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THE RISKS OF 'TAX REFORM' IN MARYLAND

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Maryland lawmakers are currently considering how to close a projected \$1.5 billion annual budget shortfall. One proposed solution is to broaden the tax base and increase tax rates so as to produce more tax revenue. In particular, there are calls to expand the retail sales tax base to cover certain services that are currently exempt. Before embarking on this course of action, Maryland lawmakers may want to consider some of the negative economic consequences of increasing taxes, which we will discuss in this paper.

First, all taxes by nature have “deadweight losses”—losses to consumers and producers beyond the extracted tax as people respond to the higher relative price of goods. These losses are permanent losses in economic activity. In some instances, deadweight losses are larger than the resulting government revenue, making the tax highly inefficient. For example, one important study found that the estimated deadweight loss from the 1993 federal tax increase was \$15.9 billion—nearly twice the tax’s resulting government revenue of \$8.4 billion. Thus, federal taxpayers incurred a cost of nearly \$3 for each dollar transferred to the federal government by the tax increase—a tradeoff of dubious public welfare value. If tax increases are necessary, policymakers should tailor them to minimize deadweight loss.

Second, retail sales taxes are vulnerable to “tax pyramiding,” which produces economic distortion by inefficiently giving tax advantages to some goods over others. Retail sales tax pyramiding occurs when the tax is applied to business inputs. The tax

then gets multiplied repeatedly as the good moves through the economy, creating distortion for goods that require many value-additions. When the good or service is finally bought by the consumer, the consumer ends up paying a tax on a tax—a dynamic that hurts Maryland consumers and puts state businesses at a competitive disadvantage. Sales tax pyramiding is no small matter; in Maryland, 42 percent of state sales tax collections are derived from the sale of business inputs. Other economic distortions created by the retail sales tax include raising Maryland’s already high cost of living and causing businesses to vertically integrate in order to avoid the tax.

The retail sales tax also imposes a large compliance surcharge on businesses. In other words, businesses act as tax collectors for the state, and that role imposes costs that put them at an economic disadvantage to out-of-state firms. Estimates of the current compliance surcharge, as of Fiscal Year 2006, range from \$169.9 million to \$202.3 million. A \$1.5 billion increase in the sales tax, due to expanding the base, would boost the compliance surcharge by another \$75.4 million to \$89.7 million.

This report shows that balancing Maryland’s budget by increasing the sales tax, via a rate increase or base expansion, would negatively affect Maryland’s economy and impair state businesses’ ability to compete in the global marketplace. Moreover, a budget deficit is a clear sign that government spending is exceeding the economy’s ability to create income, and that is especially

worrisome given that Maryland's current budget woes are coming at a time of steady economic growth and healthy tax revenues. Rather than dampening the economy by raising taxes, Annapolis should reexamine its fiscal priorities.

TAXES MATTER

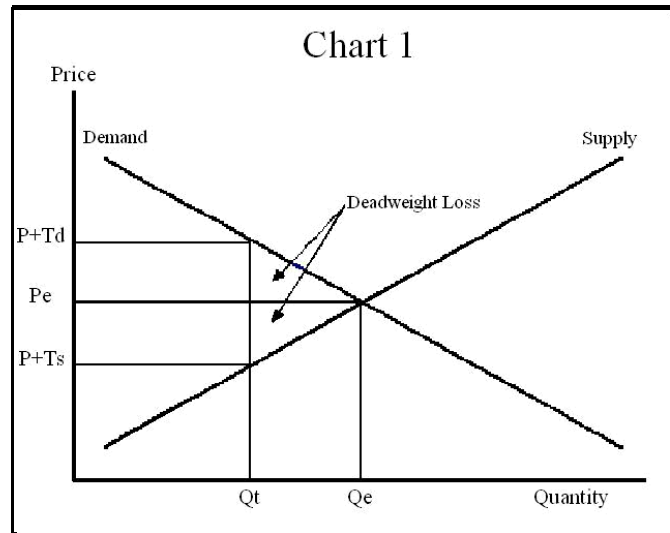
It is well established that people respond to tax incentives and disincentives. For example, they may buy a larger house than they otherwise would because they can deduct the mortgage interest from their income taxes. Since the behavior is tax-induced, it harms the economy; if not for the tax break, the taxpayer would have been financially led to a different use of that money.

Deadweight Loss

"Deadweight loss" is a term used by economists to describe economic activity forgone by consumers and producers because of the higher relative price of goods as a result of the tax. For instance, taxpayers may reduce their wage-earning because "the extra wages would be eaten up by taxes." In other words, the very nature of taxation—in which government collects revenue based on other activities such as wage-earning or general consumption instead of charging some sort of direct fee for the use of government services—results in a permanent loss of potential economic output. That loss may be necessary so as to achieve the benefit of government-provided goods, but it should be minimized when possible.

Chart 1 graphically shows how economists estimate deadweight losses where Quantity (Q_e) and Price (P_e) show the market equilibrium. The addition of a tax has the same effect as an artificial price increase. The new price point of intersection with the Demand ($P+T_d$) and Supply ($P+T_s$) curves is at Quantity (Q_t). The rectangle formed by the new intersection is the revenue gained by the tax. However, the triangle represents the deadweight loss—the value of trade that would have occurred without the tax, but is now forgone because of the tax. Deadweight loss can be estimated by calculating the area of the triangle.

Estimating the deadweight loss is subject to the degree in which taxpayers change their behavior. If, in fact, taxpayers reallocate their spending so



that they buy larger houses because the mortgage interest is deductible, then the deadweight loss is large. Economists refer to this as the "tax elasticity" (TE). The example given above is an example of "high tax elasticity." Graphically, in Chart 1, TE is shown by the steepness and curvature of the supply and demand curves.

Based on this standard economic methodology, Harvard economist Martin Feldstein pioneered the empirical estimations of deadweight loss. In one of Feldstein's studies, co-authored with Daniel Feenberg, the TE from the 1993 federal income tax increase was estimated to be 0.75. This means that for every 1 percent reduction in after-tax income, taxable income decreased by 0.75 percent.¹

According to static federal revenue projections, the 1993 tax increase (both marginal income tax rates and the payroll tax) was estimated to raise \$19.3 billion in additional revenue. However, based on behavior response (that is, taxpayers altering their behavior so as to reduce or avoid the tax), the actual additional revenue raised was estimated at a much lower level of \$8.4 billion. Further, the deadweight loss was estimated at \$15.9 billion, or nearly twice the behavior-adjusted revenue of \$8.4 billion. Thus, federal taxpayers incurred a deadweight cost of nearly two dollars from this tax increase for every tax dollar raised.

