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State Excise Taxation: Horse-and-Buggy Taxes In an Electronic Age

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Executive Summary

Selective excise taxes are already obsolete, but because government is always slow to change, they will die a slow death. In the meantime they will cause a great deal of harm, both to taxpayers and to the state governments who use them most.

Because many states have raised the cigarette tax rate precipitously during the last 10 years, this particular excise tax is putting on a clinic, so to speak. It is demonstrating to any dispassionate observer that the greater mobility of people and goods, along with instant communication, have made excise taxes obsolete. This is especially true of the cigarette tax because the product is lightweight, compact and highly taxed.

Cigarette excise taxes only function as a predictable, untroublesome tax at a low tax rate. States that have raised their cigarette tax to the point that it is 50 cents per pack higher than a readily available, alternative source are discovering a host of problems:

- Revenue estimates are rarely met, causing budget problems.
- Bonds sold against future master settlement revenues are unattractive except at preposterously high interest rates, and even then they are downgraded by the rating agencies.
- In a replay of Prohibition-era social decay, law-abiding citizens learn to break the law routinely, and states respond by adopting intrusive and sometimes abusive tactics to catch them.
- Organized criminals and terrorist cells begin trafficking in smuggled cigarettes, and the states spend prodigiously to catch them, with almost no success.
- Businesses and jobs, along with their tax revenue on income, sales and property, are lost to interstate competition.

The growth of these destructive consequences brings state governments to a crossroads. In one direction: state governments that use increasingly invasive, threatening, expensive and ultimately futile tactics to enforce high tax rates. In the other direction: innovative, service-oriented state governments that know they must compete with their neighboring jurisdictions, that they are evaluated by citizens according to their willingness to support the services that government offers with tax payments.

Tobacco taxation is a severe form of tax discrimination whose victims reside primarily among the working classes and not professional people. It is tax discrimination against people of modest means for the benefit of the well-to-do.

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Revenues from the master settlement are declining because they are linked to taxable sales that are dropping precipitously because of high state cigarette tax rates. A vicious cycle is created where states react to lower-than-expected revenue with sharp tax increases which, in turn, drive down settlement revenue and make revenue estimates less reliable by pushing smokers to cross state borders for lower-taxed cigarettes or into the underground economy.

The inaccuracy of revenue estimates for tobacco tax hikes obviously creates difficulties for state fiscal planning. That inaccuracy, moreover, will surely grow as the tax rates climb, and the rate of taxed sales is further and further divorced from the rate of tobacco consumption.

Table 1

Percentage Distribution of State Tax Collections by Source
Fiscal Year 2002

State	Individual Income	Corporation Income	General Retail Sales	Selective Excises (a)	State-Level Property Tax	Other Taxes
All States	34.6%	4.8%	33.6%	15.4%	1.8%	9.8%
Alabama	31.2%	5.0%	26.9%	25.1%	3.0%	8.9%
Alaska	–	24.7	–	13.0	4.6	57.7
Arizona	24.7	4.1	50.5	12.6	3.9	4.2
Arkansas	29.9	3.4	37.3	13.4	9.3	6.7
California	42.5	6.9	30.6	8.9	2.5	8.7
Colorado	50.2%	3.0%	27.5%	13.5%	–	5.9%
Connecticut	40.8	1.7	33.7	16.3	–	7.6
Delaware	33.0	11.6	–	14.9	–	40.6
Florida	–	4.9	58.1	18.2	1.8%	17.1
Georgia	47.1	4.1	35.1	8.6	0.4	4.7
Hawaii	32.5%	1.6%	47.1%	14.8%	–	4.0%
Idaho	37.1	3.4	35.0	14.1	–	10.4
Illinois	31.0	9.2	28.6	20.8	0.3%	10.3
Indiana	34.7	7.0	37.2	15.9	0.1	5.1
Iowa	35.3	1.8	34.9	15.8	–	12.2
Kansas	38.6%	2.5%	37.4%	13.2%	1.1%	7.2%
Kentucky	33.6	3.8	29.0	17.9	5.5	10.2
Louisiana	24.3	3.6	31.6	25.4	0.5	14.6
Maine	40.9	2.9	31.8	15.3	1.8	7.3
Maryland	43.5	3.3	24.9	18.6	2.5	7.3
Massachusetts	53.4%	5.5%	24.9%	10.2%	0.0%	6.0%
Michigan	28.0	9.4	35.6	10.5	8.7	7.8
Minnesota	42.1	4.2	28.9	15.7	0.1	9.1
Mississippi	20.8	4.1	49.5	17.8	0.0	7.7
Missouri	41.4	3.4	32.7	14.7	0.2	7.5
Montana	35.9%	4.7%	–	25.7%	12.6%	21.1%
Nebraska	38.5	3.6	35.7%	14.6	0.2	7.4
Nevada	–	–	52.5	32.1	2.9	12.6
New Hampshire	3.7	19.9	–	31.9	26.5	18.0
New Jersey	37.3	6.0	32.7	15.2	0.0	8.8
New Mexico	27.1%	3.4%	36.9%	13.4%	1.5%	17.8%
New York	59.1	5.2	19.9	10.4	–	5.3
North Carolina	46.8	4.3	24.1	18.2	–	6.7
North Dakota	17.9	4.5	30.1	25.4	0.1	22.0
Ohio	41.4	3.8	31.8	14.6	0.1	8.4
Oklahoma	37.8%	2.9%	25.3%	12.3%	–	21.8%
Oregon	71.2	3.8	–	12.6	0.5%	12.0
Pennsylvania	30.4	5.4	33.1	16.3	0.2	14.5
Rhode Island	38.7	1.3	34.4	20.2	0.1	5.4
South Carolina	34.0	3.8	40.6	14.3	0.2	7.1
South Dakota	–	4.2%	53.5%	26.0%	–	16.3%
Tennessee	1.9%	6.5	60.0	17.6	–	14.1
Texas	–	–	50.8	31.5	–	17.7
Utah	40.9	2.8	38.2	13.3	–	4.7
Vermont	26.9	2.4	14.2	23.4	25.8%	7.4
Virginia	52.5%	2.4%	21.9%	15.5%	0.2%	7.5%
Washington	–	–	62.6	16.2	11.5	9.7
West Virginia	29.1	6.2	27.1	27.0	0.1	10.5
Wisconsin	42.1	3.8	31.3	14.7	0.8	7.4
Wyoming	–	–	40.7	9.0	13.2	37.2

(a) Includes collections on motor fuels, alcohol, tobacco, insurance, utilities, pari-mutuels, and other specific products and services.
Note: Percentages don't always add across to 100 percent due to rounding.
Source: Calculated from Table E29, Tax Foundation, *Facts & Figures on Government Finance*, 38th edition.

Introduction

One famous old saying asserts that "an old tax is a good tax." If so, selective excise taxes must be particularly good taxes, as they have been around at least since the 16th century.[1] An accumulating body of evidence, however, shows this old saying sometimes to be wrong.

Excise taxation originated when people walked or rode on horseback, when rides in a stagecoach were luxuries, when people sent letters by post, and when the typical economic transaction involved the transfer of some material and often bulky item. In the face of instant communication, rapid transportation, and the expanding importance of services and non-material capital, excise taxes are becoming obsolete. The most obvious symptom of this obsolescence is the growing problems of compliance and enforcement. While excise taxes raise a modest amount of revenue, they also cause kidnappings and even murders, encourage organized crime, and divert law enforcement away from more productive activities. The modern age of fast travel and instant communication has made this 16th century tax practice increasingly obsolete.

Since the development of broad-based taxes on income and sales in the first third of the 20th century, excise taxes have receded in overall fiscal significance. They simply cannot generate the huge volume of revenue that is required to fuel the machinery of today's large governments. On a nationwide basis, states now derive about two-thirds of their tax revenue from their taxation of individual incomes and retail sales. As Table 1 shows, all but seven states impose a tax on individual income while all but five states impose a tax on retail sales, and only Alaska, with its huge revenues from severance fees on mineral deposits, taxes neither. In contrast, selective excise taxes provide less than one-sixth of state tax revenue nationwide. In only nine states do selective excise taxes provide 25

[1] For splendid examinations of tax history, see Charles Adams (1993) and Carolyn Webber and Aaron Wildavsky (1986).

percent or more of state tax revenue; three of those are states without an income tax (Nevada, South Dakota, and Tennessee) and two are states without a retail sales tax (Montana and New Hampshire). To be sure, for large governments even small percentages can represent significant totals. For fiscal 2002, all states combined raised over $82 billion from selective excise taxes. Texas led the states, collecting just over $9 billion through selective excise taxes. Even Wyoming, which collected the least, still collected over $98 million.[2]

The taxation of gasoline is far and away the largest source of excise tax revenue. Nationwide, it generates nearly 40 percent of all state excise tax revenue, which in turn is six percent of total state tax revenue. As Table 2 shows, there were four states where the gasoline tax raised more than ten percent of state tax revenue, while there was only one state where it raised less than two percent. The next two most significant excise taxes, those on tobacco and on alcohol, are fiscally anemic in comparison. The combined revenues collected by these two taxes were only 2.5 percent of total state tax collections nationwide. There were only nine states where tobacco taxes provided at least two percent of state tax revenue. There were only four states where alcohol taxes did this.

A look inside the category of "other excises" in Table 2 illustrates the narrow, penny-ante character of most excise taxes. This category is a hodgepodge of numerous excise taxes on all kinds of commercial transactions. It shows that the imposition of a large number of small taxes can eventually collect a large amount of revenue. Among the larger items in this category are taxes on insurance, utilities, and pari-mutuel betting. An examination of state tax codes, however, shows a huge number of such excise taxes, each of which typically generates a small amount of revenue. Some examples of such excise taxes include those on the sale of tires, on the disposal of tires, on amusement machines, on the rental of personal property, on cell phones, on billboard advertising, on egg containers, on fish feed, on solid waste disposal, on bingo games, on coin-operated Laundromats, on car rentals, on boat rentals, on syrup for carbonated beverages, on trading stamps, on mobile homes, and on hotel and motel rooms, to give just a few illustrations.

