

MERCATUS ON POLICY

Sales Taxes and Exemptions

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STATE AND LOCAL governments often turn to increases in sales taxes to generate added revenue. Estimates of fresh revenue from the higher tax tend to be overly optimistic, partly because the number of sales tax exemptions tends to rise with the rising tax rate. Given the fact that politicians seek to raise a certain amount of revenue and wish to maximize their chance of re-election, this relationship suggests that politicians face a trade-off when seeking votes from groups that favor sales tax decreases and groups that lobby for certain tax exemptions.

Assuming that higher tax rates increase the incentive to lobby for tax exemptions, agencies that estimate the effects of sales tax increases should take into account the expected increase in tax exemptions as well. Ultimately, the link between sales taxes and sales tax exemptions serves to undermine the certainty of generating additional revenue by increasing sales taxes.¹

PUBLIC CHOICE MODEL

PUBLIC CHOICE ECONOMICS explains how politicians seek to maximize votes given that competing groups of voters vie for political support.² For instance, one group of constituents may want taxes raised on a certain group or a certain type of transaction, while another group may favor reductions in taxes or increases in tax exemptions. In order to maximize votes, politicians can satisfy both groups by simultaneously increasing taxes and expanding the number of exemptions, or loopholes. While the net result on tax revenue generated may be negligible, a politician can secure additional votes from both groups.

University of Chicago economist Sam Peltzman's analysis of the regulation of firms offers insights that are relevant to the study of sales taxes and exemptions.³

Given that firms demand price regulations that increase their profits and consumers desire regulations that lower prices, Peltzman analyzed how politicians approach regulating firms in order to maximize votes. This model presents a situation in which both groups can't be simultaneously satisfied, just as is the case with sales taxes and exemptions. In a recent paper,⁴ we use Peltzman's model, showing that politicians seek to maximize support from competing groups, to analyze the relationship between sales taxes and sales tax exemptions.

We analyze the equilibrium relationship between the sales tax rate and the number of sales tax exemptions in each state that levies sales taxes. Our theory suggests that as tax rates rise, so do lobbying activities, and therefore the number of exemptions. In this model, in order for a politician to maintain a certain amount of revenue, that politician is not able to satisfy all groups. In other words, when a politician decreases taxes—thereby increasing support from one group—that politician is forced by the revenue constraint to decrease tax exemptions as well—hence losing support from the other group. In this way, the wealth of one interest group increases at the expense of the other group. Given this state of affairs, the politician is faced with choosing a tax rate and a number of exemptions that maximizes the politician's chance of re-election.

SALES TAXES AND EXEMPTIONS

ONLY FIVE STATES do not have a statewide sales tax (Alaska, Delaware, Montana, New Hampshire, and Oregon).⁵ These states are therefore omitted from the analysis. In addition, Hawaii has a complex, tiered system of sales taxes; this state has also been omitted for ease of comparison. The remaining 44 states have differing tax bases (i.e., the variety of transactions for which sales tax can be charged). States can either adopt a wide tax base and a low tax rate or a narrow tax base and a high tax rate. In theory, both options can generate the same level of revenue.

Federal laws prevent states from levying sales taxes on certain transactions, such as those covered by food assistance programs, interstate commerce transactions, and purchases by federal credit unions.⁶ Additional sales tax exemptions are at the discretion of individual states. We identify 17 broad exemption categories (some of which also contain subcategories), including a variety of exemptions that can be classified as entity-based (the

seller or buyer is an exempt entity, such as a nonprofit organization or a school), product-based (the item sold is exempt, such as food or health-related items), or use-based (the buyers' intended use of the item entitles them to an exemption, as with material tools used in manufacturing).⁷ The exemption categories were constructed such that they are specific enough not to have exemptions overlap and broad enough to incorporate a variety of definitions for products or transactions.