More recently, new evidence has come to light that strongly supports the TE estimate used in Feldstein and Feenberg's study. A study by Adam Looney and Monica Singhal used two different data

1. Feenberg, Daniel and Feldstein, Martin, "The Effect of Increased Tax Rates on Taxable Income and Economic Efficiency: A Preliminary Analysis of the 1993 Tax Rate Increases," NBER Working Paper 5370, November 1995.

sets to calculate TE, and each data set yielded a result virtually identical to Feldstein and Feenberg's 0.75.² To summarize Looney and Singhal's conclusions:

We focus primarily on tax rate changes arising from the loss of a dependent exemption. Using the SIPP [Survey of Income and Program Participation], we estimate a significant elasticity of family labor income of 0.75 for families with base year earnings between \$35,000 and \$85,000. Our estimates using the tax panel data are almost identical. These estimates are at the high end of the range found in previous work . . . In theory, however, our estimates of labor income elasticities from the SIPP data should be lower bounds on the true elasticities of taxable income. The high-end estimates then imply substantial behavioral responses to taxation and sizable efficiency costs of taxation.

Deadweight loss is not just an academic issue. In the real world, it means a smaller economy and lower standard of living for everyone. For example, a recently released study by David and Christina Romer examines federal tax law changes over the last 50 years. They conclude:

This paper investigates the impact of changes in the level of taxation on economic activity. . . . [T]he resulting estimates indicate that tax increases are highly contractionary. The effects are strongly significant, highly robust, and much larger than those obtained using broader measures of tax changes. The large effect stems in considerable part from a powerful negative effect of tax increases on investment.³

At the state level, Zsolt Besci comes to a similar conclusion in a study he prepared for the Atlanta Federal Reserve Bank:

The study finds that relative marginal tax rates have a statistically significant negative relationship with relative state growth averaged for the period from 1961 to 1992. These results are economically significant because controlling for progressivity with greater accuracy than other specifications uncovers the effects of taxes.⁴

Worth the Cost?

The negative economic effect of taxation is thus well established and likely would not be disputed by analysts across the political spectrum. However, taxes are necessary to fund government-provided goods, and some of those goods produce surplus benefits that outweigh the costs of taxation. In this way, taxes are often recognized as a "necessary evil."

But has government activity reached a point where some of its services are not worth their economic cost, and that activity should thus be scaled back to levels that truly produce a net gain for public welfare? An answer to this question is offered in a recent study by Stephen Brown, Kathy Hayes, and Lori Taylor. They write:

If anything, most public services do not appear to justify the taxes needed to finance them. Any tax savings financed by slower growth in environmental services, health and hospitals, or elementary and secondary education is positively associated with growth in private capital. Similarly, any tax savings financed by slower growth in public safety or education spending is positively associated with growth in private employment. . . . [T]his finding would seem to imply that other state and local public capital has been increased to the

2. Looney, Adam and Singhal, Monica, "The Effects of Anticipated Tax Changes on Intertemporal Labor Supply and the Realization of Taxable Income," John F. Kennedy School of Government, Harvard University, Faculty Research Working Papers Series, RWP06-031, July 2006.
3. Romer, Christina D. and Romer, David H., "The Macroeconomic Effects of Tax Changes: Estimates Based on a New Measure of Fiscal Shocks," National Bureau of Economic Research Working Paper No. 13264, July 2007.
4. Besci, Zsolt, "Do State and Local Taxes Affect Relative State Growth?" Atlanta Federal Reserve Bank, *Economic Review*, March/April 2006.

Category	Lowest Taxed States Growth Rate	Highest Taxed States Growth Rate	Advantages to Low Tax States	National Average
Average State and Local Taxes as a Percent of Personal Income	9.5%	13.0%	27.2% Lower Tax Burden	10.7%
Population Growth	17.5%	6.4%	172.1% Higher Population Growth	11.7%
Personal Income Growth	75.6%	57.3%	31.9% Higher Personal Income Growth	65.7%
Employment Growth	23.3%	13.0%	78.6% Higher Employment Growth	17.6%
Source: Census Bureau, Bureau of Economic Analysis, Maryland Public Policy Institute.				

point of negative returns, perhaps because a growing stock of other public capital is indicative of an increasingly intrusive government.⁵

One does not need complex statistical studies to see the negative impact of excessive taxation. Consider three important measures of economic prosperity among the 10 states with the highest and the 10 states with the lowest level of taxation between state fiscal years 1994 and 2004. These measures include population growth, personal income growth, and employment growth.

Table 1 illustrates the difference in taxation and economic performance of the lowest-taxed states and the highest-taxed states. The lowest-taxed states had an average tax bite of 9.5 percent of personal income versus 13 percent for the highest-taxed states. As such, the tax bite of the lowest-taxed states was 27.2 percent lower than the highest-taxed states. Not surprisingly, the lowest-taxed states enjoyed population growth that was 172.1 percent higher, personal income growth that was 31.9 percent higher, and employment growth that was 78.6 percent higher.⁶

RETAIL SALES TAXES MATTER MOST OF ALL

This report will judge Maryland's sales tax on each of the following four principles of a growth-maximizing tax system:

- 1. Transparency.** Taxes are the price of government. Unfortunately, there are so many different types of taxes that taxpayers struggle to determine the exact price of government. Ultimately, the price of government becomes so obscured that taxpayers are simply unable to weigh the benefits against the cost of its various activities. A good tax system should allow taxpayers to determine the price of government easily.
- 2. Neutrality.** Taxation incentivizes taxpayers to alter their behavior in order to minimize their tax bill. As such, taxing income reduces income, taxing retail sales reduces sales, taxing the value of property reduces its value. A good tax system should reduce the influence of taxes on the behavior of taxpayers by: a) taxing at a single point in the economy (income OR consumption OR wealth); b) having a single, flat rate; and c) having a properly defined tax base with no unnecessary exemptions, allowances, or credits.

5. Brown, Stephen P.A., Hayes, Kathy J. and Taylor, Lori L., "State and Local Policy, Factor Markets, and Regional Growth," *The Review of Regional Studies*, Vol. 33, No. 1, 2004, pp. 40-60.

6. Moody, J. Scott, "High Taxes Lower Economic Performance," *State Tax Notes*, Vol. 41, No. 13, September 25, 2006. p. 946.

3. **Simplicity.** In addition to paying the tax, taxpayers must also spend time and money planning, complying with, and filing their taxes. This leaves less time and money for family and business activities. A good tax system should minimize these tax compliance costs to taxpayers.
4. **Stability.** Taxpayers make many long-term decisions in the face of an uncertain world, such as the decision to have children or to buy a house. A good tax system should not be a source of additional uncertainty by undergoing continuous change, containing temporary tax changes, or, worst of all, making tax changes retroactive. Also, from a governmental perspective, tax revenue stability aids in budgetary stability and better long-term decision making.

Keep in mind that these four principles apply to the sales tax as experienced by all the states, not just in Maryland. The reason for such a broad scope is to determine how the sales tax has generally maintained its theoretical purity as laid out by the four principles. Also, pragmatically speaking, Maryland businesses must contend with tax policy within and beyond Maryland borders.

Transparency

To most consumers, the retail sales tax appears to be very transparent since the total tax paid is printed on every sales receipt. However, the retail sales tax is not transparent for two primary reasons: 1) sales tax pyramiding and 2) highly variable rates and scope.

