Sales Taxes in the District of Columbia

Report Prepared for the Washington D.C. Tax Revision Commission

September 24, 2013

Prepared by

William F. Fox
Chancellor's Professor
and Director, Center for Business and Economic Research
College of Business Administration
University of Tennessee, Knoxville

Table of Contents

Executive Summary

The District of Columbia levies a general sales tax at a 5.75 percent rate. Forty-five states and local governments in 35 states also impose general sales taxes. States' sales tax rates range from a low of 2.9 percent in Colorado to a high of 7.5 percent in California. Local sales tax rates cause the combined rate to reach above 10 percent in some places with the highest average rate of 9.45 percent in Tennessee. The District's rate is lower than the median state's 6.85 percent combined state and local rate and the combined state and local rate in place in Northern Virginia and the 6.0 percent state rate in Maryland.

The taxable base determines the character of every tax. Economists evaluate sales taxes as levies on consumption. Thus, the goal is to convert a tax on transactions to a tax on consumption through a series of exemptions and deductions. A broad consumption tax would be imposed on all household purchases, regardless how acquired, and would not be imposed on any purchases made by business. Thus, consumers would pay the tax whether purchased online or in stores and whether purchased from for profit or not-for-profit firms. DC's and all states' tax bases differ dramatically from this standard for a variety of administrative, fairness, economic efficiency and other reasons. For example, determination of when a purchase is actually for business production is very difficult. Further, governments are likely to adopt somewhat different sales taxes because of the economic environment within which they operate and the importance they place on theses various goals.

Sales tax structures differ widely across the states and the District, though precise comparisons are difficult to make. Some states, such as Hawaii and New Mexico tax a relatively wide share of the economy. Many mid-Atlantic and New England states, such as New York and New Jersey, tax a relatively narrow set of transactions. Maryland and Virginia also have narrow tax bases. Some of the differences across states arise in the taxation of goods and particularly whether food for consumption at home, non-prescription drugs, and clothing are generally taxed. The District of Columbia's sales tax is levied on the sale of most goods, though approximately 38 exemptions have been enacted. Many of these exemptions are for purchases by governments and businesses. Taxation of services also accounts for much of the differences. Hawaii taxes 160 of 168 identified services while Colorado only taxes 15 services. The District taxes 73 of the services, above the median state which taxes approximately 50 services and many more than Maryland and Virginia, which both tax relatively few services. Overall, the District of Columbia's base is 34.4 percent of personal income, which is a little larger than the average states' 32.8 percent, suggesting a somewhat broader base than national norms. Both Virginia and Maryland have narrower sales tax bases than the District, as do most other nearby and eastern states.

Some basic principles should drive any reforms of DC's sales tax. Decisions on the best tax structure for the District require judgment since there is no one size fits all approach. Choices on changes in the base should be made after consideration of (a) the compliance and administration costs for collection, (b) the implications for health of the D.C. economy, (c) fairness of the tax system, and (d) level of revenues and revenue growth over time. A number of benefits can be expected from keeping the base on consumer goods and services very broad, which is achieved by limiting exemptions for consumer goods and expanding the base to additional services. The broad base permits a low rate for any given amount of revenue to be raised. Low rates reduce the incentives to purchase currently untaxed goods and services and to find ways to purchase items outside the district to evade tax. A broad base spreads the tax burden more evenly across all consumption making the tax liability fairer across taxpayers. But, the District cannot impose a consumption tax in a vacuum. Taxing some goods and services that are not taxed by neighbors or that can be easily purchased over the Internet can harm the DC economy as people purchase from other states or remotely.

A series of policy changes that the Tax Commission could consider for the District's sales tax base include:

Taxation of Goods

1. Limit the set of new exemptions for consumer goods.
2. Impose the tax on currently not taxed consumer goods such as food for consumption at home and non-prescription drugs.
3. Seek business purchases to exempt.

Taxation of Services

Identify currently untaxed consumer services that could be included in the tax base such as:

- Construction contractors
- Carpentry and other construction related services
- Storage of household goods
- Mini-storage
- Water for consumption at home
- Barber and beautician services
- Carpet and upholstery cleaning
- Health clubs and tanning studios
- Carwashes
- Bowling alleys and billiard parlors

Taxation of Remote Sales

Significant improvements in the District's ability to collect tax on remote sales await Congressional action. Congress can regulate interstate commerce, so it can enact legislation that allows states to require remote firms to collect the tax. Steps the District can consider in the interim include:

1. Support passage of the Marketplace Fairness Act, the federal law allowing states to require remote firms to collect their sales tax.
2. Become a full member of the Streamlined Sales and Use Tax Agreement to support reform and ultimately allow the District to implement the Marketplace Fairness Act.
3. Add a line to the personal income tax return allowing residents to easily remit their use tax obligations.
4. Expand the definition of nexus using approaches such as click through nexus.