This study includes a short primer on selective excise taxation, and a discussion of the dual nature of excise taxes. In some cases excise taxes are reasonable ways of charging the users of governmental services for their usage; in other cases they are instruments of tax discrimination, in that they enable those who are politically influential to shift some of what would otherwise be their tax burdens onto those who lack their political influence. The gas tax,

Table 2

Selective Excise Tax Collections by State, as a Percentage of Total Tax Revenue Fiscal Year 2002

State	All Selective Excises	Gasoline Taxes	Alcohol Taxes	Tobacco Taxes	Other Excises
All States	15.4%	6.0%	0.8%	1.7%	6.9%
Alabama	25.1%	7.9%	2.0%	1.0%	14.3%
Alaska	13.0	3.7	1.2	4.2	4.0
Arizona	12.6	7.4	0.6	1.9	2.7
Arkansas	13.4	7.9	0.6	1.8	3.2
California	8.9	4.2	0.4	1.4	2.8
Colorado	13.5%	8.2%	0.5%	1.0%	3.9%
Connecticut	16.3	4.7	0.5	1.8	9.4
Delaware	14.9	5.0	0.5	1.3	8.1
Florida	18.2	7.3	2.2	1.9	6.8
Georgia	8.6	4.7	1.1	0.7	2.2
Hawaii	14.8%	2.3%	1.1%	1.9%	9.4%
Idaho	14.1	9.4	0.3	1.3	3.2
Illinois	20.8	6.1	0.6	2.1	12.0
Indiana	15.9	7.3	0.4	1.2	7.1
Iowa	15.8	6.9	0.3	1.9	6.8
Kansas	13.2%	7.8%	1.7%	1.1%	2.5%
Kentucky	17.9	5.8	0.9	0.2	11.0
Louisiana	25.4	7.6	0.7	1.8	15.3
Maine	15.3	7.3	1.6	3.6	2.8
Maryland	18.6	6.5	0.2	1.9	9.9
Massachusetts	10.2%	4.5%	0.4%	1.9%	3.4%
Michigan	10.5	5.0	0.6	3.1	1.8
Minnesota	15.7	4.8	0.4	1.3	9.1
Mississippi	17.8	8.7	0.8	1.2	7.1
Missouri	14.7	7.9	0.3	1.2	5.3
Montana	25.7%	13.3%	1.3%	0.9%	10.2%
Nebraska	14.6	10.3	0.6	1.5	2.2
Nevada	32.1	6.7	0.4	1.6	23.4
New Hampshire	31.9	6.3	0.6	4.4	20.6
New Jersey	15.2	2.9	0.4	2.2	9.7
New Mexico	13.4%	5.5%	1.0%	0.5%	6.4%
New York	10.4	1.1	0.4	2.3	6.6
North Carolina	18.2	7.8	1.3	0.3	8.8
North Dakota	25.4	9.9	0.5	1.9	13.1
Ohio	14.6	6.8	0.4	1.4	6.0
Oklahoma	12.3%	6.8%	1.1%	1.2%	3.3%
Oregon	12.6	7.7	0.3	3.4	1.2
Pennsylvania	16.3	7.9	0.9	1.4	6.1
Rhode Island	20.2	6.1	0.5	3.9	9.7
South Carolina	14.3	7.2	2.2	0.5	4.5
South Dakota	26.0%	12.6%	1.1%	1.9%	10.3%
Tennessee	17.6	10.5	1.0	1.1	5.0
Texas	31.5	9.9	2.0	1.9	17.7
Utah	13.3	8.6	0.7	1.3	2.8
Vermont	23.4	4.7	1.0	1.8	15.9
Virginia	15.5%	6.6%	1.0%	0.1%	7.7%
Washington	16.2	5.9	1.4	2.6	6.3
West Virginia	27.0	8.5	0.2	0.9	17.4
Wisconsin	14.7	8.1	0.4	2.6	3.6
Wyoming	9.0	6.9	0.1	0.5	1.6

Note: Percentages don't always add across to 100 percent due to rounding.
Source: Calculated from Tables E29, 38, E40, and E41, Tax Foundation, *Facts & Figures on Government Finance*, 38th edition.

[2] These magnitudes are presented in Table E29 of the Tax Foundation's *Facts and Figures on Government Finance*, 38th edition.

for instance, appears to be a generally reasonable way of charging road users for their usage. In contrast, many of the other excise taxes, led by those on tobacco products, are best described as a means of tax discrimination: those who have the votes shift some of their taxes onto the minority. The desire to gain through tax discrimination collides with the desire to avoid being victimized by tax discrimination, and this collision generates many of the socially destructive consequences of selective excise taxation that have been intensifying in our time.

The growth of these destructive consequences brings us to a fork in the road. One branch of that fork points in a traditional direction: ever-intensifying efforts to enforce obsolete tax laws with increasingly invasive, snooping, and threatening tactics. The innovative branch of that fork points toward a genuine reinvention of government, where service-oriented governments are evaluated by citizens according to their willingness to support the services that government offers. By following this innovative branch, governments and their means of finance would move into the 21st century world of instantaneous communication, a service-oriented economy, largely open borders, and a hugely shrunken world. The exploration of these forks proceeds by examining the political economy of selective excise taxation, giving particular reference to the taxation of tobacco products, though the principles that are put in play there apply to excise taxation in general.

A Primer on Selective Excise Taxation

Excise taxes are imposed on particular transactions as they occur. The general tax on retail sales, which is used in all but five states, is an excise tax, just as are selective excise taxes on tires or cell phones. The distinction between the two forms of excise tax lies in the breadth of the transactions that are taxed. A retail sales tax will tax most if not all of the items that someone buys in such a retail outlet as a hardware store or a department store. A retail sales tax is often described as a broad-based tax, to indicate that tax liability accrues broadly in non-discriminatory fashion across some wide range of transactions. To be sure, in no state is a retail sales tax truly general and non-discriminatory. There are many categories of transaction that states exclude from their retail sales taxes, and with the details of those exclusions differing among states. Some of the major types of excluded transactions include the purchase of such personal services as legal counsel and lawn care, the purchase of prescription drugs, and the purchase of groceries. While these exclusions obviously discriminate among transactions in the assignment of tax liability, the retail sales tax nonetheless applies uniformly across what is still a relatively broad range of transactions.[3]

In contrast, a selective excise tax picks out particular transactions to tax. Tax discrimination and not tax uniformity is the key feature of selective excise taxation, for only precisely targeted transactions are taxed. Furthermore, states typically impose their retail sales taxes on top of their selective excise taxes. Hence, an excise tax will first be imposed on a tire or a bottle of wine, on top of which a sales tax is imposed when that tire or wine is bought.

With rare exception, any tax on something will induce people to reduce the amount they buy. That reduction can occur in different ways, some of which impose high costs on the rest of society. That reduction can occur passively, as when people replace wine with grape juice or sparking water. Often, that reduction will occur in a more active manner, as when people seek to buy the same products while escaping the tax. There are several ways people can do this. They can travel to another state to buy where the tax is lower. They can use the internet to accomplish the same end. They can buy smuggled and counterfeit products within the underground economy. Of course, this is not a reduction in demand for cigarettes in the same way that demand for wine is reduced when a wine drinker substitutes grape juice, but it is a reduction in demand for taxed cigarettes. The higher the excise tax, the more strongly it drives commercial activity underground and promotes smuggling and organized crime. Within this underground economy, moreover, commercial disputes can be resolved only through violence that often snares innocent bystanders in the crossfire.

The effect of tax discrimination on taxpayer psyche cannot be ignored in thinking about different forms of taxation. Most taxpayers surely recognize the essential truth in Justice Holmes' famous dictum that taxes are the prices we pay for civilization.[4] We choose to tax ourselves because we secure valued public

[3] See the treatment of uniformity and discrimination in James Buchanan and Roger Congleton (1998).

[4] For an extended commentary on this dictum, see Richard Wagner (1998).

services in return. A selective excise tax is generally something different. With rare exceptions, people on whom excise taxes are imposed are not receiving public services in return. A broad-based tax treats taxpayers in a uniform manner. A retail sales tax asks people to make the same contribution to the support of government regardless of the particular items they choose to buy. In sharp contrast, a selective excise tax discriminates among taxpayers according to what they choose to buy. The victims of excise tax discrimination are forced to finance lower tax payments for those taxpayers who choose to buy things that aren't taxed. People may well recognize that a retail sales tax is a reasonable way of supporting the general activities of a state, while at the same time recognizing that a tax on wine is just a way to victimize wine drinkers for the benefit of people who don't drink wine. There are many people who will think it is wrong to escape a broad-based tax that everyone pays, and yet they see nothing wrong in escaping a discriminatory tax that only they are asked to pay. Tax administration and collection becomes particularly troublesome in a setting where the fiscal psyches of many people tell them that escaping a selective excise tax is not wrong but smart.[5]

Excise Taxes for Charging Users: Gasoline Taxation

There are cases where an excise tax can resemble a market price, in that it represents a way of charging consumers for the services they receive from government. The contract between the tenants of a shopping mall and the owner might express the rent as a percentage of sales. A rent that is expressed as, say, two percent of sales, looks a lot like a sales tax of two percent. Yet the rent is not a tax but rather is a particular form of market price. The mall owner provides a variety of services that make the mall a more attractive place for tenants to locate and customers to shop, and for which sales volume by individual merchants seems to be a reasonable indicator of individual tenant shares in the value created by the owner's provision of service. Those services might include such things as parking, maintenance, special exhibitions, and child-care for customers. Furthermore, tenants can choose whether to locate in any particular mall, and the pricing arrangements offered by an owner must be sufficiently competitive to attract tenants who can always locate elsewhere.