First, the retail sales tax is meant to apply only to the final sale of consumer goods and services. However, many goods and services can be used by both consumers and businesses. For example, printer paper can go into the printer you have at home or the printer you have at your office. The paper used at home is a “consumer good” since that is the final use of the paper. However, the paper used at the office is an “intermediate good” since it is being used as an input into a greater production process.

Taxing intermediate goods, such as office printer paper, reduces tax transparency because the tax gets passed along in the price of other goods and services. If the office printer paper was used by a graphics design shop, then the prices of goods and services sold by the shop would contain the sales tax paid on the printer paper. Consumers have no

State	State and Local Sales Tax On Business Inputs	State and Local Sales Tax Collections (estimated)	Sales Tax on Business Inputs as a Percent of Collections
United States	111.7	262.3	43%
Alabama	1.1	5.7	19%
Alaska	0.0	0.2	0%
Arizona	2.9	7.0	41%
Arkansas	1.0	3.3	30%
California	15.8	37.6	42%
Colorado	2.2	4.4	50%
Connecticut	1.6	3.3	49%
Delaware	0.0	0.0	--
Florida	6.9	20.1	34%
Georgia	3.8	7.7	50%
Hawaii	0.7	2.1	33%
Idaho	0.3	1.1	27%
Illinois	3.5	8.4	42%
Indiana	1.6	5.0	32%
Iowa	0.7	2.2	32%
Kansas	1.2	2.5	48%
Kentucky	1.2	2.6	46%
Louisiana	3.5	5.7	62%
Maine	0.3	0.9	32%
Maryland	1.2	2.9	42%
Massachusetts	1.5	3.9	39%
Michigan	2.4	8.1	30%
Minnesota	1.8	4.3	42%
Mississippi	1.0	2.6	39%
Missouri	2.1	4.9	43%
Montana	0.0	0.0	–
Nebraska	0.9	1.8	51%
Nevada	1.2	2.4	50%
New Hampshire	0.0	0.0	–
New Jersey	2.5	6.6	38%
New Mexico	1.1	2.2	51%
New York	10.8	21.1	51%
North Carolina	2.3	6.2	37%
North Dakota	0.2	0.5	42%
Ohio	4.0	9.6	41%
Oklahoma	1.5	2.9	51%
Oregon	0.0	0.0	–
Pennsylvania	3.2	8.3	39%
Rhode Island	0.4	0.8	47%
South Carolina	1.0	3.0	33%
South Dakota	0.4	0.8	48%
Tennessee	2.6	7.6	34%
Texas	10.7	20.2	53%
Utah	0.8	2.2	37%
Vermont	0.1	0.3	32%
Virginia	1.4	4.0	35%
Washington	5.9	10.6	55%
West Virginia	0.3	1.1	27%
Wisconsin	1.5	4.3	35%
Wyoming	0.4	0.7	59%
District of Columbia	0.3	0.8	35%

Source: Council on State Taxation, Census Bureau.

way to separate out the tax costs from the price. Tax analysts refer to this as “sales tax pyramiding.”

Sales tax pyramiding is no small matter. As shown in Table 2, a recent study by the Council on State Taxation found that 43 percent of state and local sales tax collections were derived from the sale of business inputs in FY 2005.⁷ In Maryland, 42 percent of state sales tax collections were derived from the sale of business inputs. Yet the full cost of this taxation is not easily observable for the public.

Second, the retail sales tax rate and base can vary by whether the purchased product is a good or service and by geography. The appendix shows many of the important retail sales tax rates and base features by state. The columns labeled “Business Sales Tax Base” and “Consumer Sales Tax Base” show which types of goods and services are subject to the tax. In Maryland, for example, a consumer will pay the retail sales tax on clothing items but not for groceries, while a small business owner will pay the retail sales tax on office equipment but not on computer software.

The column “General Sales and Use Tax Rate,” the rate most consumers are perhaps the most aware of, shows how the rate varies by state. However, the column “Combined Weighted Average of State, County and City Rate” shows that many other government jurisdictions also levy their own retail sales tax. In Alabama, the state sales tax is 4 percent, but when combined with other jurisdictions the tax rate more than doubles to 8.05 percent. Fortunately, Maryland has only a state-level retail sales tax.

In addition, the retail sales tax can get even murkier than shown in the appendix. For example, some states may tax grocery items, but do it at a reduced rate. Virginia has a 5 percent retail sales tax, but a reduced rate of 1.5 percent on groceries. Only the most observant taxpayers would ever

notice the differences in the sales tax across goods/services and/or geography.

Neutrality

Sales tax pyramiding also creates distortions in the marketplace. Most states try to mitigate those distortions by exempting business-to-business sales. As shown in the appendix, however, the necessary exemptions to prevent sales tax pyramiding are not universally applied.

The most extreme form of sales tax pyramiding occurs under a gross receipts tax, which is essentially a retail sales tax with no exemptions for business-to-business sales. Currently, eight states levy a gross receipts tax: Delaware, Kentucky, Michigan, New Jersey, New Mexico, Ohio, Texas and Washington. More disturbingly, gross receipts taxes have been growing in popularity; Ohio and Texas enacted this type of tax in 2005 and 2006, respectively.⁸

For example, Table 3 illustrates the extreme degree of sales tax pyramiding that is present under Washington state’s gross receipts tax.⁹ Overall, the degree of tax pyramiding is 2.5, meaning that on average the tax has been paid 2.5 times before reaching the final consumer. However, the degree varies dramatically by industry from a high of 6.7 times in the “manufacturing—food” industry to a low of 1.4 times in the “services—computer, data and processing” industry.

Extending the retail sales tax to services worsens the sales tax pyramiding problem. Services are difficult to distinguish between final consumption and business-to-business sales. For example, a tax accountant can file tax forms for individuals and businesses, and sometimes both are represented on the same tax forms. In such a case, how is it determined what is a consumer product and what is a business input?

7. Cline, Robert; Neubig, Tom; Phillips, Andrew, “Total State and Local Business Taxes,” Earnst & Young, LLP and the Council on State Taxation, March 2006.

8. For an excellent historical and economic analysis of gross receipts taxes in the United States, see: Chamberlain, Andrew and Flenor, Patrick, “Tax Pyramiding: The Economic Consequences of Gross Receipts Taxes,” Tax Foundation, *Special Report* No. 147, December 2006.

9. “Tax Alternatives for Washington State: A Report to the Legislature,” Washington State Tax Structure Study Committee, Volume 2, Appendices, November 2002.

