grants or loans, and technical assistance and training.<sup>15</sup> Programs have been established both at the state and local level, although some states—notably Alaska and Nevada—have not done so. Thus far, equity applicants represent a small share of legal cannabis business owners, though this varies significantly across jurisdictions. In Massachusetts, for example, about six percent of licenses granted by the state have been granted via programs that target individuals from disproportionately-affected communities.<sup>16</sup> In Oakland, California, 48 percent of those who have both received licenses from the city and applied for a license to the state are equity applicants.<sup>17</sup>

Where equity policies have produced unsatisfactory results, a wide range of factors have been cited. These include bureaucratic inefficiencies, inadequate funding, and lawsuits. Pre-existing structural inequities in the cannabis market also have contributed, as medical cannabis firms enjoyed significant licensing and market advantages when states opened up for adult-use sales. Social equity entrepreneurs have been hobbled by constraints such as two-tier licensing systems that require both state and local approval, and requirements to secure a business location before a license is granted. These are hurdles that any cannabis business would encounter, but social equity applicants are generally by definition disadvantaged with respect to access to capital. Thus, they are less able to afford to continue to rent a storefront, for example, while navigating licensing processes or waiting for legal challenges to a state's or city's program to be resolved.

While equity concerns are increasingly at the forefront, the legalization of recreational cannabis has also generated debate regarding how to best protect public health, with questions regarding potency and marketing to youth a particular focus. These concerns have been heightened by investments by large tobacco and alcohol companies. Some have called for Big Tobacco corporations to face restrictions, if not to be completely prohibited from entering the industry.<sup>18</sup>

Another question is how cannabis products should be sold. The Public Health Institute, a non-profit focused on health equity, favors public or non-profit monopoly models for cannabis retail, pointing to the examples of government-run cannabis stores in Quebec and state-run alcohol stores in the U.S.<sup>19</sup> RAND analyst Beau Kilmer cites studies suggesting that government-operated alcohol stores produce better outcomes

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<sup>15</sup> Mathew Swinburne and Kathleen Hoke, "State Efforts to Create an Inclusive Marijuana Industry in the Shadow of the Unjust War on Drugs," *Journal of Business and Technology Law* 15, no. 2 (2020) <https://digitalcommons.law.umaryland.edu/cgi/viewcontent.cgi?article=1318&context=jbt> Accessed 8-24-21.

<sup>16</sup> Massachusetts Cannabis Control Commission. Adult-Use Licensing Tracker. <https://masscannabiscontrol.com/licensing-tracker/> Accessed 3-15-22. The state also has a Disadvantaged Business Enterprise license category for woman-owned, minority-owned, and veteran-owned cannabis businesses.

<sup>17</sup> City of Oakland Cannabis Regulatory Commission. Regular Meeting Agenda, February 3, 2022. [https://cao-94612.s3.amazonaws.com/documents/CRC-Agenda-Feb-2022-Packet\\_2022-01-31-202816\\_dzzu.pdf](https://cao-94612.s3.amazonaws.com/documents/CRC-Agenda-Feb-2022-Packet_2022-01-31-202816_dzzu.pdf) Accessed 3-9-22.

<sup>18</sup> Smart Approaches to Marijuana to Senators Chuck Schumer, Cory Booker, and Ron Wyden, July 14, 2021, <https://learnaboutsam.org/wp-content/uploads/2021/07/SAB-Letter-on-Schumer-Discussion-Bill.pdf> Accessed 9-14-21. Shaleen Title and Richard Juang to Senators Chuck Schumer, Cory Booker, and Ron Wyden, August 31, 2021, <https://www.parabolacenter.com/Parabola%20Center%20CAOA%20Comments%208-31-21.pdf> Accessed 9-7-21.

<sup>19</sup> Public Health Institute, "Principles for Protecting Youth, Public Health and Equity in Cannabis Regulation," [https://gettingitrightfromthestart.org/wp-content/uploads/2021/03/Principles-for-Protecting-Youth-Public-Health-and-Equity-in-Cannabis-Regulation\\_2021.pdf](https://gettingitrightfromthestart.org/wp-content/uploads/2021/03/Principles-for-Protecting-Youth-Public-Health-and-Equity-in-Cannabis-Regulation_2021.pdf) Accessed 9-10-21.



with respect to public health, attributing this in part to the fact that they engage in less advertising and marketing than their private sector counterparts.<sup>20</sup> Drawing on research regarding the location of alcohol and cannabis stores in low-income, minority communities, Kilmer and co-authors also raise retail outlet density as a social equity concern, arguing that a state-store model may offer better opportunities to reduce health inequities.<sup>21</sup> However, proposals for state-run dispensaries are likely to meet resistance from private industry interests.