While the gasoline tax is classified as just one selective excise tax among many, it can reasonably be placed in a category of its own as a form of user charge. To the extent revenues from gasoline taxes are earmarked for the construction and maintenance of roads, the gasoline tax is an indirect method of charging road users for their usage. A driver whose car gets 20 miles per gallon is effectively paying one cent per mile for road usage, provided gas is taxed at 20 cents per gallon. A program that earmarked gasoline tax revenues for roads would thus be an indirect way of charging people for their use of roads. A gas tax is thus a close substitute to tolls as a method of charging road users for their usage.

Table 3

Percentage of Smokers Among U.S. Adults

Year	Percentage
1965	42.4%
1970	37.4%
1974 (a)	37.1%
1980	33.2%
1985	30.1%
1990	25.5%
1995	24.7%
2000	23.3%
2003	22.5%

(a) Data was presented by source for 1974 and not 1975.
Source: National Center for Chronic Disease Prevention and Health Promotion.

While these two methods of finance would be equivalent as a first approximation, a closer examination reveals some significant differences between indirect pricing through a gasoline tax and direct pricing through tolls.[6] For one thing, roads are not financed exclusively by gasoline taxes, nor are gasoline taxes used exclusively for roads. Furthermore, cars that make the same usage of roads can pay different prices because of differences in fuel consumption. A car that gets 40 miles per gallon will pay half the tax for the same road usage as a car that gets 20 miles per gallon. Moreover, a gasoline tax cannot deal with peak-load congestion. When peak-load congestion is present, drivers impose congestion costs on each other that are in addition to the gasoline taxes they pay. Direct pricing through tolls can charge higher prices during periods of peak-congestion, which, in turn, will reduce

[5] See the fascinating and valuable treatment of these kinds of themes in Wilson and Herrnstein (1985).

[6] For a collection of essays that examine the often large divergence between principle and practice in the earmarking of selective excise taxes, see Richard Wagner (ed.) (1991).

congestion by inducing some people to shift their road usage to off-peak periods.

While the gasoline tax does not allow for its indirect road charges to vary by time of day and congestion, the relatively close connection it creates between paying tax and receiving service still distinguishes it from most of the other selective excise taxes. The gasoline tax is not genuinely an instrument of fiscal discrimination, for someone who only walked or traveled by subway would pay no gasoline tax to build and maintain roads that only other people used. To be sure, the gasoline tax may well have become a relatively inefficient instrument. Recent technological developments have made it relatively inexpensive to install systems that would allow for road usage by individual vehicles to be measured just as individual usage of electricity is now measured.[7] Governments almost invariably lag in adopting new technologies, but eventually tax systems will adapt.

Table 4

State Cigarette Tax Rates Per Pack
Fiscal Years Ending June 30

State	1970	1980	1990	1995	2000	2003
Alabama	12¢	12¢	16.5¢	16.5¢	16.5¢	16.5¢
Alaska	8	8	16	29	100	100
Arizona	10	13	15	18	58	118
Arkansas	12.25	17.75	21	31.5	31.5	59
California	10	10	35	37	87	87
Colorado	5¢	10¢	20¢	20¢	20¢	20¢
Connecticut	16	21	40	47	50	151
Delaware	11	14	14	24	24	24
Florida	15	21	24	33.9	33.9	33.9
Georgia	8	12	12	12	12	12
Hawaii	8¢	14¢	33¢	60¢	100¢	130¢
Idaho	7	9.1	18	18	28	57
Illinois	12	12	20	44	58	98
Indiana	6	10.5	15.5	15.5	15.5	55.5
Iowa	10	13	31	36	36	36
Kansas	8¢	11¢	24¢	24¢	24¢	79¢
Kentucky	2.5	3	3	3	3	3
Louisiana	8	11	16	20	20	36
Maine	12	16	28	37	74	100
Maryland	6	10	13	36	66	100
Massachusetts	12¢	21¢	26¢	51¢	76¢	151¢
Michigan	11	11	25	75	75	125
Minnesota	13	18	38	48	48	48
Mississippi	9	11	18	18	18	18
Missouri	9	9	13	17	17	17
Montana	8¢	12¢	16¢	18¢	18¢	70¢
Nebraska	8	13	27	34	34	64
Nevada	10	10	20	35	35	35
New Hampshire	7	12	17	25	52	52
New Jersey	14	19	27	40	80	150
New Mexico	12¢	12¢	15¢	21¢	21¢	21¢
New York	12	15	33	56	111	150
North Carolina	2	2	2	5	5	5
North Dakota	11	12	27	44	44	44
Ohio	10	15	18	24	24	55
Oklahoma	13¢	18¢	23¢	23¢	23¢	23¢
Oregon	4	9	27	38	68	128
Pennsylvania	18	18	18	31	31	100
Rhode Island	13	18	27	56	71	132
South Carolina	6	7	7	7	7	7
South Dakota	12¢	14¢	23¢	23¢	33¢	53¢
Tennessee	13	13	13	13	13	20
Texas	15.5	18.5	26	41	41	41
Utah	8	10	23	26.5	51.5	69.5
Vermont	12	12	17	20	44	93
Virginia	2.5¢	2.5¢	2.5¢	2.5¢	2.5¢	2.5¢
Washington	11	16	34	56.5	82.5	142.5
West Virginia	7	17	17	17	17	55
Wisconsin	14	16	30	38	59	77
Wyoming	6	8	8	12	12	12
District of Columbia	4¢	13¢	17¢	65¢	65¢	100¢

Source: Orzechowski, William, Ph.D. and Robert C. Walker, *The Tax Burden on Tobacco*, vol. 38. Arlington, VA: Orzechowski & Walker, Table 7.

Excise Taxes for Fiscal Discrimination: Tobacco Taxation

Most selective excise taxes are not about charging the users of governmentally provided services directly for their usage, but are methods of discriminating against some taxpayers in favor of others. The dedication of excise tax revenues for specific purposes is a growing fiscal practice. This practice gives the appearance not simply of raising taxes but of charging users for particular services, similar to the connection between gasoline taxes and road usage. In most cases, however, this analogy between a dedicated excise tax and a user charge fails because there is no connection between tax paid and service received.

For example, Louisiana increased its cigarette tax from 24 cents a pack in 2002 to 36 cents in 2003. It also proposed, according to HB157, to dedicate this 12-cent increase to a variety of specific uses. Three cents was dedicated to the Louisiana Cancer Research Center for general purposes, with another 2.04 cents dedicated to a smoking prevention program. That program was to be focused on mass media, and came with a requirement that part of the program operate through Southern University. Another 1.96 cents was dedicated to the Health Science Center at the Shreveport branch of Louisiana State University. Two cents per pack was dedicated to the Louisiana Department of Public Safety. The remaining three cents was divided equally among a Drug Abuse Resistance Program, the Louisiana Office of Addictive Disorders, and the Southern University Agricultural Research and Extension Center (in conjunction with the Louisiana State University Agricultural Center).

Programs that otherwise would have to be financed through the general budget are financed instead by a 12-cent per pack increase in

[7] See, for instance, Gabriel Roth (1996).

the cigarette tax. The dedication of cigarette tax revenues in this instance has nothing to do with charging people for their use of governmental services, and everything to do with creating a successful coalition of supporters who would gain from enactment of the measure.

It is, of course, sometimes claimed that tobacco taxes are a method of charging smokers for costs that they impose on nonsmokers. If this claim were true, a tax on cigarettes might operate like the gasoline tax in charging the users of services for their usage. This claim, however, is false. It is true that smokers have lower life expectancy on average than nonsmokers. One observation that is consistent with this finding is that smokers of the same age will incur higher medical care costs than nonsmokers, on average. Another equally consistent observation is that smokers will receive lower claims under Social Security and Medicare than nonsmokers, on average, because of their lesser life expectancy. When the two considerations are joined, it becomes clear that smokers do more than pay their own way, for they also support nonsmokers. This finding has been reported in such sources Robert Tollison and Richard Wagner (1988, 1992), Willard Manning et al. (1989), Kip Viscusi (1992), and Jane Gravelle and Dennis Zimmerman (1994). There is no authoritative academic support for the notion that tobacco taxes can be treated as a variation on the gasoline tax principle of charging users for their usage of publicly provided services.

Tobacco taxes, like many of the other selective excise taxes, are instruments of tax discrimination. That discrimination, moreover, has intensified as the fraction of U.S. citizens who smoke has shrunk. Table 3 shows that 42.4 percent of adult Americans were smokers in 1965. By 2003, that percentage had declined nearly in half, to 22.5 percent. Table 3 also shows that this decline, while continual, has slowed in recent years. There is also a considerable variation among states in the percentage of adults who smoke. In 2003, the percentage was highest in Kentucky, where 32.4 percent of adults were estimated to be smokers. The lowest percentage was in Utah, where only 12.7 percent of adults were estimated to be smokers. There were five states where smoking was more than 2.5 percentage points below the nationwide average: these were California, Connecticut, Massachusetts, New Jersey, and Utah. There were 13 states where smoking was more than 2.5 percentage points above the nationwide average: these were Alaska, Arkansas, Indiana, Kentucky, Mississippi, Missouri, Nevada, North Carolina, Ohio, Oklahoma, South Carolina, Tennessee and West Virginia.