Among the 44 states under examination, the average sales tax rate was 5.6 percent, ranging from 2.9 percent in Colorado to 7.25 percent in California. We use two different measures—one broad and one narrow—to calculate the number of exemptions in each state. Both measures give approximately the same conclusions, so for simplicity we will focus on one measure here, the broad one. This measure simply sums the exemptions from all subcategories. The average number of exemptions in each state calculated in this way is 24 and ranges from 19 in Illinois to 31 in Vermont.

Our analysis of sales taxes and exemptions in each state has some important implications. The results of the regression analysis indicate that the relationship between tax rates and the number of exemptions is both positive and statistically significant. In other words, the estimates indicate that one unit increase in the number of exemptions calculated based on the "broad" or narrow" measure is associated with an increase in the sales tax rate between 0.10 and 0.25 percentage points, as shown in figure 1. This means that if a state has a current tax rate of 5.6 percent (the average) and adds another five exemptions, then the state can be expected to increase the tax rate to 6.1 percent, as shown in figure 2.⁸ The reverse holds for decreasing exemptions.

CONCLUSIONS AND POLICY IMPLICATIONS

HIGHER SALES TAXES ultimately increase the incentive for special interests to lobby for more tax exemptions. This relationship suggests that increasing the tax rate may not generate the additional tax revenues expected.

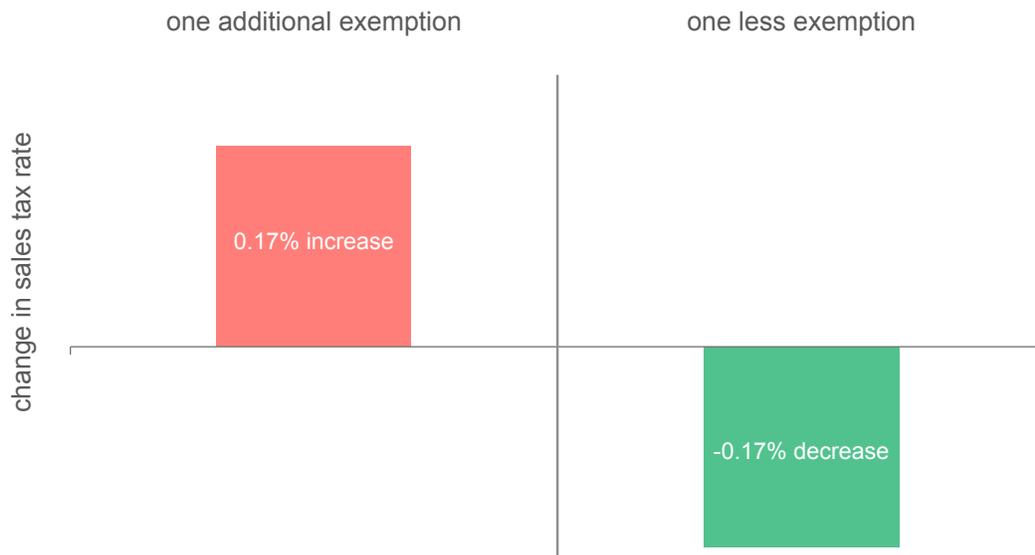
Government agencies should be aware of two major consequences of this relationship. First, estimates of the effects of increasing sales taxes are often overly optimistic; therefore, agencies should be more alert to the link between sales taxes and exemptions when making predictions of future increases in revenue.

Second, increases in sales taxes may lead to other unintended inefficiencies. Higher sales taxes can potentially lead to decreased consumption of certain goods. This implies that transactions that would have taken place prior to the added tax will not occur. Moreover, as previously mentioned, higher sales taxes tend to be associated with increased lobbying activities. Lobbying on behalf of special interests can have distortionary effects on market transactions and consumer choices. By advocating for different treatments for certain transactions or activities, lobbying activities (and ultimately sales tax exemptions) have multiple adverse effects. The sales exemptions, once implemented, erode the sales tax base. They also institute preferences for certain transactions and goods over others. This results in distortions of consumer choices, which alter essential market signals and results in misallocation of resources and investment.