As the cannabis industry rapidly expands, the environmental impacts of its operations have received attention. California, Illinois, Massachusetts, and the City of Boulder have adopted regulations addressing aspects of the energy efficiency and impacts of indoor cannabis cultivation.<sup>22</sup> In granting cannabis business licenses, New York will consider applicants' ability to increase climate resiliency and minimize or eliminate adverse environmental impacts such as energy usage, carbon emissions, waste, pollution, and the use of harmful chemicals and single-use plastics.<sup>23</sup>

Finally, wages and labor standards within the industry have received little attention, even though the majority of people in the industry are rank-and-file-employees, not business owners. Given the emphasis on repairing harm done to communities of color in the War on Drugs, it is especially worth noting research that shows that the wage premium for unionized jobs in occupations comparable to those in cannabis processing and retail is even higher for workers of color than for workers overall.<sup>24</sup> Legalization statutes in six large states (California, Illinois, Pennsylvania, New York, New Jersey, and Virginia) either encourage or require adoption of labor peace agreements by state-licensed cannabis businesses.<sup>25</sup> Through such agreements, firms commit to remaining neutral regarding unionization in return for workers refraining from strikes, boycotts, or similar activities.

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<sup>20</sup> Dan Adams and Felicia Gans, "State-run marijuana stores? Proponents — including Rhode Island's governor — say it's an idea worth exploring," <https://www.bostonglobe.com/news/marijuana/2020/01/24/state-run-marijuana-stores-proponents-including-rhode-island-governor-say-idea-worth-exploring/WGqxfp5b9zTTbTAFTI9bLM/story.html> Accessed 9-20-21.

<sup>21</sup> Beau Kilmer, Jonathan P. Caulkins, Michelle Kilborn, Michelle Priest, and Kristin M. Warren. "Cannabis Legalization and Social Equity: Some Opportunities, Puzzles, and Trade-Offs." [https://www.rand.org/pubs/external\\_publications/EP68681.html](https://www.rand.org/pubs/external_publications/EP68681.html) Accessed 3-14-22.

<sup>22</sup> Gina S. Warren, "Hotboxing the Polar Bear: The Energy and Climate Impacts of Indoor Marijuana Cultivation," Boston University Law Review 101: no. 3 (2021), <https://www.bu.edu/bulawreview/files/2021/07/WARREN.pdf> Accessed 8-27-21.

<sup>23</sup> New York State Senate, op. cit.

<sup>24</sup> David Cooper and Sebastian Hickey, "Ensuring the High Road in Cannabis," September 20, 2021, <https://www.epi.org/publication/ensuring-the-high-road-in-cannabis-jobs/> Accessed 10-8-21.

<sup>25</sup> Ibid.

## IV. The policy importance of regulating the price of legal adult-use cannabis

The ability to achieve some of the most important state-articulated public policy goals related to adult-use cannabis legalization hinges on states being able to regulate its price. Regulated recreational-use cannabis is an atypical good. For most other products, low prices are considered to be desirable with regard to consumer welfare. With cannabis, however, the socially optimal price reflects competing public policy concerns. Through legalization, policymakers seek to capture market share previously held by the illegal market, and price competitiveness with the illicit market is necessary to help induce consumers into the legal one.

At the same time, a price that is too low is not desirable from a public health standpoint, to the extent it may encourage excessive use. Further, states (and localities) use cannabis tax revenues for a variety of purposes, including administrative costs associated with cannabis legalization, education, health care, and substance abuse prevention and treatment.<sup>26</sup> Most states—though not all—tax cannabis on the basis of price.<sup>27</sup> Regulators therefore have an interest in keeping cannabis’s legal sale price from falling excessively. This requires either setting prices directly (which has not yet been done) or doing so indirectly by regulating the market supply.

## V. Congressional legislation

While the Drug Enforcement Administration still classifies cannabis as a Schedule 1 drug, high profile efforts in Congress signal increased openness to legalization. The Marijuana Opportunity, Reinvestment and Expungement (MORE) Act was passed by the House in 2020, and the Cannabis Administration and Opportunity (CAO) Act was drafted in the Senate in 2021, with Majority Leader Charles Schumer among the lead sponsors.<sup>28,29</sup> Congressional action on cannabis-related issues has also taken the form of bills beyond omnibus legalization measures.<sup>30</sup>

Both the MORE and CAO Acts strongly emphasize restorative justice, providing for automatic expungement of federal cannabis-related convictions, while also incentivizing states to follow suit with respect to state-level cannabis-related convictions. The bills also fund states to create equitable licensing

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<sup>26</sup> Tax Policy Center, <https://www.taxpolicycenter.org/briefing-book/how-do-marijuana-taxes-work> Accessed 10-19-21.

<sup>27</sup> Taxes can also be based on potency or weight. See Institute for Taxation and Economic Policy for further discussion. <https://itep.org/tag/cannabis/>

<sup>28</sup> U.S. House of Representatives, Marijuana Opportunity, Reinvestment and Expungement Act of 2021, H.R. 3617, 117th Congress, <https://www.congress.gov/bill/117th-congress/house-bill/3617> Accessed 8-18-21. Senators Chuck Schumer, Cory Booker, and Ron Wyden, Cannabis Administration and Opportunity Act Discussion Draft, <https://www.politico.com/f/?id=0000017a-a490-dc3c-a57e-b4d8e25b0000> Accessed 8-18-21.

