Community Policy Research

Taxing Times | *Issue 1*

UC SANTA BARBARA
Economic Forecast Project

Taxing Times

Community Policy Research

Economic Forecast Project

August 24, 2021

1 Executive Summary

The current cannabis tax system does not fare well in terms of the attributes a tax system should contain. The recommendation from this report is the removal of the cultivation tax and the implementation of an ad valorem tax that would be more efficient and would limit tax evasion, enabling a more effective way to reach the goals of the tax system, such as raising tax revenue to pay for programs mandated by Proposition 64.

2 Introduction

Issues surrounding how to tax and what to tax are subject to immense debate and have continued from time immemorial. A WSJ editorial by Robert Hall and Alvin Rabushka back in 1981 laid the seeds for a book called *The Flat Tax*. Although this Policy Paper concerns taxing a specific good, cannabis, and not about income taxes, some lessons can be learned from it dating back to the forming ouf our country. Here is how the book begins:

> I would repeal the entire Internal Revenue Code and start over.
>
> —Shirley Peterson, Former Commissioner, IRS, August 3, 1994

> It will be of little avail to the people, that the laws are made by men of their own choice, if the laws be so voluminous that they cannot be read, or so incoherent that they cannot be understood; if they be repealed or revised before they are promulgated, or undergo such incessant changes that no man, who knows what the law is today, can guess what it will be tomorrow.
>
> —Alexander Hamilton or James Madison, The Federalist, no. 62

Hall and Rabushka go on to say:

> The federal income tax is a complete mess. It's not efficient. It's not fair. It's not simple. It's not comprehensible. It fosters tax avoidance and cheating. It costs billions of dollars to administer. It costs taxpayers billions of dollars in time spent filling out tax forms.
>
> —The Flat Tax, 2007

Achieving a tax system that is easy to understand, efficient (uses fewer resources to implement) and minimizes tax avoidance is not just a theoretical abstraction. On the income tax side, Hall and Rabushka have designed a "postcard tax form" that is simple and implementable. The California system taxing cannabis, however, possesses many of the flaws of the income tax system. This Policy Paper will first define various tax terms and then will discuss how to streamline the tax on cannabis.

The much-anticipated Senate bill, called the Cannabis Administration and Opportunity Act, that would legalize marijuana at the federal level was released on July 14, 2021. The bill also clarifies that a state may not prohibit the interstate commerce of cannabis transported through its borders for lawful delivery into another state. California is positioned to be the premier producer in the United States. In light of this it seems useful to start immediately to construct and enact a better system. Waiting until the last moment and structuring a haphazrd system will be costly for all parties concerned: cultivators, manufacturers, distributors, consumers and, of course, government tax collection. Indeed, Proposition 64 authorizes the Legislature to amend its tax provisions without voter approval.

In what follows, I borrow from some of the excellent analysis of the California Legislative Analysts Office (LAO).

3 Taxing Terms

The Flat Tax volume concerns *income taxation.* As already pointed out, it is a mess. The idea is to tax personal and business income from all sources. Simple in principle, but due to the complexity of the tax code and loopholes, does a poor job. The code has various brackets that depend on income. Since this paper is about taxing cannabis I leave it to the reader to visit the Flat Tax volume to try and digest the complexities. A lesson learned here is that adding more things to a system that is essentially broken is not likely to lead to simplicity or effiency, i.e., start over.

States and local jurisdictions impose *sales taxes.* These are taxes on the sale of (some) goods and services. Certain items, such as food, may be exempt from the sales tax. Sales taxes are a form of "flat tax" in the everyone in a local jurisdiction pays the same rate. The statewide tax rate is 7.25% and the highest local rate 10.75% as can be seen here from the California Department of Tax and Fee Administration (CDTFA). As we all know, the tax is typically paid at the point of sale, making it easy to record and substantiate.

Excise taxes are taxes on specific goods. The law of demand in economics basically states that if you make something more expensive people will demand less of it. Taxes on cigarettes, alcohol and gasoline are examples. As is well known, excise taxes drive a wedge between what the buyer pays and what the seller receives for a particular product, with the wedge being the tax revenue to the government. Excise taxes are typically imposed to limit a negative externality, such as pollution, or to limit the consumption of a good that society has decided is harmful. For example, if society wishes to discourage the use of cigarettes or fuel consumption, imposing an excise tax will drive up the price and lead to a decrease in the quantity demanded and supplied as shown in Figure 1.