Table 3			
Washington's Gross Receipts Tax—The Dangers of Tax Pyramiding			
Calendar Year 1998			
Industry	Degree of Tax Pyramiding	Industry	Degree of Tax Pyramiding
Manufacturing—Food	6.7	Services—Miscellaneous Repairs	2.7
Manufacturing—Petroleum and Refining	6.7	Manufacturing—Miscellaneous Manufacturing Industries	2.7
Manufacturing—Aircraft and Parts	5.3	Manufacturing—Print and Publishing	2.6
Manufacturing—Rubber and Plastics	4.3	Transportation	2.5
Manufacturing—Primary Metal	4.1	Mining and Quarry	2.4
Manufacturing—Apparel and Textiles	4.1	Manufacturing—Fabricated Metal	2.3
Manufacturing—Lumber and Wood Products	4.0	Services—Lodging	2.2
Manufacturing—Professional and Scientific Instruments	4.0	Services—Personal	2.1
Manufacturing—Industrial Machinery and Equipment	3.9	Agriculture—Fishing	2.0
Manufacturing—Furniture and Fixtures	3.7	Services—Auto Repair	2.0
Manufacturing—Other Transportation Equipment	3.7	Communications	1.9
Manufacturing—Paper Products	3.7	Wholesale Trade	1.9
Manufacturing—Stone, Clay and Glass	3.4	Legal, Engineering and Accounting	1.8
Manufacturing—Chemical Production	3.3	Services—Business	1.7
Construction	3.3	Retail Trade	1.6
Manufacturing—Electrical Machinery and Equipment	2.8	Services—Medical and Health	1.6
Manufacturing—Leather	2.8	Fire	1.6
Movies, Amusements and Recreation	2.7	Electric, Gas and Other Utilities	1.5
Services—Computer, Data and Processing	1.4	Total State	2.5

Source: "Tax Alternatives for Washington State: A Report to the Legislature," Washington State Tax Structure

Table 4 Business Share of Purchases of Services Calendar Year 2003		
Industry	Business Share of Purchases of Services	Total Purchases of Services (Billions of Dollars)
Principally Business Purchases		
Advertising	98%	\$175.3
Architecture and Engineering Services	96%	\$125.2
Employment Services	94%	\$88.6
Management and Technical Services	88%	\$89.8
Data Processing Services	84%	\$38.4
Accounting and Legal Services	71%	\$196.1
Securities and Investment Services	66%	\$194.9
Principally Household Purchases		
Automobile Repair	26%	\$145.6
Personal Services	11%	\$96.5
Education Services	7%	\$131.4
Amusements and Recreation	5%	\$81.0
Medical Services	1%	\$889.5
Source: Council on State Taxation		

According to a study by the Council on State Taxation, expanding the sales tax base to services would lead to increased sales tax pyramiding. Table 4 shows that many types of services have a large business share of purchases. For instance, 98 percent of all advertising is bought by businesses; whereas only 26 percent of automobile repair services are bought by businesses.¹⁰ By adding services to the retail sales tax base, the tax further morphs into the economically destructive gross receipts tax.

As a result of sales tax pyramiding, the retail sales tax is economically damaging. A recent overview of the effect of the sales tax on economic performance by Mark Crain of Lafayette College found:

Two findings stand out from the empirical analysis [of the sales tax] of the last three decades of the twentieth century. First, marginal tax rates matter for sales taxes but not for individual income taxes. Second, states suffer a substantial penalty

for levying a marginal sales tax rate that is high in relation to other states. Of course, the reverse also applies. Substantial economic benefits redound to states with relatively low marginal sales tax rates. . . . Intuitively, the impact of the sales tax is analogous to a general, broad-based increase in the cost of production.¹¹

Sales tax pyramiding creates economic distortions in two ways. First, sales tax pyramiding increases an area’s cost of living. According to a study by Timothy Besley and Harvey Rosen, not only does the retail sales tax increase the price level, but the price level increases by more than the tax increase, a dynamic known as “overshifting.” The authors conclude:

For some commodities, the after-tax price increases by exactly the amount of the [sales] tax, a result consistent with the standard competitive model. However, taxes on other commodities are overshifted — an increase in tax revenue of one dollar per unit increases the price by more than one dollar.¹²

Second, sales tax pyramiding encourages vertical integration, where a firm merges with its suppliers in order to avoid the sales tax. For example, if manufacturing machinery is taxable, a manufacturer may find it advantageous to buy the company that makes its machines and run it as a subsidiary. From an economic standpoint, this type of vertical integration is inefficient because it is a response to sales tax pyramiding and not to the marketplace.¹³

Simplicity

As stated in the section on transparency, the retail sales tax is meant to only apply to the final sale of consumer goods and services. Complicating matters is the fact that many goods and services can be used by both consumers and businesses. Exempting certain goods and services is, at best, a crude way to distinguish between final consump-

10. Cline, Robert; Mikesell, John; Neubig, Tom and Phillips, Andrew, “Sales Taxation of Business Inputs: Existing Tax Distortions and the Consequences of Extending the Sales Tax to Business Services,” Council of State Taxation, January 25, 2005.
 11. Crain, W. Mark, *Volatile States: Institutions, Policy and the Performance of American State Economies*, University of Michigan Press, Ann Arbor, 2003, pp. 70-71.
 12. Besley, Timothy J. and Rosen, Harvey S., “Sales Taxes and Prices: An Empirical Analysis,” *National Tax Journal*, Vol. 52 No. 2, 1999, pg. 157-178.
 13. Fox, William F. and Murray, Matthew, “Economic Aspects of Taxing Services,” *National Tax Journal*, March 1988.

Table 5 Gross Retail Sales Tax Compliance Surcharge Calendar Year 2003						
Compliance Surcharge as a Percent of:	Annual Retail Sales Size Class					
	\$150,000 to \$1,000,000	\$1,000,000 to \$10,000,000	Over \$10,000,000	National Weighted Average	Maryland Sales Weighted Average	Maryland Establishments Weighted Average
Sales Tax Collected	13.47%	5.20%	2.17%	3.09%	5.02%	5.98%

Source: Joint Cost of Collection Study, PricewaterhouseCoopers, LLP and Maryland Public Policy Institute.

tion and intermediate business inputs. As states have tried to do the right thing and exempt business inputs, the simplicity of the retail sales tax has eroded.

Add-on local option retail sales taxes have further eroded simplicity. As shown in the appendix, taxpayers could face a state tax, a county tax, and even a city tax. Add on all of the exemptions and differential tax rates, such as reduced rates on groceries, and businesses have a hard time knowing what to tax and at what rate.

Another issue that reduces the simplicity of the retail sales tax is the political drive to reduce the tax impact on low-income taxpayers. The exemption or reduced tax rate on groceries is often justified on such political considerations. Those exemptions create complexity problems in the retail sales tax base. The end result of these adjustments is that the compliance costs of the retail sales tax start to become onerous, especially for small businesses. This point was driven home by a report that was commissioned by the Joint Cost of Collection Study, which examined the retail sales tax compliance costs for retail establishments.¹⁴ The study notes:

On a national basis, the study finds that average sales tax compliance costs—either as a percent of sales tax collections or as a percent of taxable sales—is more than six times greater for small retailers than for large retailers. The survey results are consistent with earlier studies . . . that also found substantial economies of scale in the cost of sales tax compliance.

Table 5 shows that the average national retailer faces a retail sales tax compliance surcharge of 3.09 percent, or 3.09 cents per dollar of tax collected. This surcharge is “regressive” in that retailers with sales less than \$1 million face a surcharge of 13.47 percent while retailers with sales over \$10 million face a much lower surcharge of 2.17 percent.