As the prevalence of smoking among the adult population has declined over the past half-century, statutory tax rates have risen, as Table 4 shows. In 1970, the highest tax was Pennsylvania's tax of 18 cents per pack. By

Table 5

Tobacco Settlement Payments Received, by State
Fiscal Years Ending June 30
($Thousands)

State	2000	2001	2002	2003
United States	$12,062,810	$ 8,229,612	$ 9,278,619	$ 8,030,265
Alabama	$ 131,736	$ 96,961	$ 118,630	$ 109,219
Alaska	27,942	21,176	24,251	23,073
Arizona	120,318	87,670	107,033	99,606
Arkansas	69,407	51,365	58,819	55,961
California	1,031,055	759,226	926,913	862,593
Colorado	$ 112,193	$ 85,026	$ 97,374	$ 92,643
Connecticut	149,965	110,430	134,821	125,465
Delaware	31,945	23,523	28,719	26,726
Florida	674,400	731,300	591,300	546,500
Georgia	200,876	152,235	174,344	165,87
Hawaii	$ 48,617	$ 35,800	$ 43,707	$ 40,674
Idaho	29,730	22,531	25,803	24,549
Illinois	380,981	288,675	330,598	314,536
Indiana	166,940	106,516	144,890	137,851
Iowa	71,175	53,940	61,774	58,772
Kansas	$ 68,339	$ 51,708	$ 59,217	$ 56,340
Kentucky	142,261	104,957	127,894	119,020
Louisiana	184,581	139,998	160,201	152,418
Maine	62,965	47,268	54,648	51,993
Maryland	184,998	140,203	160,614	152,762
Massachusetts	$ 326,256	$ 240,246	$ 293,309	$ 272,956
Michigan	351,536	258,852	316,037	294,106
Minnesota	785,511	336,997	368,600	152,905
Mississippi	479,381	211,149	209,029	149,605
Missouri	190,657	142,110	161,568	153,718
Montana	$ 34,763	$ 26,248	$ 30,171	$ 28,705
Nebraska	48,694	36,903	42,262	40,209
Nevada	49,918	37,831	43,325	41,220
New Hampshire	54,501	43,304	47,302	45,004
New Jersey	317,900	239,847	274,678	261,333
New Mexico	$ 48,809	$ 36,990	$ 42,362	$ 40,304
New York	1,030,898	754,340	926,773	862,463
North Carolina	188,394	142,729	169,370	157,617
North Dakota	29,955	22,702	25,999	24,735
Ohio	412,275	312,446	357,822	340,437
Oklahoma	$ 84,799	$ 64,266	$ 73,598	$ 70,023
Oregon	92,704	68,264	83,343	77,559
Pennsylvania	322,321	341,835	417,335	388,375
Rhode Island	58,835	44,589	51,066	48,584
South Carolina	96,275	72,961	83,558	79,498
South Dakota	$ 28,558	$ 21,643	$ 24,786	$ 23,582
Tennessee	202,952	151,394	173,380	164,957
Texas	2,236,755	974,221	1,002,821	499,993
Utah	36,410	27,594	31,601	30,066
Vermont	33,214	24,458	29,860	27,788
Virginia	$ 167,348	$ 126,823	$ 145,241	$ 138,185
Washington	168,041	127,351	145,846	138,760
West Virginia	72,549	54,982	62,967	59,907
Wisconsin	167,373	123,249	150,470	140,029
Wyoming	20,060	14,772	18,035	16,783
District of Columbia	$ 34,747	$ 37,998	$ 44,556	$ 44,285

Source: Orzechowski, William, Ph.D. and Robert C. Walker, *The Tax Burden on Tobacco*, vol. 38. Arlington, VA: Orzechowski & Walker, Table 19.

1980, nine states had cigarette taxes of at least 18 cents per pack, with the highest taxes belonging to Florida and Massachusetts at 21 cents per pack. In 1990, Connecticut had the highest cigarette tax at 40 cents per pack, but that would be one of the lowest rates today. Since 1990 cigarette tax rates have skyrocketed, and in 2003, 33 states had taxes higher than 40 cents per pack, and that does not count the implicit tax liability entailed by the master settlement.[8] While Connecticut and Massachusetts tied for the highest tax at $1.51 per pack, New Jersey and New York were close behind at $1.50. New York City, moreover, imposed its own cigarette tax of $1.50 per pack. Since 2003, the pace of tax increases has not slackened, and three states entered 2005 with cigarette tax rates of at least $2.00 per pack, not counting local government taxes.

Tobacco taxation is a severe form of tax discrimination whose victims reside primarily among the working classes and not professional people. It is tax discrimination against people of modest means for the benefit of the well-to-do. People who work in various blue collar occupations smoke much more heavily than people who work in white collar and professional occupations. Among predominately male occupations, Sterling and Weinkam (1976) reported that 54.6 percent of auto mechanics smoked while only 30.3 percent of lawyers smoked (at a time when nationwide smoking prevalence was about 37 percent). Among predominately female occupations, Sterling and Weinkam reported that 38.4 percent of nurses smoked while only 16.4 percent of librarians smoked. At a more aggregate level of data, the National Center for Chronic Disease Prevention and Health Promotion (www.cde.gov/tobacco/) reports that in 1985, when 30.1 percent of adults were estimated to smoke, 39.7 percent of blue collar workers smoked while only 27.5 percent of white collar workers smoked.

Tobacco taxes obviously hit blue collar workers more severely than they hit white collar and professional workers. If tobacco taxes were expressed as a share of the income earned by taxpayers, the rate of tax would rise as income declined. A summary provided by the Tax Foundation for 2002 (www.taxfoundation.org/excisesbyincomefed.html), for instance, showed that the federal tobacco tax (which is low relative to the tax imposed by many states) struck ten times as heavily on someone who earns less than $20,000 annually than it struck at someone who earns over $75,000. For an intensely discriminatory tax that lowers taxes for the well-to-do, one would expect the victims of that discrimination to be open to avenues of escape.

The Tobacco Settlement: Tax Farming Resurrected

A practice called tax farming has been traced back at least 4,000 years to ancient Mesopotamia. Real farmers raised food from their lands. Tax farmers raised revenue from the people who inhabited those lands. The central idea of tax farming was the same everywhere despite considerable local variation. A ruler wants to extract revenue from his subjects, and hires someone to do this. Typically a tax farmer would be awarded a monopoly to harvest taxes from a particular area, and would retain part of what he was able to extract. Tax farming has long been thought to be a tool of autocracy, for subjects were liable for whatever the tax farmer was able to take from them. A tax farmer was not concerned about notions of fairness or rules of law, and was concerned only to satisfy himself and his ruler. Within a democracy, tax liability should be assigned by the legislature, but the tobacco settlement represents the intrusion of this ancient autocratic practice into contemporary America. The master tobacco settlement reached in 1998 is surely a modern form of tax farming. That settlement was equivalent to a rough doubling of state tax rates. For instance, state tobacco tax collections at the time were about $8 billion annually, while the settlement was estimated to bring in around $10 billion. What makes the analogy with tax farming complete is that the lawyer-tax farmers were able to keep many billions of dollars for themselves.

In 1998 the four largest tobacco companies, Philip Morris (now Altria), RJ Reynolds, Lorillard, and Brown & Williamson, settled suits with 46 states. When this settlement is added to the suits that had previously been settled with Florida, Minnesota, Mississippi and Texas, the aggregate value across all 50 states was estimated at the time to be worth $246 billion over the following 25 years. Strictly speaking, the settlement was not a tax increase but the settlement of a set of suits that called for the tobacco companies to make payments to the states. Despite differences in language, the settlement operated as a tax all the same.[9] While

[8] For a wealth of information on tobacco taxation, see Orzechowski & Walker (2004).

the tobacco settlement is the largest resurrection of tax farming that has appeared to date, other targets of extortion through tax farming are in the offing, as Robert Levy (2002) explains in his careful examination of using litigation as an alternative form of taxation.

In the first year that the states received settlement revenues, 2000, those revenues were nearly 50 percent higher than revenues that states collected directly from their cigarette taxes. Table 5 shows that aggregate settlement payments to the states exceeded $12 billion in 2000. In contrast, aggregate state tobacco tax collections that year were about $8.5 billion. Over the following three years, settlement revenues have declined while tax revenues have increased. Table 5 shows that settlement revenues totaled barely $8 billion in 2003, while aggregate cigarette tax revenues for the states exceeded $11 billion. The rise in tax revenues is due to the continuing increases in state excise taxes on tobacco products, as is portrayed in Table 4.

The continuing fall in revenues collected under the master settlement illustrates a failure of the original revenue projections to hold up. Where originally the settlement was projected to yield some $246 billion over 25 years, that projection has now been revised downward to around $200 billion, and it could well be revised downward again at some future date. State reactions to the master settlement and their subsequent responses to the lower projections of future revenues illuminate the political economy of excise taxation. Settlement revenues are declining due to declining cigarette sales from the time of settlement. Revenues from tobacco taxes are increasing because the sharp tax increases of recent years have so far more than offset the decline in taxed sales that those tax increases bring about. The increasing rates of tax, however, are making less reliable the estimation of the revenues to be expected from tax increases, which in turn renders such taxes increasingly unreliable instruments of state finance.

Revenue Consequences of Excise Tax Increases

Table 6 shows revenue data from the 21 states that raised cigarette taxes during 2002. Almost invariably, actual revenues turned out to be less than what were projected to result from the tax increase. Moreover, the gap between actual and projected was often large, indicating that the projections were quite inaccurate. For 14 of the states, actual revenues were down by more than 10 percent from projected revenues. For seven states, the shortfall was more than 20 percent, and in four states revenue was short by more than a third of the estimate, leaving the state in a fiscal bind that necessitated last-minute spending cuts or tax hikes. That inaccuracy, moreover, will surely grow as the tax becomes higher, which will make excise taxes, especially cigarette taxes, increasingly unreliable instruments for state fiscal planning.