<sup>29</sup> As of this writing, the CAO Act has not yet been introduced in the Senate.

<sup>30</sup> Tom Angell, “Democratic Senators’ Bill Would Let DC Legalize Marijuana Sales against Biden’s Wishes,” <https://www.marijuanamoment.net/democratic-senators-bill-would-let-dc-legalize-marijuana-sales-in-contrast-to-bidens-proposed-blockade/> Accessed 10-20-21.

programs, as well as funding services such as job training, reentry services, and legal aid for individuals in disproportionately affected communities. They affirm that individuals with prior cannabis-related convictions would not face discrimination with respect to immigration status or federal benefits. By descheduling cannabis, the bills would ease the banking restrictions that cannabis businesses currently face, as well as allowing for business-related federal tax deductions and access to federal crop insurance. Descheduling would also allow federal funds to be used for cannabis workforce development and cannabis-related medical research.<sup>31</sup>

The two bills differ with respect to the proposed level of taxation. The MORE Act calls for an initial five percent tax rate, to be increased incrementally to eight percent over five years.<sup>32</sup> Likewise, the CAO Act specifies a tax rate to be raised in steps over a five-year period. However, it starts with a 10 percent tax that eventually increases to 25 percent.<sup>33</sup> Concerns have been expressed regarding the prospect of a 25 percent tax being levied in addition to existing state taxes. For instance, Colorado's cannabis tax rate is 15 percent. The state's governor, Jared Polis, called the combined state and federal tax rate of 40 percent "untenable for the cannabis industry and consumers."<sup>34</sup> He pointed out that the combined state and federal rates would be even higher in Washington and Oregon (77 and 57 percent, respectively).<sup>35</sup> As discussed above, a prohibitively high price discourages buyers from shifting from the illicit to the legal market.

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<sup>31</sup> New York City Mayor Eric Adams has proposed hiring residents of New York City Housing Authority (NYCHA) buildings to manage rooftop cannabis gardens on NYCHA properties. While the U.S. Department of Housing and Development's funding for NYCHA effectively precludes such a policy, descheduling would remove this obstacle. Jon Campbell, "Mayor Adams wants cannabis on NYCHA rooftops. The feds aren't on board." <https://gothamist.com/news/mayor-adams-wants-cannabis-on-nycha-rooftops-the-feds-arent-on-board?source=email> Accessed 4-25-22

<sup>32</sup> United States House of Representatives, Marijuana Opportunity, Reinvestment and Expungement Act of 2021.

<sup>33</sup> Senators Chuck Schumer, Cory Booker, and Ron Wyden, Cannabis Administration and Opportunity Act Discussion Draft.

<sup>34</sup> Governor Jared Polis to Senators Chuck Schumer, Cory Booker, and Ron Wyden, August 27, 2021, <https://cannabiswire.com/2021/09/02/as-comments-close-on-the-most-comprehensive-cannabis-reform-plan-in-congress-themes-emerge/> Accessed 9-14-21.

<sup>35</sup> See Appendix: State Excise Tax Rates on Recreational Cannabis.

## VI. The economic and fiscal impact of interstate cannabis commerce

The CAO Act, as currently drafted, would impair the ability of states to regulate the supply of cannabis. The section of the bill addressing states' rights mirrors the federal statute governing interstate commerce in alcoholic beverages.<sup>36</sup> After the end of alcohol prohibition, states had the right to ban alcohol.<sup>37</sup> Court rulings have established, however, that states cannot discriminate against alcohol imports from other states. A summary of the CAO Act states that the bill "would recognize state law as controlling the possession, production, or distribution of cannabis."<sup>38</sup> Given the precedents pertaining to alcohol, though, there is no reason to believe the CAO Act would allow states to prohibit cannabis imports and thus regulate supply and price.

Along with complicating states' ability to regulate the price of adult-use cannabis, allowing interstate trade will significantly impact cannabis businesses and the states and localities in which they operate in other ways. For businesses, some impacts will vary depending on factors such as the industry segment—cultivator, processor, distributor, or retailer—and size of the firm.

Small growers, processors, distributors, and retailers currently compete with multi-state operators (MSOs), corporations with operations in more than one state. MSOs operate within the discrete regulatory regimes of each state in which they have a presence. The interstate commerce prohibition results in a given MSO having production facilities in more than one state, entailing some duplication of costs, as well as the expense of navigating multiple state-level regulatory structures. However, the companies still benefit from purchasing power for non-cannabis supplies and from the centralization of personnel in corporate headquarters. They are also distinguished from small operators by their better access to capital.