Excise Taxes

The District's overall taxation of alcohol and tobacco is generally high on the standards of neighboring states and often relative to many other states. DC has limited capacity to raise rates on hotel rooms, restaurant purchases and parking given that rates are generally high relative to neighboring states.

Sales Taxes in the District of Columbia
by
William F. Fox[1]
University of Tennessee, Knoxville
September 24, 2013

This report to the Washington D.C. Tax Revision Commission investigates four key aspects of the sales tax in the District of Columbia. First, the report analyzes the breadth of the sales tax and compares DC's tax structure with those imposed in the 45 sales taxing states. Possible expansions of the base in the District are also discussed. Second, issues associated with taxation of remote sales, and particularly e-commerce, are discussed. Approaches used by states to address problems with collecting tax due on remote transactions are discussed. Third, how the sales tax affects economic activity in the District is considered. Finally, selective sales taxes are examined.

1. Sales Tax Structure

The District of Columbia and 45 states impose a sales tax at varying tax rates and on a range of bases. The District levies a 5.75 percent rate, which was lowered from the 6.0 percent that existed for fiscal years 2010 to 2013.[2] California levies the highest sales tax rate, at 7.5 percent. Alaska,[3] Delaware, Montana, New Hampshire, and Oregon have no state sales tax. The median state imposes a 6 percent rate, higher than the District of Columbia's standard rate, and the median combined state and local sales tax rate is higher than the District's at 6.85 percent.[4] Maximum states tax rates are 10.0 percent or higher in 11 states, led by Arizona, and the highest states and local average is 9.45 percent in Tennessee. The neighboring states both impose tax rates in the range of the District's. Maryland has a 6 percent rate and Virginia levies a 4 percent state rate plus a 1 percent local rate for a combined 5 percent. Northern Virginia's rate rose to 6.0 percent effective July 1, 2013.

Generally this report compares DC directly with state governments, but it is more accurate to compare DC with the combination of state and local governments when analyzing shares of revenues. Sales taxes generate 31.5 percent of total state tax revenues in the average state and 22.4 percent of combined state and local revenues (see Figure 1).[5] Sales taxes raise a somewhat smaller 17.1 percent of revenues in the District of Columbia. The District has relatively large

[1] The author thanks Gerry Widdicombe, Steven Rosenthal, Jason Juffras, and Brian Kirrane for comments on an earlier draft. Of course, the author is responsible for all remaining errors.
[2] The 6.0 percent rate was initially temporary but was subsequently made permanent.
[3] A number of Alaska cities levy sales taxes.
[4] See http://www.taxch.com/STRates.stm
[5] See http://www.taxadmin.org/fta/rate/burden.html

shares of property, personal income and corporate income taxes compared with the average state and local government.