To illustrate the difficulty of projecting cigarette tax revenues, consider a hypothetical American state that has a population of 5 million, and where 350 million packs of cigarettes are sold annually. The price of cigarettes is $3 per pack, and the state is contemplating a $1 per pack tax increase. If sales of these higher-priced cigarettes could be expected to remain steady at 350 million packs, the tax would raise $350 million per year. But taxed sales won't remain steady. Faced with the higher price in their community, smokers will cross state borders to shop. They will use the internet to shop. They will come across vendors who are selling lower-taxed or even untaxed cigarettes, as well as counterfeit cigarettes. And they will do these things with increasing intensity as the tax rate rises. For these reasons, standard revenue projections become increas-

Table 6

Actual Versus Projected Revenues from Cigarette Tax Increases in 2002

State	Projected Gain in 2003	Actual Gain in 2003	Shortfall
Arizona	$ 151,000,000	$ 66,000,000	– 56.3%
Connecticut	122,000,000	115,800,000	– 5.1%
Hawaii	7,000,000	8,500,000	+ 21.4%
Illinois	235,000,000	182,000,000	– 22.6%
Indiana	270,900,000	228,900,000	– 15.5%
Kansas	$ 81,600,000	$ 70,300,000	– 13.8%
Louisiana	27,400,000	14,031,000	– 48.8%
Maryland	101,000,000	64,800,000	– 35.8%
Massachusetts	195,000,000	165,000,000	– 15.4%
Michigan	291,700,000	295,000,000	+ 1.1%
Nebraska	$ 22,800,000	$ 21,400,000	– 6.1%
New Jersey	275,000,000	216,000,000	– 21.5%
New York	282,800,000	184,000,000	– 34.9%
Ohio	283,200,000	281,500,000	– 0.6%
Oregon	100,000,000	93,852,000	– 6.1%
Pennsylvania	$ 570,500,000	$ 548,000,000	– 3.9%
Rhode Island	23,500,000	19,300,000	– 17.9%
Tennessee	35,800,000	30,000,000	– 16.2%
Utah	13,800,000	10,100,000	– 26.8%
Vermont	21,600,000	19,300,000	– 10.6%
Washington	130,000,000	105,000,000	– 19.2%

Sources: National Association of State Budget Officers; Orzechowski & Walker; Tax Foundation calculations and state revenue estimates.

[9] An economic analysis of the settlement is provided in Richard Wagner (1999).

ingly unreliable as excise taxes are increased.

Economists use the concept of "elasticity of demand" to predict how much sales will fall as price rises. In years past, the elasticity for cigarettes was traditionally considered to be about one-third. What this meant was that a 33-percent increase in price would reduce cigarette sales by 11 percent. Returning to our example, then, where a $1 tax hike raises the price from $3 to $4 per pack, annual sales would have been expected to fall from 350 million packs to 311.5 million packs. Hence, the $1 per pack tax would have been expected to raise $311.5 million and not $350 million.

If elasticities were unchanged by time and circumstance, the revenue estimator's job would be easy. But elasticities aren't fixed; they are variable. The substitute for taxed cigarettes — untaxed cigarettes — is much more easily available now, which makes old guidelines for estimators obsolete. An elasticity of one third might have been fairly accurate when taxes were a dime per pack. But when taxes have already been increased ten-fold to a dollar a pack, and legislators are contemplating taxes of $2 or $3 per pack, the correct elasticity may be two thirds. In our example, that would result in a 22-percent drop in taxed sales. In a border community near a low-tax state, the elasticity could even be two, which would mean that a 33-percent tax hike would cause taxed sales to drop by 66 percent.

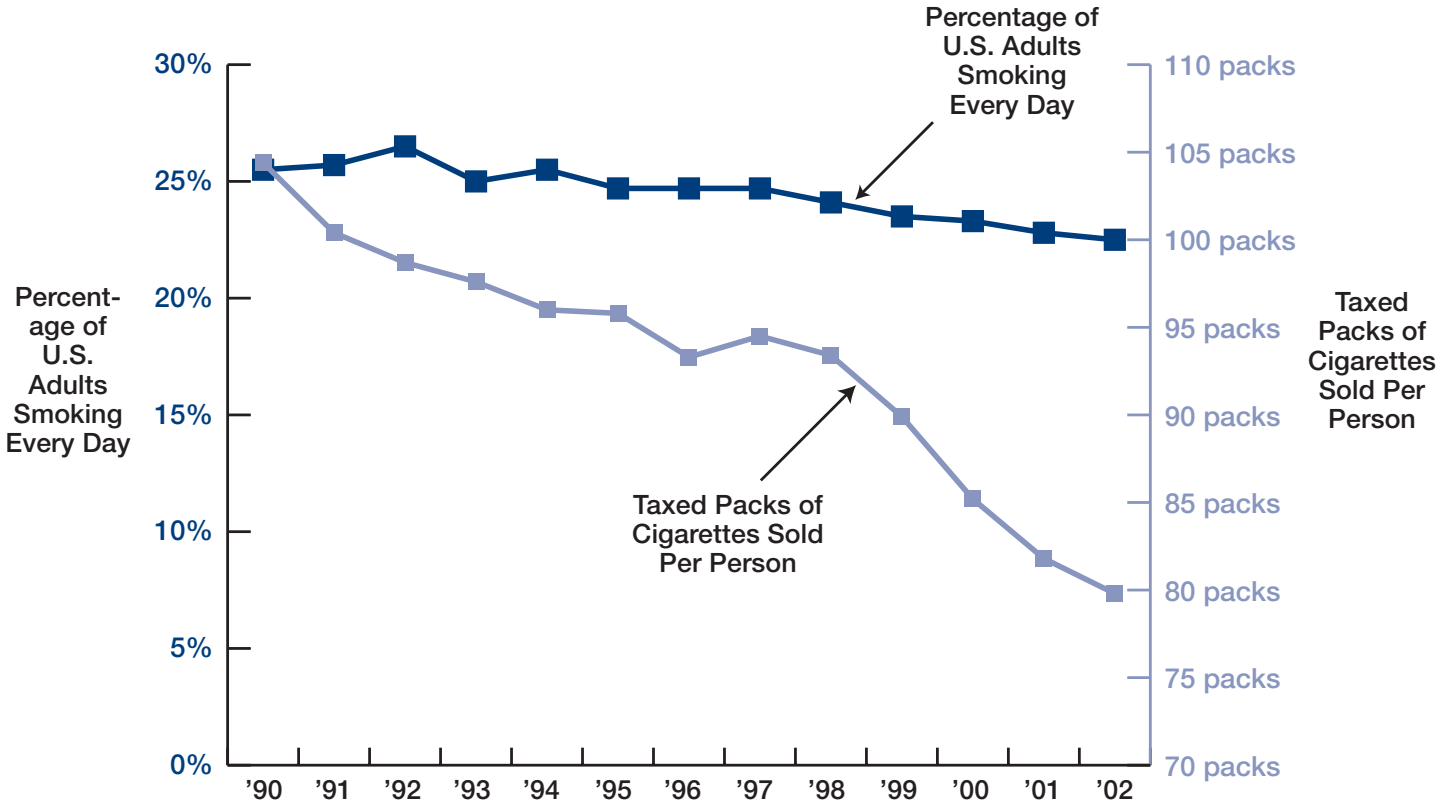
Therefore, as taxes reach prohibitionist levels, as they already have in several states, the data on taxed sales will become less and less meaningful as an indicator of smoking rates in the nation. For the same reason, cigarette taxes will become less and less dependable as a source of state revenue. See Figure 1.

Public Debt Follies Inspired by the Master Settlement Windfall

The master settlement agreement roughly doubled state cigarette taxes, even though it came in the guise of the settlement of a legal suit and not a tax increase. All the same, state tobacco revenues increased sharply without the

Figure 1

Smoking Rates Among U.S. Adults Versus Sales of Taxed Packs of Cigarettes Per Capita, 1990–2002



Sources: Centers for Disease Control; Orzechowski & Walker.

states having actually to raise taxes. The original basis for the suit was to allow states to recover what they claimed were smoking-related Medicaid expenses. The subsequent state use of settlement revenues, however, has had little to do with Medicaid, or even tobacco use in general. The settlement windfall set in motion a tobacco spending frenzy where legislatures boosted appropriations on everything under the sun. A report on the state use of settlement revenues issued by the General Accounting Office found that only seven percent of those revenues went to programs relating to smoking and its cessation and prevention. The other 93 percent went to support the whole range of governmental activities. Smith, Wakefield, and Nichter (2003) surveyed press reports of the use of settlement revenues throughout the nation. Some of the uses of settlement revenues they reported were the funding of laptop computers for legislators, the placement of asthma equipment in classrooms, programs to discourage the use of illicit drugs, the construction of university buildings, the purchase of text books for parochial schools, and pay increases for public officials.

Even the seven percent of settlement revenues that find their way into tobacco control programs may be used in peculiar ways when the details are examined closely. The *Minneapolis Star Tribune* reported on such an episode on November 18, 2001, in a column by David Phelps and Deborah Caulfield Rybak. The Minnesota Partnership for Action Against Tobacco (MPAAT) was created as part of the settlement agreement, being given $202 million and a charter that runs until 2023. Phelps and Rybak report that of the $4.6 million MPAAT awarded in its first round of grants, 82 percent went to members of its advisory boards. A good deal of MPAATs money went into the sponsorship and promotion of no-smoking ordinances throughout Minnesota, with most of those ordinances failing to pass. A glossy and expensive public relations campaign it sponsored did win a national award, while a variety of less costly and non-glitzy programs were rejected by MPAAT. This is not to claim that inferior programs were supported over superior programs. There is no way to determine this. It is only to say that even when a paltry seven percent of settlement revenues go for tobacco-related programs, those funds are often spent ineffectively, and sometimes they are even misused for the pet causes of those who were able to gain control of those revenues.

As taxes reach prohibitionist levels, as they already have in a few states, the data on taxed sales will become less and less meaningful as an indicator of smoking rates. For the same reason, cigarette taxes will become less and less dependable as a source of state revenue.

The master settlement windfall made it appear initially as though states could count on receiving an additional $246 billion over the next 25 years without having to raise taxes. It is well recognized that democratic polities face strong temptations to expand spending by borrowing rather than by taxing. With a tax, the costs are borne now, but with borrowing they can be postponed. What results is a strong tendency for democracies to be in deficit (Buchanan and Wagner 1977). It is much easier for legislatures to appropriate than to tax. There is never enough money to go around for all requests for appropriation, but the ability to borrow allows legislatures to support more requests than they could support if they were limited wholly to appropriating tax revenues.

The master settlement opened a new opportunity for deficit finance. To start, the settlement revenues were not officially a tax but were rather a legally-generated windfall. Consequently, borrowing against those revenues could hardly represent a state debt. A good number of states developed ways of doing just this, which would allow them to spend immediately the settlement revenues that wouldn't accrue for a quarter-century or more. They did this by creating special authorities that would receive the settlement revenues, and which could issue bonds that were backed by future settlement revenues. For example, California created a Golden State Tobacco Securitization Corpora-

tion, New York created an Ambac Assurance Corporation, Oregon created a Financial Assurance Corporation, and Wisconsin created a Badger Tobacco Asset Securitization Corporation. These special authorities fueled the tobacco spending frenzy that the master settlement agreement set in motion.