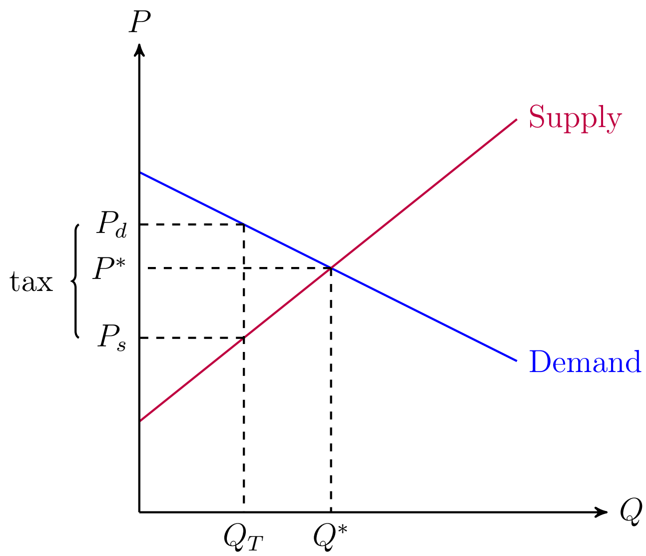

Figure 1: Excise Tax

Without a tax the equilbrium price is given by P^* and the equilibrium demand is Q^*. When a tax (here a per unit tax for simplicity) is imposed the price to the consumer rises from P^* to P_d and the price the seller receives falls from P^* to P_s. Note that the price paid by the consumer did not rise as much as the tax nor did it fall as much as the tax to the supplier. This is known as the incidence of a tax and depends on the slopes of the demand and supply curves. The steeper is the demand curve, say, the more the incidence of the tax is borne by the consumer. That is, the rise in price does not lead to much of a fall in demand. Also note that the quantity exchanged has fallen from Q^* to Q_T. As metioned above, the tax has "discouraged" use of the product. Finally, it does not matter who the tax is placed on, the consumer or the supplier, the result will be the same.

A type of excise tax called an *ad valorem tax* is based on the value of the exchanged good rather than on a per unit of the good. Property taxes are a type of ad valorem tax with the value being an assessed value rather than the exchanged value. The tax you pay rises with the value of the property for a given tax rate.

4 The Current System for Cannabis Taxation

The current tax policy relating to cannabis does not fare well given the objectives outlined above. From the LAO report:

> Proposition 64 established two state excise taxes on cannabis. The first is a 15 percent retail excise tax, effectively a wholesale tax under current law. The second is a tax based on the weight of harvested plants, often called a cultivation tax.
>
> —LAO, 2019

This tax structure almost certainly takes more resources to implement than an ad valorem excise tax, even with a graduated potency tax. A weight-based (cultivation tax) tax must go through a consistent weighing and verification procedure. This tax as well as the retail tax end up being paid to the state or locality by the distributor as the example in Figure 2 from the LAO shows.