Since ending the interstate commerce prohibition will allow firms to ship cannabis across state lines, participating in a state's retail market will no longer require producing the product in-state. Therefore, there is expected to be an increase in the geographic concentration of cannabis cultivation and manufacturing. This will widen the gap between a given state's small cultivators and manufacturers, on the one hand, and MSOs and large corporations that might be drawn to an extensive national market, on the other, as the latter take advantage of economies of scale.<sup>39</sup>

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<sup>36</sup> Office of the Law Revision Counsel, United States Code, <https://uscode.house.gov/browse/prelim@title27&edition=prelim> Accessed 10-19-21.

<sup>37</sup> U. S. Congress, Constitution Annotated: Amdt21.1 Twenty-First Amendment: Doctrine and Practice, [https://constitution.congress.gov/browse/essay/amdt21\\_1/](https://constitution.congress.gov/browse/essay/amdt21_1/) Accessed 10-19-21.

<sup>38</sup> Senators Chuck Schumer, Cory Booker, and Ron Wyden, Cannabis Administration and Opportunity Act Discussion Draft Detailed Summary, <https://www.democrats.senate.gov/imo/media/doc/CAOA%20Detailed%20Summary%20-.pdf> Accessed 8-18-21.

<sup>39</sup> Pertaining to the CAO Act's provisions regarding equitable licensing, Majority Leader and CAO Act sponsor Senator Schumer recently said, "We don't want the big boys to come in after all the pain that's occurring in communities [affected by the War on Drugs]—to have the big boys come in and make all the money makes no sense. We want to make sure that smaller businesses and businesses of color do it." <https://www.youtube.com/watch?v=VDhE2Tcjuk0> Accessed 11-26-21.



The increased geographic concentration of production will also decrease employment and tax revenue in states and localities where firms scale back or eliminate operations. There will not necessarily be an equivalent increase in states where production operations are expanded because of economies of scale.

MSOs are spending billions of dollars every year acquiring other cannabis-related companies. Acquisitions and mergers allow for economies of scale in production, intra-state distribution, compliance, and marketing.<sup>40</sup> While these transactions produce greater market power and may result in some efficiencies, they also serve to position companies to take advantage of an eventual national market.<sup>41</sup> In the meantime, with or without national legalization, small operators are facing an increasingly consolidated industry. From 2019 to 2020, the ten top-earning MSOs increased their share of total legal cannabis U.S. sales (recreational and medical) from 10.6 to 17.7 percent.<sup>42</sup> While U.S. sales increased by 52 percent, these ten MSOs' share of the market increased by 68 percent. In states where the number of cannabis cultivation licenses is limited, the scarcity produces a premium for resold licenses. Small operators can find themselves needing to choose between competing against increasingly larger players or selling their license and cashing out.<sup>43</sup>

In facing challenges such as these, small cannabis business owners are no different from small business owners across the wider economy. In spite of these challenges, small, independent businesses strengthen local economies in ways that chain stores do not. A locally-owned operation spends a larger share of its revenue on labor costs than does a national chain outlet. Independent businesses are more likely to perform functions such as bookkeeping in-house, whereas these activities are handled in corporate headquarters by chains. From business supplies to professional services such as legal counsel, independent retailers procure locally more of the goods and services they use than do their chain counterparts. In an analysis of a Chicago neighborhood shopping district, the share of revenue independent retailers spent on local procurement was more than twice that of the national chains (6 percent versus 2.9 percent).<sup>44</sup> Finally, a portion of a national chain's profits is redirected to the corporate headquarters, where it is invested in the chain's operations or distributed in part to shareholders.

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<sup>40</sup> Beau Kilmer, Jonathan P. Caulkins, Michelle Kilborn, Michelle Priest, and Kristin M. Warren, "Cannabis Legalization and Social Equity: Some Opportunities, Puzzles, and Trade-Offs," *Boston University Law Review* 101 (no. 3): 2021, <https://www.bu.edu/bulawreview/2021/07/14/volume-101-number-3-may-2021/> Accessed 8-24-21.

<sup>41</sup> Will Yacowicz, "Trulieve's \$2.1 Billion Harvest Acquisition Would Create One of the Cannabis Industries Biggest Companies," <https://www.forbes.com/sites/willyacowicz/2021/05/12/trulieves-21-billion-harvest-acquisition-would-create-one-of-the-cannabis-industrys-biggest-companies/> (Accessed October 17, 2021). Jeff Smith, "Big Cannabis can be good cannabis': Q & A with Curaleaf CEO Jeff Bayern," [https://mjbizdaily.com/big-cannabis-can-be-good-cannabis-qa-with-curaleaf-ceo-joe-bayern?utm\\_medium=email&utm\\_source=newsletter&utm\\_campaign=MJD\\_20211019\\_NEWS\\_Daily](https://mjbizdaily.com/big-cannabis-can-be-good-cannabis-qa-with-curaleaf-ceo-joe-bayern?utm_medium=email&utm_source=newsletter&utm_campaign=MJD_20211019_NEWS_Daily) Accessed 10-20-21.