Public debt allows governments to shift some of the cost of present expenditure onto the future. For people today who want more state spending, this is a good deal. For people in the future, it is not such a great deal. Subsequent developments have made this tobacco spending a worse deal for present and future taxpayers alike. In columns issued by Bloomberg.com for November 22, 2004, and January 31, 2005, Joe Mysak reported on the experiences in New York and New Jersey respectively. The details differ a bit between the two states, but the story line is the same, and it is the same in a number of other states that have converted future settlement revenues into current spending. How much these state-created authorities will have to pay in interest to sell those bonds depends on how confident potential buyers are that they will be paid in the future. Mysak reports that a New Jersey issue had to promise to pay 6.03 percent when ordinary state bonds would have to pay only 4.58 percent.

The decline in projected settlement revenues, about 20 percent from $246 billion to $200 billion, has made the matter worse for future state taxpayers. This reduces sharply the willingness of investors to buy those bonds. In consequence, the price offered to place such bonds could well rise to 8 or 9 percent, Mysak notes, further increasing the burden on future taxpayers. See sidebar on New Jersey.

Unreliable Tobacco Revenue in New Jersey: The Securitization Fiasco

New Jersey's public finances are suffering from a poorly managed scheme to borrow against their projected future revenues from the 1998 master tobacco settlement. The settlement promised that the four large tobacco companies would pay the states in perpetuity a sum based on taxable tobacco sales. Payments began in 2000 and were distributed according to population. Although it can probably be safely asserted that New Jersey has mismanaged the funds more spectacularly than most states, the general contours of New Jersey's experience can be found in many states.

The original idea behind selling tobacco bonds was that states could depend on their share of revenues from the master settlement to redeem the bonds when they came due. By doing this, they could go on a spending spree and worry about paying bondholders in the future. Without any explicit tax increase, states could increase their current spending.

New Jersey started doing this in 2000, with bonds sold through the New Jersey Economic Development Authority. Within a year or two it became apparent that revenues from the master settlement were going to be much less than anticipated, approximately 20 percent less, and even this projection might turn out to be optimistic. The most obvious reason for the drop is that the state raised its cigarette tax rate to the prohibitionist level of $2.40 per pack, sending New Jersey smokers scurrying for different sources, either out of state, on the internet, or in the booming black market for untaxed cigarettes.

This gap increased the risk to bond buyers, who in turn required a higher rate of interest to buy the bonds. In addition to paying a higher rate of interest, in 2003 New Jersey also dedicated 51 cents per pack of its own cigarette tax to the New Jersey Economic Development Authority, in addition to all of the payments under the Master Settlement. Otherwise, the cost of borrowing by the New Jersey Authority would have been even higher.

Even with this huge concession, New Jersey had to offer 6.03 percent to place its 30-year tobacco bonds, whereas ordinary, general obligation bonds could have been placed at about 4.68 percent. Moody's Investors Service rated the New Jersey bond issue at Baa2, which is only one step above the lowest possible investment grade rating (www.nytimes.com/2004/10/07/nyregion/07tobacco.html).

New Jersey taxpayers are paying for the tobacco spending frenzy that the New Jersey legislature has embraced. Politicians, of course, invariably want to spend all of the revenues they can collect, and then some. The securitization of future revenues from the tobacco master settlement may have been a new type of budgetary arrangement, and yet it reminds us of the wisdom of that old aphorism: the more things change, the more they stay the same.

Misguided Claims about Harmful Tax Competition

When governments in close proximity to one another impose different tax rates on retail transactions, people have some incentive to shift their purchases from higher-tax to lower-tax jurisdictions. The greater the difference in tax, the stronger will be the incentive to make that shift. Whether any particular person will actually make the shift will also depend on the costs that would be incurred in doing so. In most cases, more time will be required to shop in lower-tax jurisdictions, due to the greater distance that must be traveled. The saving in tax must exceed the added costs of shopping in the lower-tax jurisdiction, to make it rational to shift patronage.

The customary image of cross-border shopping is of someone driving in a car. It is this image that assimilates the cost of shopping to time spent traveling, along with associated

automobile expenses. The growth of internet commerce presents a different situation. Travel time and automobile expenses are no longer involved. In their place are delivery charges, which are generally less. The ability of people to escape high excise taxes through cross-border shopping and internet commerce has provoked numerous charges that tax competition can become excessive or harmful. There are, of course, two distinct issues involved here: one concerns the existence or strength of cross-border shopping, the other concerns an evaluation of the consequences of cross-border shopping.

The existence of cross-border shopping has been demonstrated in numerous instances. For instance, William Fox (1986) examined cross-border shopping for three areas in Tennessee: Chattanooga which borders Georgia, Tri-cities which borders Virginia, and Clarksville which borders Kentucky. Austan Goolsbee (2000) examined internet shopping. In both instances, shopping patterns were found to be sensitive to differences in tax rates and tax structures. A state that taxes a product more heavily than a neighboring state will lose sales to that neighboring state, with the amount of loss varying directly with the magnitude of the tax differential and inversely with the cost of getting to the out-of-state vendor (which is minuscule for internet commerce). See sidebar on Arizona.

Similarly, Patrick Fleenor (1998) examined cross-border cigarette sales. He distinguished among four types of cross-border effects: (1) purchases from regular retail vendors in lower-tax states, (2) purchases from untaxed military bases, (3) purchases from untaxed American Indian Reservations, and (4) smuggling. He found significant amounts of each type of cross-border activity, in varying amounts depending on tax differentials and the availability of these different substitutes for highly taxed cigarettes. Moreover, there is no reason to presume that cigarettes were the only lost sales. Clusters of convenience stores selling cigarettes are, of course, common on the low-tax side of state borders, but they are joined by clusters of gas stations, outlet malls and, indeed, nearly every kind of retail operation. Naturally, bargain-hunting smokers who cross the border to buy cigarettes will do other shopping at the same time if it is convenient. This multiplies the cross-border effect of tax differentials. See sidebar on Kansas.

A 1990 study by Price Waterhouse presented a detailed examination of two pairs of states with respect to cross-border responses to differences in tax rates on cigarettes, alcoholic beverages, and gasoline; the details presented there, moreover, were reinforced by the subsequent studies noted above. These pairs were New Hampshire and Massachusetts and Indiana and Illinois. For both pairs, the state with the lower tax rates had significantly higher sales than the state with the higher tax rate. The lower-tax state derives added tax revenue, its merchants earn more, and there is increased employment that results from the expanded market. Over the 1975-88 period examined by

Internet Shopping Means Even the Desert Can't Stop "Cross-Border" Shopping for Low-Tax Cigarettes

In 2002 Arizona more than doubled its cigarette tax, increasing it from 58 cents to $1.18 per pack. State revenue estimators projected that this tax increase would boost revenues by $150 million per year. In turn, state appropriators dedicated 70 percent of those expected revenues to health care for low-income families, 23 percent to health education, and the remaining seven percent to research.

Those estimates didn't work out. For 2003, actual revenues were $95 million less than the estimators projected. For 2004, they were $31 million less than projected. The projection of tax revenues is not an exact science, and the estimation of cigarette tax revenues is particularly volatile because there are so many ways available of escaping the tax.

All of the states bordering Arizona have lower cigarette taxes, with New Mexico having the lowest tax at 21 cents, followed by Nevada at 35 cents. To be sure, the major population centers in Arizona, Phoenix and Tucson, are a couple of hours' drive away from state lines, so Arizona is probably less subject to cross-border shopping than some other states. Still, the higher the tax, the stronger will be the incentive people face to cross the state line.

Moreover, the distance to state borders doesn't matter for internet purchases, or for purchases on Arizona's numerous Indian reservations. Both are growing each year.

A report by Fiscal Economics, Inc. estimates that the internet's share of cigarette sales would rise from 2 percent in 2003 to somewhere between 6 and 14 percent in 2005. There is 1949 federal legislation called the Jenkins Act that requires vendors who ship cigarettes out of state to report those purchases to the tax collectors in the home state of the purchaser, along with the names and addresses. While established businesses tend to follow the Jenkins Act, much internet commerce is conducted by new and small businesses who avoid the costs of compliance.

The state is even making criminals out of ordinary citizens in its effort to stop people from buying cigarettes elsewhere. It has done this both by enacting legislation to this effect and by appropriating $1 million per year for this express purpose.

Price Waterhouse, 41.7 percent of cigarette sales in New Hampshire were estimated to have been made to residents of Massachusetts. This was in response to a price differential of about $2 per carton in favor of New Hampshire. For wine and distilled spirits, a price differential of about $11 per gallon led to an estimated 29.3 percent of sales in New Hampshire being made to residents of Massachusetts. While New Hampshire gained retail sales and employment, along with tax revenue, Massachusetts lost.

The number of cigarettes sold per resident is about three times as high in New Hampshire as it is in Massachusetts. This is not because people in New Hampshire are smoking fiends, for surveys show similar patterns of smoking in

Tobacco Revenue Shortfalls and Lost Businesses in Kansas

In the spring of 2002, lawmakers in Kansas responded to a budget shortfall by more than tripling the state's cigarette tax from 24 cents to 79 cents per pack. At the time of passage, state revenue estimators projected that the tax would raise an additional $81 million in FY 2003 and $104 million in FY 2004.[1]

Almost overnight smokers and the businesses that serve them began devising ways of avoiding the tax. As has historically occurred in the wake of tax hikes, cigarette sales began migrating to lower-tax jurisdictions, causing tobacco merchants in Kansas to shut their doors.[2] In order to avoid this fate some stores located in border regions moved across state lines. One proprietor, who moved stores into Missouri, told the Associated Press that he began contemplating the moves the moment that lawmakers in Kansas proposed the tax hike.