Breadth of the Sales Tax Base

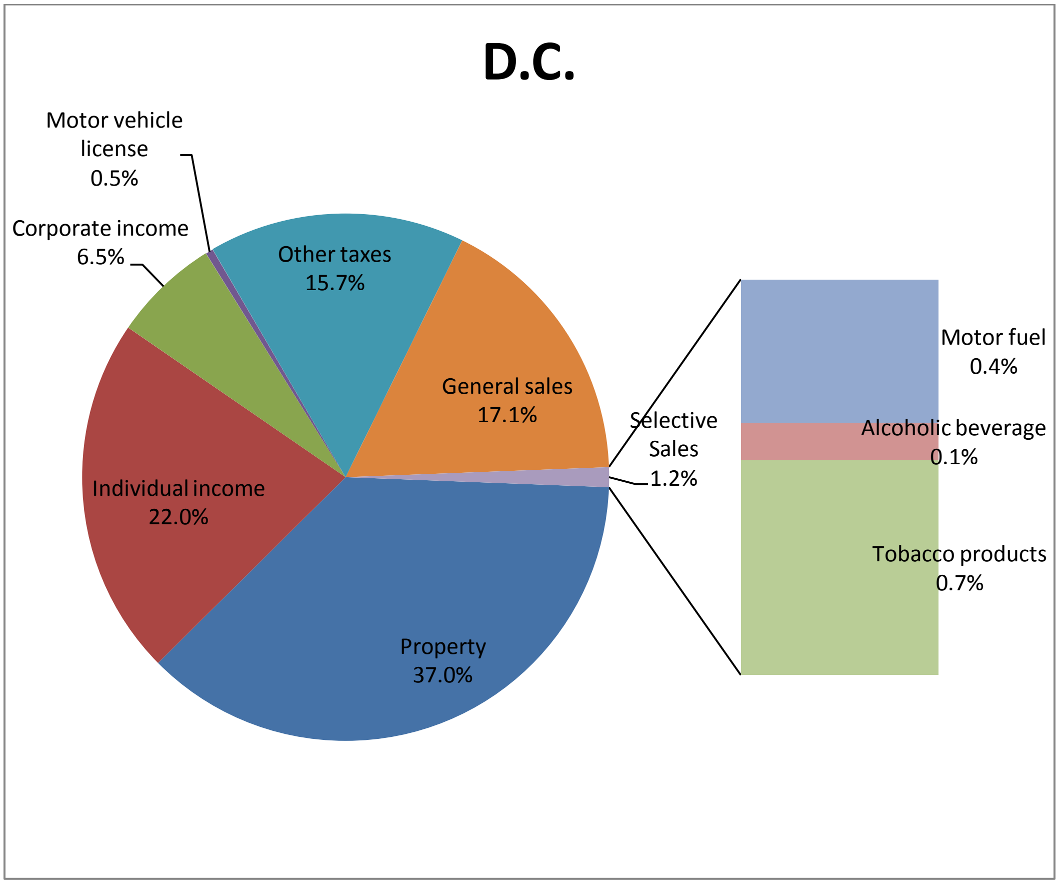
The character of every tax is determined by defining the set of taxable transactions. Comparing sales tax base breadth across governments is difficult because of differing consumption patterns, a very wide range of goods and services on which the tax can be levied, and differing definitions in statutes. The sales tax base as a percent of personal income is one comprehensive measure of the sales tax breadth that accounts for both the size of the economy and sales tax characteristics (see Figure 2). The District of Columbia's base is 34.4 percent of personal income, which is a little larger than the average states' 32.8 percent, suggesting a somewhat broader base than national norms.[6]

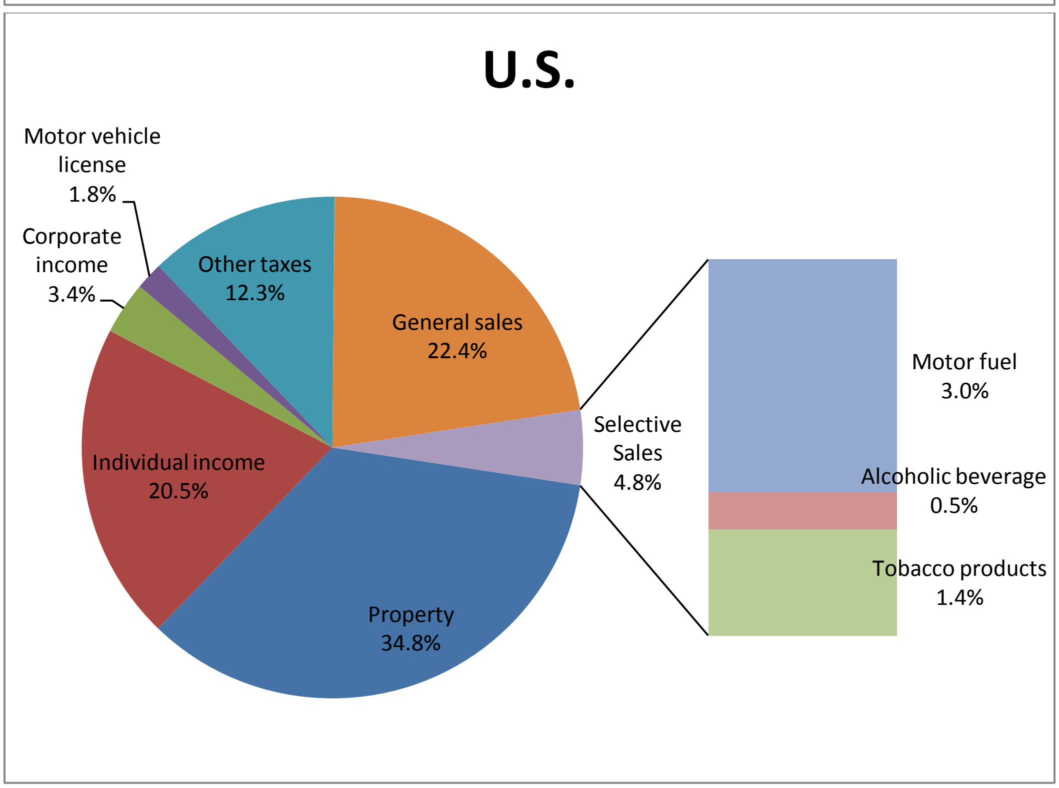
Some states, such as Hawaii (with a base over 100 percent of personal income), South Dakota and New Mexico have sales tax bases that are much broader. DC's base is more expansive than most nearby states. Both Virginia and Maryland have narrower sales tax bases than the District, as do most other nearby and eastern states including New Jersey, New York and Pennsylvania. Georgia and Maine are east coast states with broader bases. Still, the details of what is included in the base can vary significantly across governments regardless of the expansiveness of the base. For example, Virginia, though having a narrower base, taxes food for consumption at home while the District does not. Virginia is not increasing the rate on food as the general rate rises in July.