Maryland’s specific compliance costs are higher than the national average. Table 5 shows re-weighted results based on Maryland specific retailing data from the U.S. Census Bureau.¹⁵ When re-weighted by sales, Maryland businesses face a retail sales tax compliance surcharge of 5 percent—or 63 percent higher than the national average. When re-weighted by establishments, the surcharge is a higher 6 percent—or 94 percent higher than the national average.

Keep in mind that this analysis only quantifies the retail sales tax compliance surcharge on retailers. Arguably, retailers are most able to handle sales tax collections because much of the process is automated via electronic cash registers. For other service-based industries, such as barbers and architects, retail sales tax collection will be more labor-intensive and thus more expensive.

Table 6 quantifies Maryland’s retail sales tax compliance surcharge for Fiscal Year (FY) 2006. In FY 2006, Maryland collected \$3.38 billion in retail sales tax. Using the “Maryland Sales Weighted Average” of 5.02 percent yields a retail sales tax compliance surcharge of \$169.9 million. Using the “Maryland Establishments Weighted Average” of 5.98 percent yields a retail sales tax compliance surcharge of \$202.3 million.

14. “Retail Sales Tax Compliance Costs: A National Estimate,” Joint Cost of Collection Study, PricewaterhouseCoopers, LLP, April 7, 2006.

15. The re-weighting is based on data from the 2002 Economic Census published by the U.S. Census Bureau.

Sales Tax Collections	\$3,381,694,000
Compliance Surcharge at "Maryland Sales Weighted Average"	\$169,883,426
Compliance Surcharge at "Maryland Establishments Weighted Average"	\$202,283,069
Additional Surcharge with \$1,500,000,000 Sales Tax Increase at "Maryland Sales Weighted Average"	\$75,354,286
Additional Surcharge with \$1,500,000,000 Sales Tax Increase at "Maryland Establishments Weighted Average"	\$89,725,624
Source: Joint Cost of Collection Study, PricewaterhouseCoopers, LLP and Maryland Public Policy Institute.	

Also shown are the estimated increases in the sales tax compliance surcharge assuming the sales tax base is expanded in order to cover the projected \$1.5 billion budget deficit. Using the "Maryland Sales Weighted Average" of 5.02 percent yields an additional sales tax compliance surcharge of \$75.4 million. Using the "Maryland Establishments Weighted Average" of 5.98 percent yields an additional sales tax compliance surcharge of \$89.7 million.

Whichever retail sales tax compliance surcharge is used, the disturbing results will mean a considerably higher compliance surcharge on Maryland's businesses. This surcharge may also be contributing to the retail sales tax overshifting into higher prices discussed previously.

Stability

The conventional wisdom among policymakers about the stability of the retail sales tax is based on the observed stability of consumer spending. Since taxpayers can delve into savings during economic downturns, consumer spending is less volatile than the economy at large.

This claim rests on the assumption that the majority of the sales tax is collected on the final sale of consumer goods and services. As stated previously, in Maryland 42 percent of state sales taxes are collected from business-to-business sales. One has to look no further than the 2001 recession to understand the volatility of business-to-business sales. In 2001, the vast majority of the decline in economic activity was business driven, while consumer spending was only modestly affected.

Mark Crain, in his previously cited paper, also finds:

The conventional wisdom that sales taxes generate a more reliable revenue stream than income taxes does not square with the observed fiscal experiences in nearly 2 out of 3 American states. The analysis in this chapter discovers that income tax revenues are less volatile than sales tax revenues in 23 of the 37 states that levy both types of taxes.¹⁶

Maryland is among the states in which sales tax revenue is more variable than income tax revenue.

A more recent threat to the stability of the retail sales tax is the rapid growth in retail purchases over the internet. A recent study by Glenn and Sara Ellison found that "[i]n terms of sales taxes, for example, it is quite easy for consumers, in high tax states, especially, to learn the general principle that buying things online saves on taxes, and we find clear evidence [online] sales being higher in high tax states."¹⁷

States are so worried about the internet and out-of-state sales that the Streamlined Sales Tax Project (SSTP) was initiated to solve this growing issue. In particular, SSTP is meant to address the *Quill* decision of the U.S. Supreme Court, which essentially stopped the taxation of sales made in other states. To date, the SSTP has not gained popularity with policymakers and, as a result, the stability, even the very viability, of the retail sales tax remains in jeopardy.

16. Crain., p. 80.

17. Ellison, Glenn and Ellison, Sara Fisher, "Internet Retail Demand: Taxes, Geography, and Online-Offline Competition," National Bureau of Economic Research, Working Paper 12242, May 2006.

CONCLUSION

Overall, the most serious defect of the retail sales tax is sales tax pyramiding. Sales tax pyramiding almost single-handedly reduces the transparency, neutrality, simplicity, and stability of the sales tax. In fact, an entire tax, the value-added tax (VAT), was invented specifically to eliminate the economic problems caused by sales tax pyramiding.

Crain succinctly observes:

[T]he desire for a tax structure that enhances revenue stability, in conjunction with the negative consequences of sales taxes on economic performance, offers two powerful explanations for the pervasive shift in state governments away from sales taxes and toward increased reliance on income taxes. In light of these findings the demise of state sales taxes represents a rational response by state policymakers to the negative attributes of this tax instrument.¹⁸

Closer to home, Stephen Mark, Theresa McGuire and Leslie Papke studied the effects of taxation in the greater Washington, D.C. area, including Virginia and Maryland. They “find that higher rates of two business taxes—sales and personal property—reduce annual employment growth by a significant amount.”¹⁹

The evidence is clear: Balancing Maryland’s budget by increasing the retail sales tax, via a rate increase or base expansion, would impair Maryland’s economy and lessen state businesses’ ability to compete in the global marketplace. Moreover, a budget deficit is a sign that government spending is exceeding the economy’s ability to create income. Rather than dampen the economy by raising tax revenue, Annapolis should put its own house in order by ensuring the benefits of every dollar spent exceeds the deadweight loss of taxation. If not, cut spending.

—Mr. Moody is president of *Economic Analysts, Inc.*, a public policy consulting group. Dr. Warcholik is vice president and chief economist of *Economic Analysts, Inc.*

18. Crain, p. 81.

19. Mark, Stephen T., McGuire, Theresa J., Papke, Leslie E., “The Influence of Taxes on Employment and Population Growth: Evidence from the Washington, D.C. Metropolitan Area,” *National Tax Journal*, Vol. 53 no. 1, March 2000, pp. 105-124.