ENDNOTES

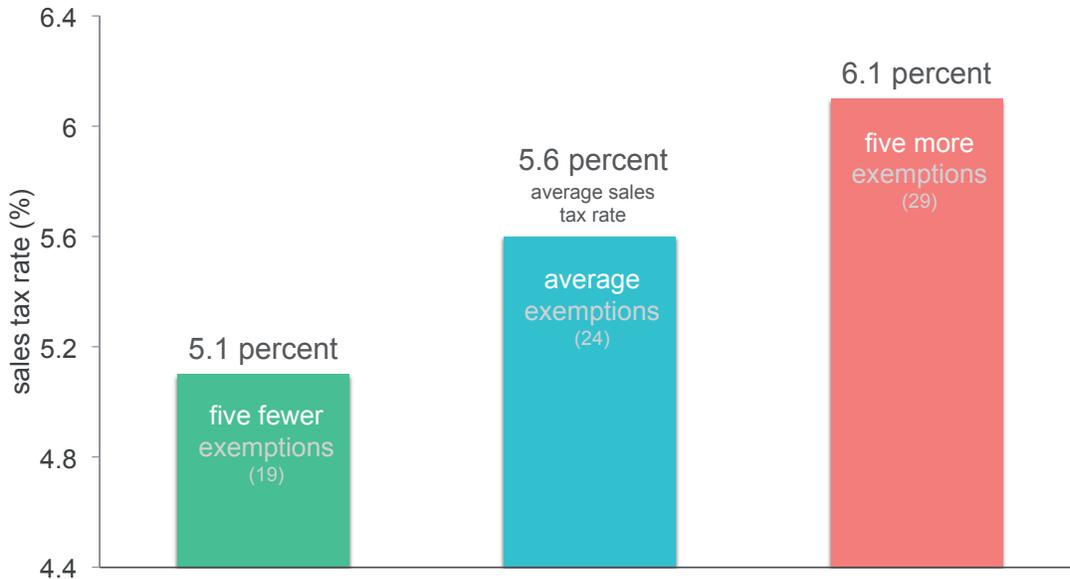
1. Justin Ross, "A Primer on State and Local Tax Policy: Trade-Offs Among Tax Instruments" (Mercatus Research, Mercatus Center at George Mason University, Arlington, VA, 2014).
2. See, e.g., Dennis Mueller, *Public Choice III* (Cambridge: Cambridge University Press, 2003).
3. Sam Peltzman, "Toward a More General Theory of Regulation," *Journal of Law and Economics* 19 (1976): 211–40.
4. Andreea Militaru and Thomas Stratmann, "A Survey of Sales Tax Exemptions in the States: Understanding Sales Taxes and Sales Tax Exemptions" (Mercatus Research, Mercatus Center at George Mason University, Arlington, VA, 2014).
5. Scott Drenkard, "State and Local Sales Tax Rates in 2014" (Tax Foundation, Washington, DC, March 18, 2014).
6. "State and Local Laws Held Preempted by Federal Law," Justia US Law, accessed July 3, 2014, <http://law.justia.com/constitution/us/049-state-local-laws-preempted-by-federal-law.html>.
7. Militaru and Stratmann, "Survey of Sales Tax Exemptions," 2014, 17.
8. Militaru and Stratmann, "Survey of Sales Tax Exemptions," 2014, 24.

Figure 1. The effect of increasing or decreasing sales tax exemptions and sales tax rate.



Source: Authors' calculations based on data presented in Militaru and Stratmann, "Survey of Sales Tax Exemptions," 2014. Produced by Thomas Stratmann, Rachel Reese, and Rizqi Rachmat, Mercatus Center at George Mason University.

Figure 2. The relationship between the number of sales tax exemptions and sales tax rates.



Source: Authors' calculations based on data presented in Militaru and Stratmann, "Survey of Sales Tax Exemptions," 2014. Produced by Thomas Stratmann, Rachel Reese, and Rizqi Rachmat, Mercatus Center at George Mason University.

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