The District's base, like in the states, has fallen dramatically over past decades, evidencing a shrinking share of the economy that is taxable. Low taxation of services (and particularly health and professional services), growing remote sales, and increasing exemptions explain the decline. The sales tax was 47.0 percent of personal income in DC in 1998 compared with 42.5 percent in the U.S. Maryland and Virginia have seen similar declines in the relative size of their bases.

[6] The sales tax base is calculated by dividing sales tax revenues by the standard sales tax rate. The revenues used for the states in preparing the base estimates were adjusted using calculations prepared by John Mikesell that account for differences between what a state reports as sales tax revenues and what would be generated from a standard sales tax base. However, Mikesell has not prepared the adjustments for the District making it more difficult to compare the District with states. DC's sales tax structure differs from the norm in several ways that reduce the accuracy of this approach. Revenues from the DC sales tax are increased by tax rates on alcohol, tobacco, and so forth that exceed the standard 6 percent rate and are reduced because the motor vehicle excise tax revenue is not included in the sales tax, as it is in most states. Also, a considerable share of purchasing is done by non-residents making the base seem larger relative to personal income.

Figure 1: State and Local Tax Revenue Distribution, 2010



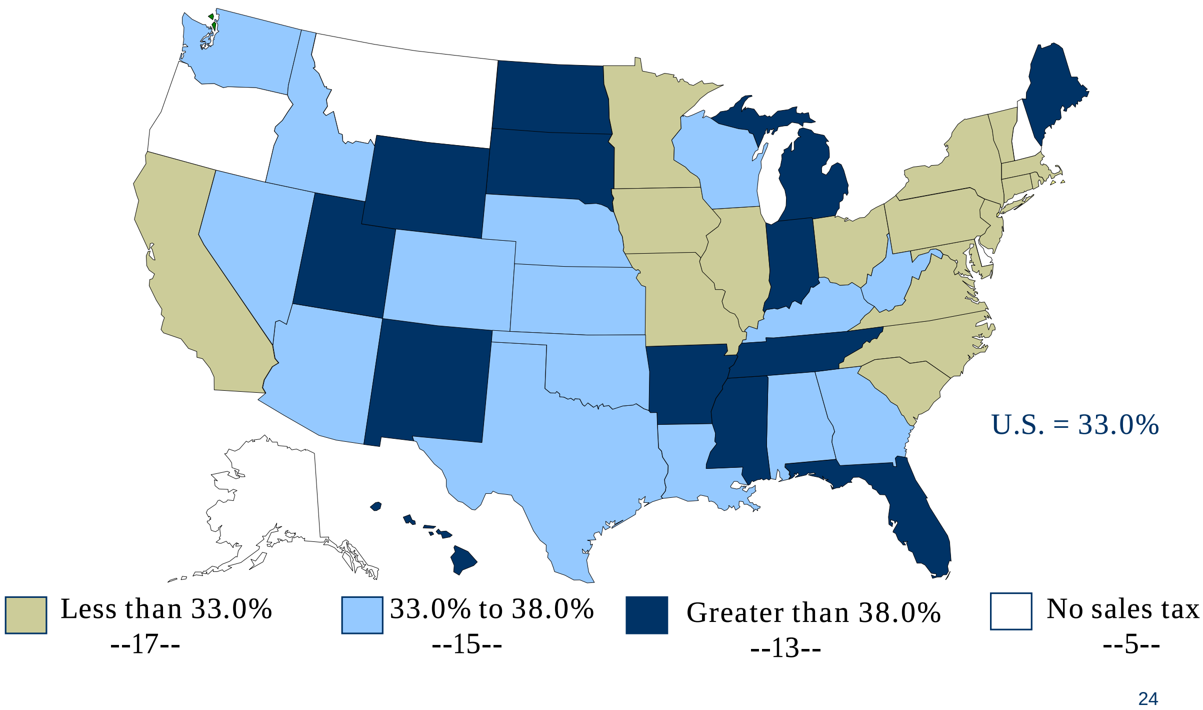


The District of Columbia's sales tax is levied on the sale of most goods though approximately 38 exemptions have been enacted. Exemptions include for sales to the federal government, sales to other state and local governments with reciprocal laws, sales to utilities or public service companies, casual sales, sales of natural gas and electricity used in manufacturing and assembling, sales of public utilities to residential consumers, residential cable TV, sales of medicines and pharmaceuticals, sales of selected other medical devices, sales of motor fuels subject to the motor fuel tax, and selected other sales. The term retail is also defined to exclude 12 other categories of sales, such as most transportation and communications services, newspapers distributed at no charge, sales of food except for immediate consumption or snack foods, and parking for resident individuals near their home.

A series of services are also specifically articulated for taxation. The Federation of Tax Administrators identifies 168 services that could be considered for taxation and reports that DC taxes 73 of these.[7] The District taxes a relatively broad set of utility, admissions/amusements and fabrication/installation services. Overall, DC taxes more services than the median state, which taxes about 50 services. Maryland taxes 39 services and Virginia 18 services. At the upper end of states, Hawaii taxes 160 services and Washington State 158 and at the lower end Colorado taxes only 15 services and Illinois 17.