Appendix Statutory Sales Tax Rates and Base on Businesses and Consumers as of December 31, 2005												
State	General Sales and Use Tax Rate (Percent)	Combined Weighted Average of State, County and City Rates (Percent)	Sales Tax Holiday (as of May 2006)	Business Sales Tax Base								
				Agricultural			Services					
				Insecticides and Pesticides	Fertilizer, Seed and Feed	Seedlings, Plants and Shoots	General Treatment	Janitorial/Cleaning	Transportation	Repair	Professional/Personal	
Alabama	4	8.05	Yes	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt
Alaska	None	1.15	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Arizona	5.6	7.65	No	Taxable	Exempt	Exempt	Partially Taxable	Exempt	Taxable	Exempt	Exempt	Exempt
Arkansas	6	8	No	Exempt	Exempt	Exempt	Partially Taxable	Taxable	Exempt	Taxable	Exempt	Exempt
California	6.25	7.95	No	Taxable	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt
Colorado	2.9	6.15	No	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt
Connecticut	6	6	Yes	Exempt	Exempt	Exempt	Partially Taxable	Taxable	Exempt	Taxable	Exempt	Taxable
Delaware	None	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Florida	6	6.7	Yes	Exempt	Exempt	Exempt	Partially Taxable	Taxable	Exempt	Exempt	Exempt	Exempt
Georgia	4	6.9	Yes	Exempt	Exempt	Exempt	Exempt	Exempt	Taxable	Exempt	Exempt	Exempt
Hawaii	4	4	No	Taxable	Taxable	Taxable	Taxable	Taxable	Taxable	Taxable	Taxable	Taxable
Idaho	5	5.05	No	Exempt	Exempt	Exempt	Exempt	Exempt	Taxable	Exempt	Exempt	Exempt
Illinois	6.25	7.55	No	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt
Indiana	6	6	No	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt
Iowa	5	6.6	Yes	Exempt	Exempt	Exempt	Partially Taxable	Taxable	Exempt	Taxable	Exempt	Taxable
Kansas	5.3	6.95	No	Exempt	Exempt	Exempt	Partially Taxable	Exempt	Exempt	Taxable	Exempt	Exempt
Kentucky	6	6	No	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt
Louisiana	4	8.6	No	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Taxable	Exempt	Exempt
Maine	5	5	No	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt
Maryland	5	5	No	Exempt	Exempt	Exempt	Exempt	Taxable	Exempt	Exempt	Exempt	Exempt
Massachusetts	5	5	No	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt
Michigan	6	6	No	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt
Minnesota	6.5	6.7	No	Exempt	Exempt	Exempt	Partially Taxable	Taxable	Exempt	Exempt	Exempt	Exempt
Mississippi	7	7	No	Exempt	Exempt	Exempt	Partially Taxable	Exempt	Exempt	Taxable	Exempt	Exempt
Missouri	4.225	6.85	Yes	Exempt	Exempt	Exempt	Exempt	Exempt	Taxable	Exempt	Exempt	Exempt
Montana	None	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Nebraska	5.5	6.3	No	Exempt	Exempt	Exempt	Exempt	Taxable	Exempt	Taxable	Exempt	Exempt
Nevada	6.5	7.5	No	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt
New Hampshire	None	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
New Jersey	6	5.95	No	Exempt	Exempt	Exempt	Exempt	Taxable	Exempt	Taxable	Exempt	Exempt
New Mexico	5	6.55	Yes	Exempt	Exempt	Exempt	Taxable	Taxable	Taxable	Taxable	Taxable	Taxable
New York	4	8.25	No	Exempt	Exempt	Exempt	Partially Taxable	Taxable	Exempt	Taxable	Exempt	Exempt
North Carolina	4.5	7.05	Yes	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt
North Dakota	5	5.5	No	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt
Ohio	5.5	6.75	No	Exempt	Exempt	Exempt	Partially Taxable	Taxable	Taxable	Taxable	Exempt	Exempt
Oklahoma	4.5	8.15	No	Exempt	Exempt	Exempt	Partially Taxable	Exempt	Taxable	Exempt	Exempt	Exempt
Oregon	None	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Pennsylvania	6	6.25	No	Exempt	Exempt	Exempt	Partially Taxable	Taxable	Exempt	Taxable	Exempt	Exempt
Rhode Island	7	7	No	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt
South Carolina	5	5.75	Yes	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt
South Dakota	4	5.25	No	Exempt	Exempt	Exempt	Taxable	Taxable	Taxable	Taxable	Taxable	Taxable
Tennessee	7	9.4	Yes	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt
Texas	6.25	7.95	Yes	Exempt	Exempt	Exempt	Partially Taxable	Taxable	Exempt	Taxable	Exempt	Exempt
Utah	4.75	6.45	No	Exempt	Exempt	Exempt	Partially Taxable	Exempt	Taxable	Taxable	Exempt	Exempt
Vermont	6	6	No	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt
Virginia	4	5	Yes	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt
Washington	6.5	8.45	No	Exempt	Exempt	Exempt	Partially Taxable	Exempt	Exempt	Taxable	Exempt	Exempt
West Virginia	6	6	No	Exempt	Exempt	Exempt	Taxable	Taxable	Taxable	Taxable	Taxable	Exempt
Wisconsin	5	5.4	No	Exempt	Exempt	Exempt	Partially Taxable	Exempt	Exempt	Taxable	Exempt	Exempt
Wyoming	4	5.35	No	Exempt	Exempt	Exempt	Exempt	Exempt	Taxable	Taxable	Exempt	Exempt
Average Tax Rate	5.3	6.5										
Exempt	n.a.	n.a.	n.a.	42	44	44	25	29	33	24	40	
Partially Taxable	n.a.	n.a.	n.a.	0	0	0	16	0	0	0	0	
Taxable	n.a.	n.a.	n.a.	3	1	1	4	16	12	21	5	
District of Columbia (not included in totals)	5.75	5.75	Yes	Taxable	Taxable	Taxable	Partially Taxable	Taxable	Exempt	Taxable	Exempt	

Source: Commerce Clearing House, Federation of Tax Administrators, The Sales Tax Clearinghouse.