"All of my customers were saying, 'If that tax passes, I'm going over to Missouri to buy cigarettes.' I have 2,000 customers so I have heard it 2,000 times."[3]

The movement of business activity along with attendant income, property and sales tax revenue into neighboring states alarmed many Kansas legislators. Les Donovan, vice chairman of Kansas's Senate tax committee, for example, stated that another cigarette tax increase in Kansas "would be the single best thing that we could do for the *Missouri* economy."[4]

While some smokers followed retailers to low-tax states, others began purchasing tax-free cigarettes over the internet or on Indian reservations.[5] Still others sought to avoid the new tax by making their own cigarettes.[6] The rash of cigarette tax hikes nationwide over the past decade has created a cottage industry of firms that sell roll-your-own kits. A far cry from the simple rolling papers of yesteryear, these kits typically consist of paper tubes (which may contain a filter) into which loose tobacco is injected with a simple machine. These kits make cigarettes that are outwardly nearly indistinguishable from their factory-made counterparts and allow smokers to produce cigarettes for about one quarter of their retail price. In the aftermath of the tax hike, sales of such kits soared in Kansas.[7] The general manager of one store in Topeka reported that while pack sales of cigarettes fell sharply in the wake of the tax hike, sales of cigarette tubes increased six-fold. He noted that there was a certain "defiance factor" among his customers: "I hear people all the time say, 'Screw the state, I'm rolling my own. I'm taxed enough.'"[8]

The combined effect of reduced consumption, border activity, and consumers making their own cigarettes caused taxed cigarette sales in the state to fall by 21.6 percent in fiscal 2003, the year following enactment of the tax, and by another 6.3 percent the next year. Surprised by the decline in taxed sales, the state's fiscal forecasters were forced to reduce their official estimates of how much the state could expect to receive from tobacco levies during fiscal year 2004 and 2005 by $20 million.

1 Dick Lipsey, "Smokers, Smoke Shops Upset Over Tax Increase," *Topeka Capital-Journal,* 5/19/02. The tax increase occurred in two steps. On July 1, 2002, the tax rose from 24 to 70 cents per pack, and on January 1, 2003, the tax climbed further to 79 cents per pack.
2 Amy Bauer, "Higher Price to Pay, Cigarette Sales Down, Tax Revenues Up," *Topeka Capital-Journal,* 7/18/02; and Margaret Stafford, "Cigarette Retailers Worry New Sales Boost May Vanish if Missouri Moves Ahead With Tax," *Kansas City Star,* 7/12/02.
3 See Stafford.
4 Lori O'Toole Buselet, "Outlook Dim for Tobacco Tax Hike," *The Wichita Eagle,* 11/14/04.
5 Bill Draper, "Experts Reduce Estimate of Cigarette Tax Revenue," The Associated Press, April 26, 2004.
6 Dave Ranney, "Smokers Roll With Cigarette Tax Increase," *Lawrence Journal World,* April 13,2003. Also see Bauer.
7 See Ranney and Bauer.
8 See Ranney.

each state. The difference in sales is a product of Massachusetts having a tax rate ($1.51 per pack) that nearly triples that in New Hampshire ($0.52 per pack). See sidebar.

It is clear that competition among jurisdictions keeps taxes lower than they would otherwise be. Monopoly generates higher prices than competition; this simple observation holds for governments at least as well as it holds for businesses. It is surely peculiar to argue that competition is good commercially and harmful politically. Such an argument could be made only by assuming that governments invariably use power wholly for good and never for ill, and with the amount of good achieved varying directly with the amount of power held. No one who remembers the 20th century could ever make that claim.

It should hardly be surprising that open borders and freedom of movement lead to lower total tax collections than would result in a world with closed borders and a single government. But this does not mean the competitive situation is detrimental and in need of correction. The situation would be detrimental only if the residents of the various states were failing to secure publicly provided services commensurate with their willingness to pay for those services. But this situation is not the one we observe.

Arguments that tax competition is harmful generally follow along these lines: "Competition keeps taxes low. Low taxes prevent governments from supplying vital public needs. Therefore, competition prevents governments from supplying vital public needs." The argument follows logically but from a false premise. The false premise is that low taxes prevent governments from supplying vital public needs.

Think of what it means to claim that competition prevents a government from supplying vital public needs. This describes a situation where taxpayers, knowing full well that taxes are the price of public services, would be clamoring to pay more taxes and receive more public services. Such a clamor does not currently exist. Rather, what we see are some people supporting higher taxes and larger government because other people would pay those taxes. Cigarette taxes are not the only case of a tax that the majority is foisting on the minority, but it is certainly the most clear-cut example of this phenomenon. Non-smokers who constitute roughly three quarters of the population are supporting higher taxes that they will never have to pay.

Smuggling, High Taxation, and the Underground Economy

Someone who buys cigarettes in New York City now pays a combined state and city tax of $3 per pack of cigarettes. It is unlikely that a smoker would travel all the way from New York to Virginia to buy cigarettes, even though the tax there is only 20 cents per pack, or ever further to North Carolina where the tax is 5 cents. However, it is highly worthwhile for people to buy cigarettes in Virginia or North Carolina and take them to New York to sell. The economic arithmetic of such smuggling is very simple. A truckload of cigarettes will hold about 800 cases. This is 48,000 cartons or 480,000 packs. A pack of cigarettes that sells for about $3 in Virginia or North Carolina will fetch about $7 in New York City, including the higher excise tax but also including higher sales tax piled on the excise tax, along with some other costs. An investment of $1.5 million in Virginia will return at least $3 million in New York City. That is a fine return for a half-day drive by nearly anyone's calculation.

To be sure, that return comes with some

Revenue Gaps in Massachusetts: Cross-Border Shopping Foils Estimates

In 2002, Massachusetts came one penny short of doubling its cigarette tax, raising the rate from 76 cents to $1.51 per pack. The tax increase took effect for 2003, and the Department of Revenue projected that the tax hike would bring an additional $190 million annually into the Massachusetts treasury.

Massachusetts' hopes for collecting so much were high because of the already high cigarette taxes on its southern and eastern borders: Connecticut already had a $1.51 per pack tax rate; New York's rate was just a penny less at $1.50; and Rhode Island's $2.46 rate was the nation's highest. The notable gap in the high-tax barrier that surrounds Massachusetts is the northern border where Vermont had a rate of $1.19 and more importantly, New Hampshire was charging 52 cents per pack. Where a carton of Marlboros might sell for about $50 in Massachusetts, it sold for about $30 in New Hampshire.

The internet is another breach in the Massachusetts tax fortress. In early 2005 the Department of Revenue organized an investigative campaign that included spying and intimidation to collect taxes from Massachusetts residents who use the internet to buy cigarettes.

Despite such intrusive efforts, the added tax revenues that were brought into the state treasury failed to reach the projection. For 2003, the shortfall was $30 million or 15 percent. For 2004, cigarette tax collections were 14 percent less than projected, leaving the state $26 million short.

risk of being detected and punished, but this does not appear to be much of a risk. Patrick Fleenor (2003) reports on two pertinent estimates in this respect. One estimate is that 100,000 cartons are smuggled into New York City each day, whereas police seized 70,000 cartons throughout the year. A later estimate put the smuggling at 110,000 cartons per day and the police seizures at 112,000 cartons per year. Both of those estimates paint the same picture, of police apprehending about one day's worth of smuggling per year. This is an efficiency or detection rating of about one-third of one percent, which is certainly not going to deter people from seeking the remarkable profits that smuggling offers. Indeed, hijacking a cigarette truck would seem to be a more profitable activity than hijacking an armored car, where armed guards must be confronted and where the payoff is perhaps one-sixth as high. In fact, for smugglers, detection by competing criminals may be a greater concern than detection by legal authorities. Fleenor reports that the sales of taxed cigarettes in New York City fell by more than 50 percent following the imposition of the $3 tax. This fall, of course, does not show that New Yorkers reduced their smoking. What it shows is how quickly smuggled cigarettes were able to replace former channels of commercial distribution.

The press is full of stories about cigarette smuggling, for smuggling is a natural consequence of high excise taxation. We should remember, though, that we only read about the smugglers who are caught. The evidence noted above suggests that for each arrest, another 350 or so are undetected. Hence, the press reports capture only the proverbial tip of the iceberg, with the full magnitude of the problem well hidden from our view. See sidebar about Oregon for an example of law enforcement futility in this area.

To be sure, even just the tip of the iceberg is enough to give great cause for concern. It is well known that organized crime is heavily involved in smuggling. The logistics of such high-volume operations in the underground economy require a good deal of organization. Individuals may be able to hawk smuggled cigarettes by the trunk load, but to graduate to truck load size requires organizational sophistication.

Part of that organizational sophistication, it turns out, is supplied by terrorist networks. For instance, Sari Horwitz in the *Washington Post* for June 8, 2004, reported on a federal conviction of a smuggling operation connected to the terrorist group Hezbollah. In this case, cigarettes were bought in North Carolina and taken to Michigan in rented vans. On August 22, 1997, Michigan Governor John Engler issued a proclamation declaring a "cigarette smuggling emergency" in Michigan. That governments would call for more severe enforcement efforts against underground activity is almost second nature. At the same time, the shift of economic activities underground is a natural response to high and discriminatory taxation. Governments face two options for dealing with underground activity. One is to reduce the tax, which will mitigate the problem but will also limit the extent of government authority, something that

Cigarette Tax Revenue Proves Elusive as Oregon Strike Force Strikes Out

Oregon's cigarette tax stood at 68 cents per pack in 2002, when it was raised to $1.28. The political story behind Oregon's cigarette tax hike was the same as in most states. Governmental business as usual implied a budget deficit, in Oregon's case approximately $500 million. The 60-cent increase in the cigarette tax was projected officially to close $114 million of that deficit.

Matters haven't worked out that way so far. For 2003, actual revenues fell short of projected revenues by nearly $40 million, representing a 35-percent gap. For 2004 the shortfall was over $15 million, representing a 14-percent gap.