[7] See http://taxadmin.org/fta/pub/services/services.html

Figure 2: STATE SALES TAX BASE AS A PERCENT OF PERSONAL INCOME, 2010



2. Defining the Tax Base

As noted above, the taxable base determines the character of every tax. Economists evaluate sales taxes as levies on consumption, but the taxes generally fall far short of broad taxes on consumption.[8] Governments must use a combination of exemptions and additions to achieve the consumption base with a tax that is levied on transactions. Characteristics of a broad consumption tax are:

- All household purchases should be taxed. All purchases of goods and services by households are consumption and belong in a consumption tax base.[9]
- The tax should be imposed regardless of the vendor. Sales tax should be collected from both for profit and not-for-profit entities if the goal is to tax all consumption. The tax is intended to be on the consumer and not on the not-for-profit seller. The argument then is that subsidies for not-for-profit firms could be legislated directly through the appropriations process and not through tax subsidies.
- The tax should be imposed regardless of how the purchase is consummated. The tax should be levied on all purchases to be consumed in DC whether purchased from a vendor in the District, bought via cross border shopping, or purchased via the Internet or mail order. The mode of purchase does not alter whether the purchase is for consumption.
- The tax should not be levied on any business-to-business transactions. Businesses purchase to produce and do not consume. Households purchase to consume and do not produce.

This ideal consumption tax system offers many advantages. The broad base permits a low rate for any given amount of revenue to be raised. Further, it spreads the tax burden evenly across all consumption. The tax structure has no effect on the relative prices of different goods or services so it does not encourage the purchase of one set of items relative to another. But, no government fully follows this prescription for a series of political, administrative, fairness, and economic reasons. For example, all states tax many business purchases and exempt a number of consumer purchases. Many allow exemption for certain purchases by or sales by not-for-profits. The ability to impose tax on remote sales and cross border sales is limited by Constitutional restrictions and administrative feasibility. Still, the criteria listed above are a standard against which the District's tax structure can be compared.

[8] Robert Cline, Andrew Phillips and Thomas Neubig, (2013) estimate that only 24 percent of consumption is taxed. Sales tax bases are generally larger shares of personal income because many business inputs are also taxed.
[9] Durable goods consumption is spread over multiple years so an adjustment could be made for the timing of when consumption occurs relative to when the item is purchased.