Table 3 Continued

Appendix Continued Statutory Sales Tax Rates and Base on Businesses and Consumers as of December 31, 2005											
State	Business Sales Tax Base										
	Manufacturing					Programming Software			Leases and Rentals		
	Manufacturing Machinery	Utilities/ Fuel	Farm Machinery	Raw Material	Office Equipment	Custom	Modified	Downloaded	Motor Vehicles	All Other Tangible Personal Property	Rooms and Lodgings
Alabama	Taxable	Exempt	Taxable	Exempt	Taxable	Exempt	Taxable	Taxable	Taxable	Taxable	Exempt
Alaska	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Arizona	Exempt	Taxable	Exempt	Exempt	Taxable	Exempt	Taxable	Taxable	Taxable	Taxable	Taxable
Arkansas	Taxable	Taxable	Exempt	Exempt	Taxable	Taxable	Taxable	Exempt	Taxable	Taxable	Taxable
California	Exempt	Exempt	Taxable	Exempt	Taxable	Exempt	Taxable	Exempt	Taxable	Taxable	Exempt
Colorado	Exempt	Exempt	Exempt	Exempt	Taxable	Exempt	Exempt	Taxable	Taxable	Taxable	Taxable
Connecticut	Exempt	Exempt	Exempt	Exempt	Taxable	Exempt	Exempt	Taxable	Taxable	Taxable	Taxable
Delaware	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Florida	Taxable	Exempt	Exempt	Exempt	Taxable	Exempt	Exempt	Exempt	Taxable	Taxable	Taxable
Georgia	Exempt	Taxable	Exempt	Exempt	Taxable	Exempt	Taxable	Exempt	Taxable	Taxable	Taxable
Hawaii	Taxable	Taxable	Taxable	Taxable	Taxable	Taxable	Taxable	Taxable	Taxable	Taxable	Taxable
Idaho	Exempt	Exempt	Exempt	Exempt	Taxable	Exempt	Taxable	Taxable	Taxable	Taxable	Taxable
Illinois	Exempt	Taxable	Exempt	Exempt	Taxable	Exempt	Exempt	Taxable	Taxable	Exempt	Exempt
Indiana	Exempt	Exempt	Exempt	Exempt	Taxable	Exempt	Taxable	Taxable	Taxable	Taxable	Taxable
Iowa	Exempt	Exempt	Exempt	Exempt	Taxable	Exempt	Taxable	Exempt	Taxable	Taxable	Exempt
Kansas	Exempt	Exempt	Exempt	Exempt	Taxable	Exempt	Taxable	Taxable	Taxable	Taxable	Taxable
Kentucky	Taxable	Exempt	Exempt	Exempt	Taxable	Exempt	Exempt	Taxable	Exempt	Taxable	Taxable
Louisiana	Taxable	Taxable	Taxable	Exempt	Taxable	Exempt	Taxable	Taxable	Taxable	Taxable	Taxable
Maine	Exempt	Taxable	Exempt	Exempt	Taxable	Exempt	Taxable	Taxable	Taxable	Taxable	Taxable
Maryland	Exempt	Exempt	Exempt	Exempt	Taxable	Exempt	Exempt	Exempt	Taxable	Taxable	Taxable
Massachusetts	Exempt	Exempt	Exempt	Exempt	Taxable	Exempt	Exempt	Exempt	Taxable	Taxable	Exempt
Michigan	Exempt	Exempt	Exempt	Exempt	Taxable	Exempt	Taxable	Taxable	Taxable	Taxable	Taxable
Minnesota	Taxable	Exempt	Exempt	Exempt	Taxable	Exempt	Taxable	Taxable	Taxable	Taxable	Taxable
Mississippi	Taxable	Taxable	Taxable	Exempt	Taxable	Taxable	Taxable	Taxable	Taxable	Taxable	Taxable
Missouri	Exempt	Exempt	Exempt	Exempt	Taxable	Exempt	Taxable	Taxable	Taxable	Taxable	Taxable
Montana	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Nebraska	Taxable	Exempt	Exempt	Exempt	Taxable	Taxable	Taxable	Taxable	Taxable	Taxable	Taxable
Nevada	Taxable	Taxable	Taxable	Exempt	Taxable	Exempt	Taxable	Exempt	Taxable	Exempt	Exempt
New Hampshire	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
New Jersey	Exempt	Taxable	Exempt	Exempt	Taxable	Exempt	Taxable	Exempt	Taxable	Taxable	Taxable
New Mexico	Taxable	Taxable	Taxable	Exempt	Taxable	Taxable	Taxable	Taxable	Taxable	Taxable	Taxable
New York	Exempt	Exempt	Exempt	Exempt	Taxable	Exempt	Taxable	Taxable	Taxable	Taxable	Taxable
North Carolina	Taxable	Taxable	Taxable	Exempt	Taxable	Exempt	Taxable	Exempt	Exempt	Taxable	Taxable
North Dakota	Taxable	Taxable	Taxable	Exempt	Taxable	Exempt	Taxable	Exempt	Exempt	Taxable	Taxable
Ohio	Exempt	Exempt	Exempt	Exempt	Taxable	Taxable	Taxable	Taxable	Taxable	Taxable	Taxable
Oklahoma	Exempt	Exempt	Exempt	Exempt	Taxable	Exempt	Taxable	Exempt	Taxable	Taxable	Taxable
Oregon	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Pennsylvania	Exempt	Exempt	Exempt	Exempt	Taxable	Exempt	Taxable	Taxable	Taxable	Taxable	Exempt
Rhode Island	Exempt	Exempt	Exempt	Exempt	Taxable	Exempt	Taxable	Exempt	Taxable	Taxable	Taxable
South Carolina	Exempt	Exempt	Exempt	Exempt	Taxable	Taxable	Taxable	Exempt	Taxable	Taxable	Taxable
South Dakota	Taxable	Taxable	Taxable	Exempt	Taxable	Taxable	Taxable	Taxable	Taxable	Taxable	Taxable
Tennessee	Exempt	Exempt	Exempt	Exempt	Taxable	Taxable	Taxable	Taxable	Taxable	Taxable	Taxable
Texas	Exempt	Exempt	Exempt	Exempt	Taxable	Taxable	Taxable	Taxable	Exempt	Taxable	Exempt
Utah	Exempt	Exempt	Exempt	Exempt	Taxable	Exempt	Taxable	Taxable	Taxable	Taxable	Taxable
Vermont	Exempt	Exempt	Exempt	Exempt	Taxable	Exempt	Exempt	Exempt	Exempt	Taxable	Exempt
Virginia	Exempt	Exempt	Exempt	Exempt	Taxable	Exempt	Taxable	Exempt	Exempt	Taxable	Taxable
Washington	Exempt	Taxable	Taxable	Exempt	Taxable	Exempt	Exempt	Taxable	Taxable	Taxable	Taxable
West Virginia	Exempt	Exempt	Exempt	Exempt	Taxable	Taxable	Taxable	Taxable	Taxable	Taxable	Taxable
Wisconsin	Exempt	Taxable	Exempt	Exempt	Taxable	Exempt	Taxable	Taxable	Taxable	Taxable	Taxable
Wyoming	Exempt	Exempt	Exempt	Exempt	Taxable	Exempt	Taxable	Taxable	Taxable	Taxable	Taxable
Exempt	31	29	34	44	0	34	8	16	6	1	9
Partially Taxable	0	0	0	0	0	0	0	0	0	0	0
Taxable	14	16	11	1	45	11	37	29	39	44	36
District of Columbia (not included in totals)	Taxable	Exempt	Taxable	Exempt	Taxable	Taxable	Taxable	Taxable	Taxable	Taxable	Taxable

Source: Commerce Clearing House, Federation of Tax Administrators, The Sales Tax Clearinghouse.