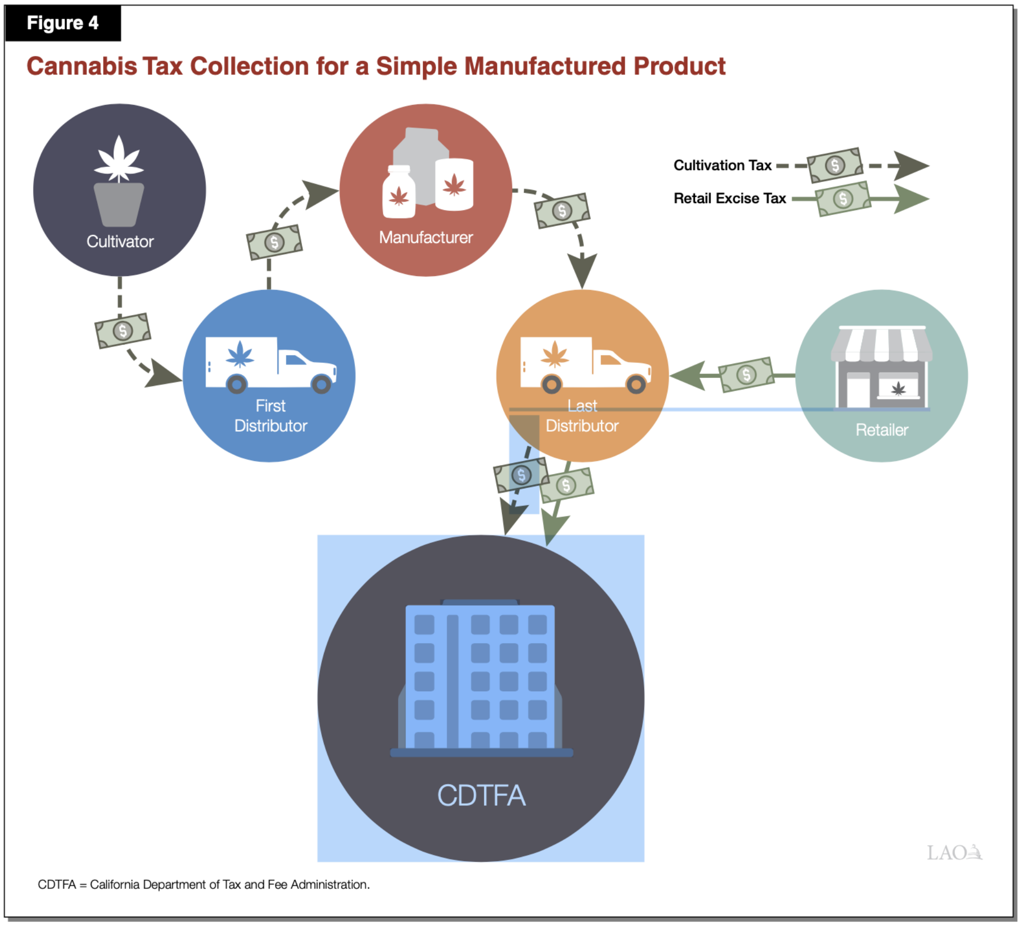

Figure 2: LAO Graph

5 A Streamlined System

In agreement with the LAO report, removing the cultivation tax and applying a tax at the retail point of sale is a much simpler and more efficient system. But what kind of tax? Obviously an ad valorem tax, but here it depends on the preferences of the general public. If the tax is to discourage cannabis use then a simple ad valorem excise tax should be used. If, however, the tax is to discourage high-potency cannabis then a graduated ad valorem excise tax would be the leading candidate. Potency is extensively monitored and labeled on the product. This is also one of the key recommendations of the LOA report. Of course there are many tradeoffs to consider. However, in terms of resources used to implement and collect taxes and the likelihood of avoidance, an ad valorem excise tax at the point of retail sales seems an obvious choice. Since taxing at the retail point of sale is pretty much ubiquitous in the US it is well understood by both retailers and consumers. And, typically, these sales take place in public places so that it becomes more difficult to cheat the system. Note that the taxation of wine does not include a cultivation tax and uses an excise tax at the retail level.

6 Tax Levels

Once the tax system has been efficiently chosen the next step is to determine the level of the ad valorem excise tax rate. Again, there are many points to consider. Given the mandate of Proposition 64 that the revenues from the tax collection should fund the various mandated programs any change in tax policy should generate at least as much revenue as the status quo. That analysis is beyond the scope of this report and will need more analysis, currently underway at the Economic Forecast Project. However, the LAO has investigated various policies and the outcomes can be found in their report. Their report finds that keeping the retail sales tax at 15% and eliminating the cultivation tax would have an equal chance of falling short or exceeding the threshold.

What goals the tax system should focus on is a matter for the voting public. Three key factors should be considered when establishing tax levels: (1) to raise revenue for mandated programs (2) to keep the illicit market from flourishing and (3) to limit tax avoidance. Obviously if the tax rate is too high and prices rise to a very high level then many will switch to the illegal sector. This is similar to a decades old idea from Arthur Laffer who coined the term Laffer Curve. In this context I will coin the "Laugher Curve." The curve in Figure 3 lays out the tax revenue obtained from various tax levels.