As already noted, the District's base, though broader than average, is narrow relative to some states and to the standard described above and could be expanded. Further, the tax base in the District and in states has been narrowing over time as consumers purchase more non-taxable services, more exemptions are enacted and remote sales expand, and additional exemptions are legislated. Several strategies can be used to reverse the pattern of narrowing tax bases. The first strategy to ensuring a good tax base is to avoid the seemingly continuous process in some states of expanding the set of exemptions. Thus, an important way to keep the base broad is to avoid new exemptions before worrying about potential expansions. This does not mean that no further exemptions should be granted, but further exemptions should be based on the criteria listed above (and the additional criteria below).

Second, the District could broaden its base by either eliminating exemptions for goods or identifying additional services to tax. Economists generally lean towards taxing the broadest set of consumption purchases (as in the criteria above) at the lowest rate, but other factors based mostly on administrative and compliance capacity should be considered in the decision on what to tax. Thus, decisions on whether to expand the base often must be made on a case by case basis rather than applying across the board determinations regarding whether each category of goods should be taxable. Ultimately, the best structure is a judgment that may vary across governments and these judgments often lead to taxes that differ from a true consumption tax.

Fairness is an important goal in setting the tax structure. The sales tax in DC, as in the states, is regressive, particularly when measured against current income. For example, the Institute for Taxation and Economic Policy finds that households in the lowest 20 percent of the income distribution pay 2.9 percent of income in general sales taxes in the District and households in the upper 1 percent pay 0.3.[10] The decline from low to high income is similar to the average state but sales taxes are generally a smaller percent of income in the District. The regressiveness of sales taxes arises from several factors including: (1) failure to tax some purchases, such as professional services which are not as regressive in consumption, (2) very high consumption relative to income for households at the bottom of the income distribution, and (3) higher savings relative to income by higher income households. Also, the tax structure is less regressive when the tax is compared with lifetime income rather than current income (as is done in the ITEP report).[11]

However, it is difficult to target fairness objectives with the sales tax because the tax is collected by vendors when transactions take place. Generally there is no means testing or knowledge of the buyer. Exempting food, for example, offers some tax reduction for low income households, but most of the tax reduction accrues to higher income households and tourists. Neither of these groups is likely the target of the exemption. Fairness goals are often better achieved by focusing

[10] See http://www.itep.org/pdf/whopaysreport.pdf
[11] See Fox (2006) for discussion of differences in incidence between current and lifetime incidence.

on fairness for the tax system rather than for individual taxes. Then, the income tax can be used to achieve the desired overall tax fairness without distorting the sales tax structure with intent to achieve equity.

Some other criteria to consider in deciding on specific exemptions include:

Tax consumption not business purchases. Broad taxation of sales to final consumers increases horizontal equity in the tax, reduces tax induced changes in behavior and often is easier to comply with because decisions do not need to be made on whether the transaction is taxable. But, business inputs (which are everything a business buys for its operations) should be free from taxation. Taxing business inputs encourages vertical integration, raises the costs for operating in the District, and distorts prices to the extent that differential input taxes are reflected in final product prices. Exemptions for some transactions *may* be necessary because of the difficulty of determining whether the buyer is a consumer or a business. Certain professional services may be examples. But, taxation of business inputs should be limited wherever possible.

Limit effects of taxes on the location of production and sales. Some types of consumption can be difficult to tax because of evasion/avoidance through cross border shopping in Virginia or Maryland or purchasing on the Internet. Such concerns always exist, but the small geographic size of the District and its location inside a single metropolitan area exaggerate the importance of this problem. The use tax is due on many of these purchases but the District's capacity to enforce the tax is limited, particularly on individuals. Many large ticket items are easily purchased outside the District and shipped in for use, without the tax being collected. Services produced from outside DC and items purchased online are examples where tax avoidance may be particularly easy and where attempts to tax the class of goods or services could significantly harm economic activity located in the District. Thus, the capacity to evade tax by purchasing elsewhere must be taken into account when selecting the DC base.

Keep compliance and administrative costs low. Some services are produced by very small providers or the costs of separating business buyers from consumers could be high, suggesting keeping costs of collecting the tax low should enter decision on the base.

The next two sections discuss some exemptions that could be considered for elimination and some additional services that could be taxed.

Reducing Exemption of Goods

The base is defined with limited exemptions for goods purchased by individuals. Two examples of such exemptions are mentioned as examples of how the base can be expanded. Of course, such expansions can often be politically difficult to do.