Table 3 Continued

Appendix Continued Statutory Sales Tax Rates and Base on Businesses and Consumers as of December 31, 2005											
State	Consumer Sales Tax Base										
	Clothing	Food and Meals			Medicine and Medical Services/Devices			Occasional Sales		Newspapers	Periodicals
		Grocery Food	Meals	Sales by Caterers	Nonprescription Medicines	Medical Services	Medical Devices	Motor Vehicles, Vessels and Aircraft	All Other Sales		
Alabama	Taxable	Taxable	Taxable	Taxable	Taxable	Exempt	Taxable	Exempt	Exempt	Taxable	Taxable
Alaska	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Arizona	Taxable	Exempt	Taxable	Taxable	Taxable	Exempt	Exempt	Exempt	Exempt	Taxable	Taxable
Arkansas	Taxable	Taxable	Taxable	Taxable	Taxable	Exempt	Exempt	Taxable	Exempt	Exempt	Taxable
California	Partially Taxable	Exempt	Taxable	Taxable	Taxable	Exempt	Exempt	Taxable	Exempt	Taxable	Taxable
Colorado	Taxable	Exempt	Taxable	Taxable	Taxable	Exempt	Exempt	Taxable	Taxable	Exempt	Taxable
Connecticut	Partially Taxable	Exempt	Taxable	Taxable	Exempt	Exempt	Exempt	Taxable	Exempt	Exempt	Exempt
Delaware	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Florida	Taxable	Exempt	Taxable	Taxable	Exempt	Exempt	Exempt	Taxable	Exempt	Taxable	Taxable
Georgia	Taxable	Exempt	Taxable	Taxable	Taxable	Exempt	Exempt	Exempt	Exempt	Taxable	Taxable
Hawaii	Taxable	Taxable	Taxable	Taxable	Taxable	Taxable	Exempt	Exempt	Exempt	Taxable	Taxable
Idaho	Partially Taxable	Taxable	Taxable	Taxable	Taxable	Exempt	Exempt	Taxable	Exempt	Taxable	Taxable
Illinois	Taxable	Taxable	Taxable	Taxable	Taxable	Exempt	Taxable	Exempt	Exempt	Exempt	Exempt
Indiana	Taxable	Exempt	Taxable	Taxable	Taxable	Exempt	Exempt	Taxable	Exempt	Exempt	Taxable
Iowa	Taxable	Exempt	Taxable	Taxable	Taxable	Exempt	Exempt	Taxable	Exempt	Exempt	Taxable
Kansas	Taxable	Taxable	Taxable	Taxable	Taxable	Exempt	Exempt	Taxable	Exempt	Taxable	Taxable
Kentucky	Taxable	Exempt	Taxable	Taxable	Taxable	Exempt	Exempt	Exempt	Exempt	Taxable	Taxable
Louisiana	Taxable	Exempt	Taxable	Taxable	Taxable	Exempt	Exempt	Taxable	Exempt	Taxable	Taxable
Maine	Taxable	Exempt	Taxable	Taxable	Taxable	Exempt	Exempt	Taxable	Exempt	Taxable	Taxable
Maryland	Taxable	Exempt	Taxable	Taxable	Exempt	Exempt	Exempt	Exempt	Exempt	Taxable	Taxable
Massachusetts	Partially Taxable	Exempt	Taxable	Taxable	Taxable	Exempt	Exempt	Taxable	Exempt	Exempt	Exempt
Michigan	Taxable	Exempt	Taxable	Taxable	Taxable	Exempt	Exempt	Taxable	Exempt	Exempt	Exempt
Minnesota	Partially Taxable	Exempt	Taxable	Taxable	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Taxable
Mississippi	Partially Taxable	Taxable	Taxable	Taxable	Taxable	Exempt	Taxable	Taxable	Exempt	Exempt	Taxable
Missouri	Taxable	Taxable	Taxable	Taxable	Taxable	Exempt	Exempt	Taxable	Exempt	Taxable	Taxable
Montana	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Nebraska	Taxable	Exempt	Taxable	Taxable	Taxable	Exempt	Exempt	Taxable	Exempt	Exempt	Taxable
Nevada	Taxable	Exempt	Taxable	Taxable	Taxable	Exempt	Exempt	Taxable	Exempt	Exempt	Taxable
New Hampshire	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
New Jersey	Partially Taxable	Exempt	Taxable	Taxable	Exempt	Exempt	Exempt	Taxable	Exempt	Exempt	Exempt
New Mexico	Taxable	Exempt	Taxable	Taxable	Taxable	Taxable	Taxable	Exempt	Exempt	Exempt	Taxable
New York	Partially Taxable	Exempt	Taxable	Taxable	Exempt	Exempt	Exempt	Taxable	Exempt	Exempt	Exempt
North Carolina	Taxable	Exempt	Taxable	Taxable	Taxable	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt
North Dakota	Taxable	Exempt	Taxable	Taxable	Taxable	Exempt	Exempt	Exempt	Exempt	Exempt	Taxable
Ohio	Taxable	Exempt	Taxable	Taxable	Taxable	Exempt	Exempt	Taxable	Exempt	Exempt	Taxable
Oklahoma	Taxable	Taxable	Taxable	Taxable	Taxable	Exempt	Taxable	Exempt	Taxable	Exempt	Exempt
Oregon	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Pennsylvania	Exempt	Exempt	Taxable	Taxable	Exempt	Exempt	Exempt	Taxable	Exempt	Exempt	Taxable
Rhode Island	Exempt	Exempt	Taxable	Taxable	Exempt	Exempt	Exempt	Taxable	Exempt	Exempt	Taxable
South Carolina	Taxable	Taxable	Taxable	Taxable	Taxable	Exempt	Exempt	Exempt	Exempt	Exempt	Taxable
South Dakota	Taxable	Taxable	Taxable	Taxable	Taxable	Exempt	Exempt	Exempt	Exempt	Taxable	Taxable
Tennessee	Taxable	Taxable	Taxable	Taxable	Taxable	Exempt	Exempt	Taxable	Exempt	Exempt	Exempt
Texas	Taxable	Exempt	Taxable	Taxable	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Taxable
Utah	Taxable	Taxable	Taxable	Taxable	Taxable	Exempt	Exempt	Taxable	Exempt	Exempt	Taxable
Vermont	Partially Taxable	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Taxable
Virginia	Taxable	Taxable	Taxable	Taxable	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt
Washington	Taxable	Exempt	Taxable	Taxable	Taxable	Exempt	Exempt	Taxable	Exempt	Exempt	Taxable
West Virginia	Taxable	Taxable	Taxable	Taxable	Taxable	Exempt	Exempt	Exempt	Exempt	Taxable	Taxable
Wisconsin	Taxable	Exempt	Taxable	Taxable	Taxable	Exempt	Exempt	Taxable	Exempt	Exempt	Exempt
Wyoming	Taxable	Taxable	Taxable	Taxable	Taxable	Exempt	Exempt	Taxable	Taxable	Exempt	Taxable
Exempt	2	29	1	1	11	43	40	18	42	31	11
Partially Taxable	9	0	0	0	0	0	0	0	0	0	0
Taxable	34	16	44	44	34	2	5	27	3	14	34
District of Columbia (not included in totals)	Taxable	Exempt	Taxable	Taxable	Exempt	Exempt	Exempt	Exempt	Exempt	Taxable	Taxable

Source: Commerce Clearing House, Federation of Tax Administrators, The Sales Tax Clearinghouse.