<sup>42</sup> Source: Authors' calculations based on state revenue or regulatory offices; Matej Mikulic, "Medical cannabis market size in the United States 2019-2025," <https://www.statista.com/statistics/1244517/us-medical-cannabis-market-size/> Accessed 10-24-21; and corporate financial data as reported by MSOs and the Wall Street Journal.

<sup>43</sup> Chris Roberts, "Big Weed Is Here: Marijuana Legalization Spreads, Budding Big Business Green," <https://observer.com/2021/02/big-weed-is-here-marijuana-legalization-spreads-budding-big-business-green/> Accessed 9-7-21.

More evidence of how local economies benefit from small businesses comes from a nationwide analysis of U.S. counties that found a positive relationship between small locally-owned firms and per capita income growth.<sup>45</sup> However, the density of large firms that were not locally-owned negatively impacted the rate at which a county's per capita income grew.

While small businesses are vital, then, to the health of local and state economies, a sudden introduction of interstate commerce would increase the pressure on small cannabis cultivators, producers, distributors, and retailers. The impact would extend to the ancillary businesses in fields such as accounting, marketing, and law that serve these small firms and the local governments that benefit from the tax revenue they generate.

Meanwhile, federal legalization could induce market entry by large chain retailers such as Walmart and other large corporations. An industry analyst cites chain drugstores and chain convenience stores as being well-positioned to enter the market.<sup>46</sup> The former have experience handling highly-regulated products, while the latter check large volumes of IDs daily.

Large alcohol, tobacco, and consumer packaged goods corporations have begun making investments through various corporate structures and are lobbying on cannabis issues. There is also speculation about the eventual entry of Amazon, which has recently expressed support for both the MORE and the CAO Acts.<sup>47</sup> A multinational corporation has the resources and the power to significantly shape a market and navigate the concomitant regulatory environment with little resistance. For instance, for years, Amazon fought being required to charge state sales taxes.<sup>48</sup> A New York Times analysis states that, by the time the company began to reach compromises with states regarding the issue about a decade ago, it “had benefited from years of price advantages over conventional retailers.”<sup>49</sup> Uber provides another example of a corporation that established dominance in a market while operating outside the existing regulatory regime. Current efforts to develop the legal cannabis industry to advance policy objectives such as racial and regional equity may be overwhelmed by the entry of huge corporations with easy access to large amounts of capital and the willingness to flout regulations.

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<sup>44</sup> Civic Economics, “The Andersonville Study of Retail Economics,” <http://nebula.wsimg.com/0d5203ffcac30fe852f544a21a475256?AccessKeyId=8E410A17553441C49302&disposition=0&alloworigin=1> Accessed 10-15-21.

<sup>45</sup> David Fleming and Steven J. Goetz, “Does Local Firm Ownership Matter?” *Economic Development Quarterly* 3 (no. 25): 2011, <https://journals.sagepub.com/doi/abs/10.1177/0891242411407312> Accessed 10-18-21.

<sup>46</sup> Omar Sacribe, “Cannabis retailers turn to tech such as online ordering, data-backed product suggestions as industry change looms,” <https://mjbizdaily.com/cannabis-retailers-embrace-tech-online-ordering-data-backed-product-suggestions/> Accessed 10-13-21.

<sup>47</sup> Amazon, “Amazon is supporting the effort to reform the nation's cannabis policy,” <https://www.aboutamazon.com/news/policy-news-views/amazon-is-supporting-the-effort-to-reform-the-nations-cannabis-policy> Accessed 10-19-21.

<sup>48</sup> Kelly Phillips Erb, “Tax-Free No More: Amazon to Begin Collecting Sales Tax Nationwide on April 1,” <https://www.forbes.com/sites/kellyphillipserb/2017/03/27/tax-free-no-more-amazon-to-begin-collecting-sales-tax-nationwide-on-april-1/> Accessed 10-24-21.

<sup>49</sup> Shira Ovide, “Amazon Wants a Lot of New Laws,” <https://www.nytimes.com/2021/06/03/technology/amazon-laws.html> Accessed 10-24-21.

Finally, all legal cannabis businesses large and small have invested in licenses and facilities within the unique regulatory system of a given state.<sup>50</sup> To the extent that the abrupt emergence of a national market makes those investments uneconomical, the businesses will bear a cost.