Food for Consumption at home. The District, like 31 states, exempts food for consumption at home from the sales tax. The exemption results in a narrower tax structure, higher rates for any given amount of revenue that is raised, and additional volatility in revenues collected. Exemption of food is normally justified on vertical equity grounds – to keep low income people from bearing tax on necessities – and because of the political benefits of granting exemptions. However, the benefits of exempting food are very poorly targeted to low income households. Many low income households receive food stamps, which are exempt throughout the country based on federal policy, and many of the other tax savings accrue to higher income households or non-residents when they purchase food in the District. Food could be taxed and low income households compensated with credits against the personal income tax or a smart card could be provided to low income household to use as payment of sales tax on food purchases. Virginia imposes the tax on food so extension of the base in the District would impose a tax consistent with the neighbor, but Maryland does not tax food.

Non-prescription drugs. Unlike most states, the District exempts many non-prescription drugs. By comparison, nine states currently exempt some non-prescription drugs and one allows for a lower tax rate.[12] The case for exemption is weak relative to many other types of consumption and the exemption could be eliminated. But, both Maryland and Virginia also exempt non-prescription drugs and a base expansion by the District must consider implications for cross border shopping.

Imposing Tax on Additional Services

States often consider adding additional services to the sales tax, particularly when revenues are tight or during a recession. Some extensions have been made across the country over the past several decades, but the issue often attracts more discussion than action. Florida's brief experiment with a major expansion of the base in 1986 has been widely discussed. Other states, such as South Dakota and Texas, have made relatively significant expansions and many other small expansions have been made. Connecticut, Florida and Rhode Island are the only states that have extended the sales tax to additional services since 2010, though generally to limited services. Florida imposed the tax on telecommunications services linked to convention centers and civic centers and Rhode Island is now taxing non-veterinary pet care services. Connecticut's changes are more expansive including manicures, pedicures, spa services, intrastate livery services and others. But, services remain broadly exempt in many states including these three. Professional services, business services, and certain personal services are commonly not taxed in many states.

[12] See http://taxadmin.org/fta/rate/sales.pdf

The District has expanded the base to select services on several occasions during the past 20 years. Examples include laundry services, select telecommunications services, courier services, and employment services. The District could consider a number of other expansions but the principles listed above suggest that decisions on whether to expand the base to each of these should be made on a case by case basis. Some possible additional services for taxation can be easily identified, including:

- Construction contractors
- Carpentry and other construction related services
- Storage of household goods
- Mini-storage
- Water for consumption at home
- Barber and beautician services
- Carpet and upholstery cleaning
- Health clubs and tanning studios
- Carwashes
- Bowling alleys and billiard parlors

Several of these, such as construction contractors, construction related services, water and barber and beautician services have the potential to collect significant revenues, though some others may provide limited revenues. The list includes many items that are often purchased by final consumers and ones where business purchasers can be easily identified. The services are often linked to tangible goods or real property located in the District, which makes it harder to purchase outside the District or over the Internet, thereby limiting the effects on the District's economy. And, compliance should generally not be difficult.

Taxing Professional Services Only Hawaii, New Mexico, South Dakota and Washington State tax a broad set of professional services that include accounting and bookkeeping, architects, attorneys, dentists, engineers, land surveying, medical test laboratories, nursing services out of hospitals and physicians.[13] These service providers may pay little or no tax in the District today if they reside elsewhere and commute into the District for work. Imposition of the sales tax is one means of collecting revenue from these service providers. However, the tax will only reduce the service provider's income if it cannot be forward shifted into higher prices for the buyers. Research has suggested full forward shifting of the sales tax, but the studies are focused on general commodities and not on professional services.[14] It is possible that providers would be

[13] See http://www.taxadmin.org/fta/pub/services/services.html
[14] See Besley and Rosen (1996) and Poterba (1999).

unable to shift all of the tax to buyers in the small geographic area around the District because purchasers could buy the services in Maryland, Virginia or online. Consumer and business decisions to purchase professional services outside the District would be a detriment to the local economy.

Taxing Not-For-Profit Sales and Purchases

States vary in their tax treatment towards the purchase and sale of goods and services by not for profits. Exemption of non-profit organizations is usually based on the expectation that they provide goods and services that benefit society, such as helping low-income individuals or delivering services that the public sector would otherwise provide. The tax exemption is effectively a subsidy to not-for profit organizations which can be questioned despite the benefits that many not-for-profits offer. Several points can be made in the case of DC, and they suggest that the Tax Commission could consider recommending tight restrictions on when not-for-profit purchases are exempt and allowing very few cases (if any) where sales are exempt because they are made by not-for-profits. First, the case is strongest for exempting purchases by not-for profits, at least in cases where substantial public benefits are provided by the firm. The tax is intended to be levied on the buyer not the seller. Second, direct cash subsidies could be provided by the public sector rather than the indirect subsidies through the tax system, which would allow the city council to more carefully evaluate the benefits of each subsidy.