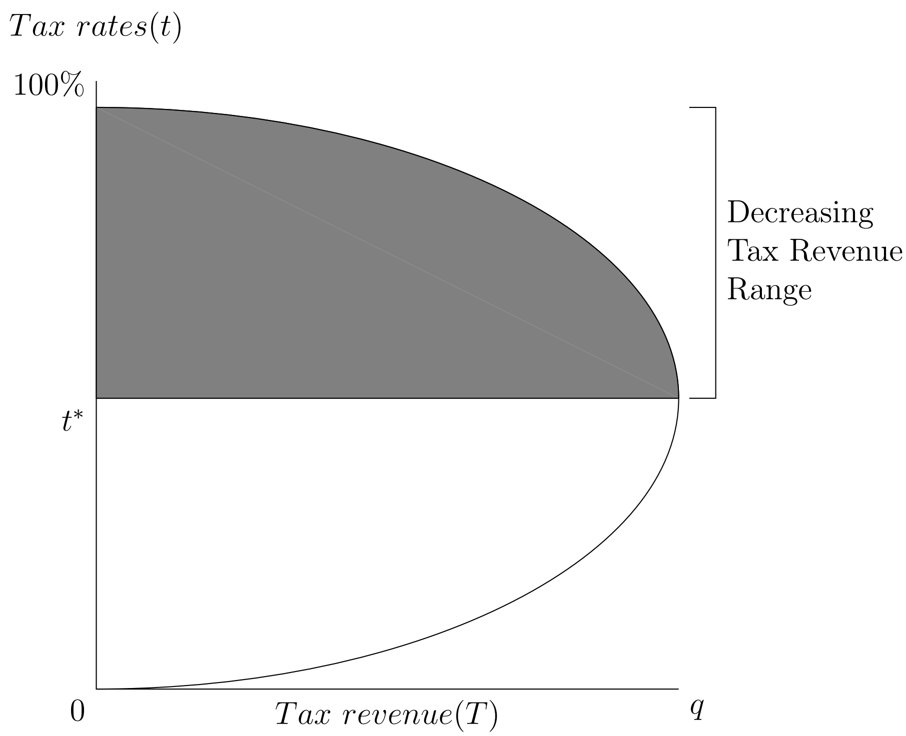

Figure 3: The Laugher curve

Obviously, when the tax rate is 0 there is no tax revenue. As the tax rate is raised slightly consumers continue to buy from the legal market as the price rises but is still below that of the cost of going to the illegal market. As the tax rate keeps rising, more revenue is raised until the tax rate reaches t^*, the point of maximum tax revenue. Further increases in the tax rate drives prices higher that the illegal market and consumers switch to the illegal sector. Note that the consumption may not fall much, just who gets the sale. The decline in legal use will depend on what is known in economics as "elasticity." The term refers to how responsive consumers will be to a change in price. If demand is very elastic it means consumers are more responsive to price. For example, in Figure 1 it would mean the demand curve is less steep and any change in price will lead to a large response by consumers. One reason a demand curve might be very elastic is if there are many substitutes, such as illegal sector cannabis. Unfortunately, there is little quantitative work estimating the movement between the legal and illegal sector.

7 Conclusion with Pros and Cons

The current cannabis tax system does not fare well in terms of the attributes a tax system should contain. The removal of the cultivation tax and the implementation of an ad valorem excise tax would be more efficient and enable a more effective way to reach the goals of the tax system, including curbing the use of high potency strains, raising tax revenue to pay for educational programs and to limit tax avoidance. This system checks more boxes than the current system by a long shot.

The pros and cons of an ad valorem excise tax on cannabis Pros:

- Easy to collect and monitor
- Tax avoidance more difficult
- Curbs the use of high-potency products if potency based

- Fewer retailers than cultivators and distributors leading to fewer points of collection

Cons:

- Ad valorem taxes tend to be more volatile since they are based on current prices and therefore caution should be taken if such taxes are to be part of the general fund.