## VII. The Dormant Commerce Clause

The preceding section lays out potential economic and fiscal consequences of the removal of the prohibition on interstate cannabis commerce. Market forces would likely produce impacts such as geographic concentration of production and accelerated consolidation of industry ownership. However, a second set of potential impacts stems from the Dormant Commerce Clause (DCC), a well-established doctrine of constitutional law that constrains states' ability to regulate interstate commerce.<sup>51</sup> Removing the prohibition on interstate trade would bring the DCC into play. The potential consequences of the DCC differ from the direct market effects, such as consolidation, that would be expected solely on the basis of allowing interstate commerce in cannabis. These potential consequences associated with the DCC have been identified by legal scholars Robert Mikos and Scott Bloomberg, as follows.<sup>52</sup>

First, federal legalization would create regulatory gaps. If a court were to rule that a state regulation is an impediment to interstate commerce, states could be prevented from enforcing it, yet there would not necessarily be an analogous federal regulation in its place. Interstate commerce would also complicate compliance with state regulations, such as track-and-trace systems that are designed to prevent diversion and facilitate tax collection.

Second, the DCC would undermine states' ability to regulate their markets with respect to policies such as environmental and labor standards. Mikos and Bloomberg posit that the inability to restrict the importation of product from another state, regardless of the conditions under which it was produced, could set off a race to the bottom. Under such a scenario, states competing against each other to land or retain business operations relax regulations, lower tax rates, and provide incentives to corporations.

Third, because the DCC severely restricts states' ability to discriminate against out-of-state imports, it leaves little ability to implement policies that favor state residents in a market open to interstate trade. Policies that give preference for business licensing, for example, to residents of a community disproportionately impacted by the War on Drugs or to a state's struggling small farmers would be vulnerable to legal challenge.

Mikos and Bloomberg propose including language in the CAO that effectively states that it is the Congressional intent to continue state regulatory and tax primacy, thereby suspending the application of the DCC to the cannabis market. They propose a temporary suspension of seven years, allowing federal

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<sup>50</sup> Robert A. Mikos and Scott Bloomberg, "Legalization without Disruption: Why Congress Should Let States Restrict Interstate Commerce in Marijuana," Vanderbilt University Law School Legal Studies Research Paper Series Working Paper No. 21-33, August 2021, [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=3909972](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3909972) Accessed 9-15-21.

<sup>51</sup> Supreme Court of the United States, "Tennessee Wine and Spirits Retailers Association vs. Russell F. Thomas, Executive Director of the Tennessee Alcoholic Beverage Commission, et al.," [https://www.supremecourt.gov/opinions/18pdf/18-96\\_5i36.pdf](https://www.supremecourt.gov/opinions/18pdf/18-96_5i36.pdf) Accessed 10-20-21.

<sup>52</sup> Mikos and Bloomberg, "Legalization without Disruption."

and state regulators, as well as established businesses, a transition period. (During this time, states would have the option to engage in interstate commerce should they choose to.) Mikos and Bloomberg also cite the powerful precedent for locking in a state-determined regulatory approach set by the McCarran-Ferguson Act of 1945—still in effect today—in which Congress suspended the application of the Commerce Clause to state regulation of “the business of insurance” after the Supreme Court had ruled that insurance was a form of interstate commerce.<sup>53, 54</sup>

## VIII. Social equity and interstate commerce

It is clear that allowing interstate cannabis commerce to begin in the near term without addressing market concentration or the Dormant Commerce Clause could have a wide range of ramifications, including for social equity. As stated in Section III, state and local social equity programs have faced numerous criticisms. Without discounting these, it is worth noting that licensing and related policies aimed at supporting social equity cannabis businesses represent an unusual undertaking in that they are trying to achieve restorative justice via publicly-licensed private commerce. It should also be noted that these efforts are relatively new. The first state program was only undertaken in 2018 (by Massachusetts). Likewise, in 2012, Colorado and Washington became the first two states to allow adult-use sales, yet they only took the first steps toward establishing social equity programs in 2020.

As unsatisfactory as the overall results may have been thus far with respect to the number of social equity licenses granted and businesses launched, the landscape is a dynamic one, with states and localities refining their policies and new programs trying to learn from others’ experiences. The Cannabis Regulators of Color Coalition (CCRC) has established itself as a resource for legislators and public agencies developing cannabis policies, and former Massachusetts Cannabis Control Commission member and CCRC founding member Shaleen Title recently published recommendations to policymakers developing and administering cannabis licensing programs.<sup>55</sup>

While policymakers and advocates debate, craft, and enact social equity policies, the cannabis market is subject to increasing concentration from large multi-state operators (MSOs). As noted previously, medical cannabis firms were in a privileged position when adult-use sales began. Meaningful actions to achieve social equity in the cannabis market require recognition of the domination that MSOs have sought and achieved in insulated state markets.

The present situation with respect to cannabis social equity ownership, then, can perhaps be characterized by three factors. First, there are the largely unsatisfactory results so far. Second, there are signs that this dissatisfaction is being increasingly recognized and can be an impetus for learning and change. Third, the state cannabis markets social equity licensees are supposed to enter have specific and significant existing structural inequities, beyond the broader ones of the general economy.