This gap occurred despite the natural tax-collecting advantages that Oregon has over most states. All along Oregon's borders, residents of adjoining states have established shopping habits in Oregon to take advantage of Oregon's zero sales tax rate. Also, Oregon has no neighboring states with lower cigarette taxes that are close to population centers in Oregon. Portland, by far the largest city in Oregon, lies along the Washington border, where the cigarette tax is $1.425 per pack. Nevada at 35 cents and Idaho at 57 cents have significantly lower taxes, but the adjacent parts of Oregon are sparsely populated.

Nor does Oregon face a significant concern about purchases from Indian reservations, for it has secured the agreement of a majority of those reservations to collect tax for the state, in exchange for compensating payments. Oregon even created a strike force to collect taxes on internet sales, according to an Associated Press report of 15 November 2004. Initially an 18-person force was created for $2 million in 2001, and it estimated that it collected an additional $8 million from 2001 to 2003.

Pressured to collect even more, the strike force claimed that with triple the staff they could collect an additional $30 million in tobacco taxes between 2003 and 2005. That claim has now been revised downward by some $25 million, and the Revenue Department had to request an emergency appropriation because the additional staff were supposed to be paid from the extra tax collections that never materialized.

governments are loathe to do. The other option is to spend more on tax enforcement. That governments might be generally biased toward enforcement is easy enough to understand, but it not so clearly desirable. See sidebar about how even this emergency has not taught Michigan this lesson.

High taxation is a close cousin to outright prohibition. Cigarettes are not prohibited in New York City, but the tax rate is surely getting close to the prohibitive region. Prohibition, after all, is equivalent to a tax that eliminates the demand for the taxed product. The American experience with alcohol prohibition is thus instructive regarding high taxation and the incentives to smuggle that high taxation creates. Prohibition, of course, did not eliminate the demand for alcohol, nor will the high taxation of cigarettes eliminate the demand for cigarettes. What is eliminated is the desire to buy the highly taxed versions of the product. With respect to alcohol prohibition, the best estimates are that prohibition reduced consumption by only around 30 percent. What prohibition accomplished was to drive 70 percent of the market underground, where organized crime and its violent methods of resolving commercial disputes prevailed (Miron and Zweibel 1991). With 50 percent of New York City's cigarette purchases occurring in the underground economy in the wake of the $3 tax rate, it is clear that prohibitionist levels have been reached. As a result, data on taxed sales no longer track actual consumption in any useful way, and revenue estimates of future tax rate changes will be even less reliable than they already are.

Ordinary commerce is open and public. Underground commerce must be concealed and secret. This distinction has numerous implications for civility within society. With open commerce, trust is easy to secure and contract disputes can be resolved in the open through litigation or mediation. Within the underground economy, a dispute over contract terms between a retailer and a distributor can not be resolved in a court. One alternative is violence or threats of violence, and another is bribery of police and public officials. Due to the natural growth of underground activity in response to high taxation and or outright prohibition, relatively little reduction in consumption is achieved. The primary change is that open and peaceful commercial activity are replaced with underground and violent activity, a side effect of which is a significant deterioration of the quality of life within urban areas, as Sam Staley (1992) explains with particular cogency.

The prohibition of alcohol created disrespect for the law, it launched modern organized crime in America, it corrupted law enforcement and the court system, and it harmed people financially, emotionally and morally. Therefore, it makes a large difference whether underground activity is treated primarily as a problem of *insufficient law enforcement* or as a problem of *excessive taxation*. The emphasis on greater law enforcement leads to even higher taxes, as well as to greater surveillance, snooping, informing, and a continuing restriction on civil liberties in an effort to restrict the extent of underground activity. Yet underground activity thrives when governments seek to restrict, through high taxation and even prohibition (which is just a sufficiently high tax that no one would pay it), what would otherwise be peaceful economic

Michigan: Flying in the Fact of Its Own Experience

During 2004, Michigan raised its cigarette tax from $1.25 per pack to $2.00, giving it the third highest state-level cigarette tax in the nation, behind only Rhode Island at $2.46 and New Jersey at $2.40. Official state projections say that this tax hike will generate an additional $313 million of revenue per year. The actual revenue impact will be for the future to determine.

There have been a number of anecdotal reports of sharp declines in taxable cigarette sales where Michigan borders Ohio and Indiana. Such declines would certainly not be surprising, as the tax rate is 55 cents in Ohio and 55.5 cents in Indiana. Several vendors have reported sales declines in the vicinity of 50 percent.

A story filed by Jessica Schrader for the *Macomb Daily* on July 2, 2004, reports on a store owner who closed down, in part because of declining sales but also because of an increased fear of robbery. When a carton of cigarettes sells for $50, concerns about security understandably increase.

The focus of state law enforcement, though, seems to be more on catching and prosecuting Michigan residents who buy cigarettes outside of Michigan than on providing security for Michigan vendors. Michigan state police say they have a zero tolerance policy toward any Michigan resident they find with a cigarette that does not bear a Michigan tax stamp. High taxes can turn ordinary people doing ordinary and peaceful things into criminals.

Besides shopping out of state and over the internet, Michigan smokers can follow the legally safer route of rolling their own cigarettes. The equipment to do so is relatively cheap, the quality is apparently quite satisfactory, and the cost saving is huge. Where a pack of Marlboros now sells for nearly $5 in Michigan, someone can buy loose tobacco and roll his own cigarettes for around one-fourth the cost, about $1.25 to $1.50 per pack.

activities. Once the underground trafficking in cigarettes is recognized as a problem of high taxation, the focus should logically shift onto the need for sensible tax policies and tax levels.

Taxes, Entrepreneurship, and Government Finance

The various calls to restrict tax competition and to curb underground transactions take for granted that present approaches to taxation represent the best means available to finance government. Whatever transactions escape the tax collector are thus deviations from this ideal base. But why are selective excise taxes such perfect instruments of taxation? Once upon a time, they were convenient taxes for governments to impose. Roads were poor, cars were slow, and there was no alternative to the nationalized postal service. If you made a retail purchase, it would be in a local store. A government could tax those sales and not worry that shoppers would take their business elsewhere.

A report on the state use of settlement revenues issued by the General Accounting Office found that only seven percent of those revenues went to programs relating to smoking. The other 93 percent went to support the whole range of governmental activities. ... [including] the funding of laptop computers for legislators.

But times have changed, and in many ways. Roads are better. Cars are faster. And there are now several ways that people can ship parcels to us. We don't even have to visit retail outlets anymore. We can sit at home, browse on our computers, make our purchases, and soon our merchandise arrives. And when we look at our invoice, we find most often that we have paid no sales tax. Furthermore, we are evolving from an economy based on manufacturing to one based on services, which in turn is accompanied by material images of capital equipment giving way to such immaterial images as knowledge.

What are we to make of this evolution? Those who think that excise taxes are the perfect instrument of government finance declare this situation to be an abomination. Those people yearn for former, slower times. But those times are not our times. We are all vastly more mobile now than we were then. Is it not time for our governments to move forward as well? Taxes on mobile objects and transactions are a thing of the past, a relic for a museum of tax history. Such taxes will doubtless be with us for some time yet. After all, it took a while for computers to replace typewriters. Even now, one can still see a typewriter every so often.

Governments will undoubtedly cling to increasingly obsolete taxes, which means that mobility is going to cause increasing problems when it confronts the voracious tax appetites of modern governments. Eventually, those appetites will be scaled back, but that scaling back will be rendered more traumatic, contested, and difficult so long as governments continue to think of themselves as having an inherent right to tax whatever they wish to tax, as if current conditions of mobility did not exit.

Think for a moment about your last visit to a hotel. That hotel might have been quite plain, or it could have been relatively fancy. In either case it surely had an elevator. What is an elevator but a subway that runs vertically, a form of public transportation? The hotel provided security services as well as refuse collection. It probably provided recreational facilities as well, perhaps an exercise room, maybe a swimming pool, or perhaps even both, and possibly even more recreational options.

This hotel, in other words, is like a city.[10] People conduct various personal or private activities there, and at the same time are able to enjoy a range of publicly available services. A hotel, however, does not try to finance its activities by taxing highly mobile activities and people. It provides services that people value,

[10] For an imaginative and constructive comparison of cities and hotels, see Spencer McCallum (1970).

and which makes people willing to pay the room charges, charges that are sufficient to cover the cost of those public-like services as well as the cost of the rooms.

A hotel is, of course, operated as a business.

Bargain-hunting smokers who cross the border to buy cigarettes will do other shopping at the same time if it is convenient. This multiplies the cross-border effect of tax differentials.

This is to say that it seeks to provide services that people are willing to buy. To the extent it does so, people support it and the hotel flourishes. A hotel exists in a world of open mobility and freedom of competition. People can take their meals inside the hotel or out. They can have their drinks inside the hotel or out. A hotel must attract residents, it cannot force them to stay and support the hotel. This is a lesson that governments must come to learn. They must seek increasingly to attract support. Their ability to demand and compel support will continue to weaken.

An efficient, economical government will be attractive to people. This attractiveness will be reflected in the increased desires of people to locate within the boundaries of that government, which in turn translated into increased land values. Public services that make a government more desirable have the potential of paying for themselves, just as any profitable commercial enterprise pays for itself. Such considerations point toward a possible framework for injecting the entrepreneurial and commercial principles of service provision into the conduct of government, provided that competition, openness, and mobility can be maintained.[11] Governments are a following and not a leading edge of society, but as our economic organization and arrangements come increasingly to be based on open and easy mobility, on services and immaterial capital, and on entrepreneurship, we will surely find our governments coming along in evolution's wake. What is uncertain is not whether this evolution will happen, but only how quickly.[12]

[11] In this regard, see, for instance, Fred Foldvary (2004) and Kenneth Wenzer, ed. (1999).

[12] For instance, property owners in the vicinity of the Tysons Corner area of Fairfax County, Virginia, secured the creation of a special taxing district by which landowners agreed to special property assessments to help finance a Metrorail connection. This is a concrete illustration of the theme of entrepreneurial governance noted immediately above.

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