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Marijuana Legalization and Taxes: Federal Revenue Impact

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Key Findings

- Marijuana tax collections in Colorado and Washington have exceeded initial estimates.
- A mature marijuana industry could generate up to \$28 billion in tax revenues for federal, state, and local governments, including \$7 billion in federal revenue: \$5.5 billion from business taxes and \$1.5 billion from income and payroll taxes.
- A federal tax of \$23 per pound of product, similar to the federal tax on tobacco, could generate \$500 million per year. Alternatively, a 10 percent sales surtax could generate \$5.3 billion per year, with higher tax rates collecting proportionately more.
- The reduction of societal risk in being engaged in the marijuana trade, as well as the inclusion of taxes, will combine to reduce profits (and tax collections) somewhat from an initial level after national legalization.
- Society pays all the costs regardless of legality but tax revenues help offset those costs.

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Revenue Impact of State Legal Marijuana Enactments to Date

Four states and the District of Columbia have legalized the sale of retail marijuana by popular vote, with an additional 25 states permitting medical marijuana or decriminalizing marijuana possession.¹ Beginning in 2011, polls consistently show a majority of Americans supportive of legalizing marijuana,² and a number of states are likely to consider legalization ballot initiatives or legislative measures in the next few years.

In those states that have fully legalized marijuana, revenue collections have exceeded initial estimates. Colorado anticipated \$70 million in marijuana tax collections per year, and after a slow initial start, state collections will likely exceed \$140 million in calendar year 2016.³ In Washington, after a slow start to bring the licensing system online, sales are now averaging over \$2 million a day with revenue possibly reaching \$270 million per year.⁴ If all states legalized and taxed marijuana, states could collectively expect to raise between \$5 billion and \$18 billion per year. While these amounts are not stratospheric, they are considerable and exceed additional enforcement and regulatory costs incurred by the states.

Estimated Revenue Impact of Legal Marijuana

It is estimated that the current size of the marijuana market nationally is \$45 billion per year, approximately 0.28 percent of gross domestic product and comprising some 26 million pounds of marijuana consumed per year.⁵

Federal and state governments have several options for taxes on a legal marijuana industry. A federal excise tax on marijuana similar to that of cigarettes, approximately \$23 per pound of product, would raise approximately \$500 million in additional revenue. A 10 percent sales surtax, similar in nature to those adopted recently by Colorado and other states and proposed in recent legislation by Rep. Earl Blumenauer, would raise approximately \$5.3 billion in additional revenue; higher excise tax rates would raise proportionately more.

Legalization: Colorado (passed 2012, in effect 2014), Washington (passed 2012, in effect 2014), Oregon (passed 2014, in effect 2015), Alaska (passed 2014, in effect 2016), the District of Columbia (passed 2014, non-sales features in effect 2015, sales features on hold due to congressional opposition). Medical marijuana: California (1996), Alaska (1998), Oregon (1998), Washington (1998), Maine (1999), Colorado (2000), Hawaii (2000), Nevada (2000), Montana (2004), Rhode Island (2006), New Mexico (2007), Vermont (2007), Michigan (2008), Arizona (2010), New Jersey (2010), Delaware (2011), the District of Columbia (2011), Connecticut (2012), New Hampshire (2013), Massachusetts (2013), Maryland (2014), Minnesota (2014), New York (2014), Gaum (2014), Georgia (2015), Texas (2015). Decriminalization: Oregon (1973), Alaska (1975), Colorado (1975), California (1976), Maine (1976), Minnesota (1976), Ohio (1976), New York (1977), North Carolina (1977), Mississippi (1978), Nebraska (1979), Nevada (2002), Massachusetts (2009), Maryland (2014), Delaware (2015), Missouri (2017).

² See Gallup, "Illegal Drugs," http://www.gallup.com/poll/1657/illegal-drugs.aspx.

³ See Joseph Henchman, Marijuana Legalization and Taxes: Lessons for Other States from Colorado and Washington, Tax Foundation Special Report (Apr. 20, 2016).

⁴ Id

⁵ Reported marijuana market size is the median of the reported market size from several studies of marijuana consumption within the United States.

Business income from marijuana production would initially raise almost \$5.5 billion in federal revenues and an additional \$1.5 billion in state and local revenues. These revenues are expected to fall as more businesses enter into the market and drive down profit margins. Individual income tax and payroll taxes from labor in the marijuana industry, which would be reported after legalization, contributes \$1.5 billion in federal revenue and an additional \$1 billion in state and local revenues. These revenues are expected to increase as production expands.

At the state level, assuming no black market, state taxes on marijuana similar to Washington and Colorado could increase state's tax revenues by \$13 billion nationally, with an additional \$5 billion from normal sales taxes. If high tax rates or other factors perpetuate the black market, tax collections would be less.

Effect of Legalization on the Marijuana Market

Two economic forces will act on the marijuana market when recreational use is legalized. First, those currently involved in the marijuana trade require a higher return than the rest of the economy due to the high risk of imprisonment, confiscation of capital, and unenforceable contracts. Anecdotal estimates suggests that profit margins need to be 100 percent and can be as high as 1000 percent.⁶ This is considerably higher than profit margins of similar industries, such as the tobacco industry.⁷ Legalizing marijuana will drastically reduce the risk involved in producing marijuana, which reduces the required return to engage in the activity. The lower risk should increase the entrance of new entrepreneurs into the market, which increases supply and forces down prices.

The second force is the inclusion of taxes in the price. Taxes, which are not levied directly in the black market, should have an upward pressure on prices. Many taxes are passed directly to the consumer through higher prices. Marijuana, similar to alcohol and tobacco products, is less sensitive to changes in price than other products. Thus, a tax increase is likely to be passed directly to the consumer. At the same time, when businesses operate in the black market, there is a considerable loss of tax revenue to federal, state, and local governments. These losses are not solely from sales and excise taxes. Business, wage income, and payroll taxes as well as business and licensing fees are also lost.

⁶ Estimates taken from media interviews with marijuana producers in the "Green Triangle" region of California.

⁷ Several study suggest that the tobacco industry has a 22% profit margin of their products sold.

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Using estimates of demand, from domestic and international studies, and the long-run after-tax profit margins from the alcohol and tobacco industries, we estimate that overall taxes should fall from over \$28 billion to just over \$22 billion, assuming that all states implement a 25 percent sales surtax and the federal government has an excise tax similar to that of cigarette. The change in tax revenues is largely from a reduction in business profits as production increases and profit margins fall. In addition, as the price of marijuana falls due to increased production, sales tax revenues should also decrease somewhat.

⁸ Estimated from a survey of the economic literature on price elasticity of marijuana consumption. The estimates are largely generated from studies of drug use within the OECD.