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<sup>53</sup> Mikos and Bloomberg, “Legalization without Disruption.” National Association of Insurance Commissioners, “McCarran-Ferguson Act,” [https://content.naic.org/cipr\\_topics/topic\\_mccarranferguson\\_act.htm](https://content.naic.org/cipr_topics/topic_mccarranferguson_act.htm) Accessed 10-24-21.

<sup>54</sup> Note that the McCarran-Ferguson Act was amended in 2021 to repeal antitrust exemptions.

<sup>55</sup> Shaleen Title. “Fair and Square: How to Effectively Incorporate Social Equity Into Cannabis Laws and Regulations.” [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=3978766](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3978766) Accessed 12-13-21.



How, then, would interstate commerce impact state and local social equity efforts? First, consider market dynamics. Some have argued that interstate commerce would benefit entrepreneurs wishing to expand their operations across state lines. While this is undeniably true for some share of licensees, the entry of mega-corporations into the U.S. cannabis market and the accelerated market consolidation MSOs could achieve would likely swamp in the aggregate any benefits that small, minority-owned firms would gain. The fact that some MSOs have viewed insulated state markets as a strategic advantage does not mean that opening those markets would help the majority of small social equity licensees. The economies of scale MSOs already enjoy will be multiplied with cross-state operations.

Second, consider the potential for the Dormant Commerce Clause (DCC) to undermine state and local social equity policies. At a key moment when programs are being established, evaluated, and honed, the DCC could serve to tie programs up in litigation and ultimately invalidate them.

State and local social equity programs need to be scrutinized and held accountable, but they also need adequate time and resources to develop. In January of this year, the executive director of Los Angeles' Department of Cannabis Regulation said that her office was chronically understaffed and underfunded and she was asking the City Council to fund additional staff so that licensing staff could process paperwork, not answer phones.<sup>56</sup> The following month, though, the state's Department of Cannabis Control announced \$100 million in funding for 17 California municipalities to alleviate licensing logjams, some of which Los Angeles intends to use for staff hires.<sup>57</sup> These two items illustrate both the shortfalls of existing programs and the efforts to correct them.

Developing strong social equity policies, including tackling market consolidation within states, is not guaranteed, but opening markets to interstate commerce and the application of the DCC would seriously imperil the chance for success. In a recent statement, New York State Senator Liz Krueger, a co-sponsor of the 2021 law that legalized cannabis in New York, recognized the potential for federal legislation to impact state and municipal equity efforts: "New York State's Adult-Use Cannabis program includes a robust social and economic equity program designed to ensure opportunities for people from communities most impacted by the drug war. I welcome federal action to deschedule and legalize cannabis, but any federal legislation should be crafted in a way that it does not undermine state and local social equity programs by allowing large multi-state operators to dominate the industry. Federal actors must take into account the disproportionate impact of the criminalization of cannabis on Black and Brown communities, and work with states to ensure that we do not replace criminalization with economic exploitation."<sup>58</sup>

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<sup>56</sup> Alexander Nieves. "California's weed market should be flourishing. But bureaucracy is blunting it. The disconnect between city councils' plans and lethargic government operations is hampering what should be a flourishing industry." <https://www.politico.com/news/2022/01/06/californias-weed-market-should-be-flourishing-but-bureaucracy-is-blunting-it-526644> Accessed 2-16-22.

<sup>57</sup> Chris Casacchia. "California localities detail plans to spend \$100 million to fix marijuana licensing logjam." <https://mibizdaily.com/how-california-localities-will-spend-100-million-to-fix-marijuana-licensing-logjam/> Accessed 2-24-22.

<sup>58</sup> Email communication from New York State Senator Liz Krueger to the authors, March 15, 2022.

## IX. Policy Options and Recommendations

First, Congress should suspend the Dormant Commerce Clause to avoid creating regulatory gaps, setting off an economic race to the bottom among states, and undermining the efforts of states and localities to develop an equitable industry with needed local economic benefits. The suspension could be temporary, as proposed by Mikos and Bloomberg. A transition period before nationwide interstate commerce was to commence would allow states to prepare and update their regulatory frameworks. The suspension could also be permanent, as with McCarran-Ferguson and insurance. Absent such Congressional action, business closures, reduced employment, and decreased tax revenue will likely follow in states and localities on the losing end of the emerging national market.

In suspending the DCC, Congress would not only benefit states by protecting the nascent policy experiments now underway.<sup>59</sup> As noted earlier, cannabis legalization involves a broad range of vital issues, including racial justice, strengthening rural economies, public health, environmental protection, and good jobs. Allowing states and localities time to continue and to hone their policies will provide valuable lessons that can inform and strengthen federal policy.

Second, any federal taxation (ad valorem or otherwise) needs to be structured so that it does not impede drawing buyers from the illicit market into the legal one or encroach upon needed state and local revenues. Federal taxation should be limited to that necessary to generate revenue to support investments in equity policies. The Federal government has considerable access to broader revenue streams capable of funding general expenditures.

Third, Congress should provide for monitoring of the impact of federal legalization, regardless of the duration of suspension of the DCC. Because of the potential for federal legalization to significantly affect state markets, a body such as the Government Accountability Office should evaluate impacts, allowing Congress and federal policymakers to make mid-course corrections where necessary. Funds could also be allocated to independent researchers to conduct rigorous evaluations. In particular, attention should be paid to states' equity efforts and policies to promote balanced market structures, ensuring that substantive policy benchmarks are met.

Finally, while federal policy is being formulated, states and localities should draw on the emerging body of research and analysis available to evaluate and strengthen their own equity policies. For example, the Minority Cannabis Business Coalition's National Cannabis Equity Report assesses the current landscape with respect to state-level policy, presenting findings such as the fact that "only six of 15 state social equity programs . . . provide funding to social equity applicants and operators beyond fee reductions and waivers."<sup>60</sup> Shaleen Title's "Fair and Square: How to Effectively Incorporate Social Equity into Cannabis Laws and Regulations" offers policymakers concrete recommendations, such as sequential licensing—

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<sup>59</sup> Mikos and Bloomberg, "Legalization without Disruption."

<sup>60</sup> Minority Cannabis Business Association. MCBA National Cannabis Business Equity Report 2022. <https://minoritycannabis.org/equitymap/> Accessed 2-14-22.

requiring a given number of equity licensee operations to be up and running before other cannabis businesses open—and tying municipal cannabis tax revenue to equity policy goals.<sup>61</sup>

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<sup>61</sup> Shaleen Title, *op. cit.*

## Appendix: State Excise Tax Rates on Recreational Cannabis

STATE	RATE
<b>Alaska</b>	\$50/oz. mature flowers; \$25/oz. immature flowers; \$15/oz. trim, \$1 per clone
<b>Arizona</b>	16% excise tax (retail price)
<b>California</b>	15% excise tax (levied on wholesale at average market rate); \$9.65/oz. flowers & \$2.87/oz. leaves cultivation tax; \$1.35/oz fresh cannabis plant
<b>Colorado</b>	15% excise tax (levied on wholesale at average market rate); 15% excise tax (retail price)
<b>Illinois</b>	7% excise tax of value at wholesale level; 10% tax on cannabis flower or products with less than 35% THC; 20% tax on products infused with cannabis, such as edible products; 25% tax on any product with a THC concentration higher than 35%
<b>Maine</b>	10% excise tax (retail price), \$335/lb. flower; \$94/lb. trim; \$1.5 per immature plant or seedling; \$0.3 per seed
<b>Massachusetts</b>	10.75% excise tax (retail price)
<b>Michigan</b>	10% excise tax (retail price)
<b>Montana</b>	20% excise tax (retail price)
<b>Nevada</b>	15% excise tax (fair market value at wholesale); 10% excise tax (retail price)
<b>New Jersey (c)</b>	Up to \$10 per ounce, if the average retail price of an ounce of usable cannabis was \$350 or more; Up to \$30 per ounce, if the average retail price of an ounce of usable cannabis was less than \$350 but at least \$250; Up to \$40 per ounce, if the average retail price of an ounce of usable cannabis was less than \$250 but at least \$200; Up to \$60 per ounce, if the average retail price of an ounce of usable cannabis was less than \$200
<b>New York (a, d)</b>	\$0.005 per milligram of THC in flower; \$0.008 per milligram of THC in concentrates; \$0.03 per milligram of THC in edibles; 9% excise tax (retail price)
<b>Oregon</b>	17% excise tax (retail price)
<b>Vermont (b)</b>	14% excise tax (retail price)
<b>Washington</b>	37% excise tax (retail price)

(a) As of April 2022, retail sale of recreational cannabis has not yet started.



(b) Vermont expected to begin retail sales of recreational cannabis via existing medical dispensaries May 1, 2022.

(c) Rates were determined as of February 22, 2021.

(d) Rates were determined as of March 30, 2021.

**Note:** District of Columbia voters approved legalization and purchase of cannabis in 2014, but federal law prohibits any action to implement it. In 2018, the New Hampshire legislature voted to legalize the possession and growing of cannabis, but sales are not permitted. Alabama, Georgia, Idaho, Indiana, Iowa, Kansas, Kentucky, Louisiana, Minnesota, Nebraska, North Carolina, South Carolina, Oklahoma, Rhode Island, and Tennessee impose a controlled substance tax on the purchase of illegal products. Several states impose local taxes as well as general sales taxes on marijuana products. Those are not included here.

**Sources:** Tax Foundation and MJBiz Daily. <https://taxfoundation.org/state-recreational-marijuana-taxes-2021/> Accessed 11-29-21 Footnote (a) updated by authors. <https://mjbizdaily.com/more-than-two-dozen-vermont-towns-to-allow-adult-use-marijuana-stores/> Accessed 4-27-22