Third, the subsidies advantage not-for-profits in their direct competition with for-profit firms. This explains part of the rapid expansion of the not-for-profit sector relative to the for profit sector in the U.S. Fourth, not-for profit firms determine the size of the subsidy by their level of activity rather than the District of Columbia determining the size of any subsidies through its budget process. Specifically, not-for-profits have a six percent subsidy on their sales and the more the sales the bigger the subsidy. Fifth, not-for-profit firms receive the subsidies even if the local population does not value the services since no direct evaluation is taking place of the benefits of the not-for-profits. Finally, purchasers of goods and services from not-for profits probably receive most of the benefits through lower prices since the evidence is that sales taxes are reflected in higher consumer prices. So, the not-for-profits may see only modest additional revenues.

3. State Efforts to Tax Remote Commerce

The sales tax and the corresponding use tax are generally intended to tax sales at their destination, where consumption occurs, rather than at the origin of the transaction. The advent of e-commerce together with other remote sales including via catalogs and cross border shopping create significant challenges for the District and states in enforcing the tax on a destination basis. This section focuses on e-commerce, but cross border shopping (driving to another state and bringing purchases back or having them shipped back to the District) is an unusually large concern given the close proximity to Maryland, Virginia, and other states.

E-commerce has expanded rapidly over the past 15 years and has become a significant and growing share of the remote sales problem. By 2010, business-to-business and business-to-consumer e-commerce totaled $3.5 trillion and had grown at a compound annual rate of 12.8 percent since 2000.[15] B2B represents over 90 percent of all e-commerce. State efforts to collect tax on remote sales are limited by *Quill v. North Dakota* (504 US 298 (1992)), which only permits states to require vendors with physical presence in a state to collect and remit its sales tax. The result has been lost sales and use tax collections, distortions in the ways that businesses operate, and changes in consumer behavior. For example, Bruce, Fox and Luna (2009) estimate that state and local governments lost a combined $11.4 billion in sales tax collections in 2012 because of the inability to collect tax that is due on e-commerce transactions and that DC lost $35 million. These losses do not include catalog sales and cross border shopping in other states. Despite the relatively large losses, the authors estimated that the District collected over $105 million of the $140 million that was due on e-commerce sales. The tax is collected on many remote sales because the selling vendor has taxable presence in the District, but much remains untaxed as well. B2B and B2C catalog, TV and other remote sales are estimated to result in a loss of similar magnitude to that from e-commerce.

The use tax is due on taxable e-commerce transactions in cases where the sales tax has not been remitted, and the best evidence is very poor compliance relative to other state and local taxes. The State of Washington has undertaken random audits of a wide range of businesses every two years from 1996 to 2010 and has found that noncompliance with the use tax is the greatest of any state tax paid by business, at between 23 and 25 percent.[16] Consumers are believed to have much lower compliance with the use tax except for items that must be licensed such as vehicles. Low use tax compliance explains much of the loss from e-commerce.

The inability to enforce sales tax collection on many online purchases is expected to alter how some sales are consummated and to change some business practices. Several papers have

---

[15] See http://www.census.gov/econ/estats/2010/all2010tables.html

[16] See for example http://dor.wa.gov/Docs/Reports/Compliance_Study/compliance_study_2010.pdf

determined that remote purchases are very responsive to the inability to collect the sales tax. The inability to collect the tax effectively means the tax rate is 0 percent on certain purchases versus the 6 percent that is imposed on purchases in the District. The papers tend to find a “home state effect,” which means buyers have a tendency to purchase more from firms (even e-commerce firms) with in-state presence than otherwise would be anticipated, all else equal. Still, the sales tax creates a tendency to buy more remotely than would be expected, particularly in states with higher sales tax rates. Ellison and Ellison (2009) only analyze online purchases of memory sticks, but find that a one percent sales tax rate increase raises online purchases to evade the tax by 6 percent. Einav et al. (2013) study a wide range of purchases through EBay and find that every one percent increase in the sales tax rate raises online purchases by almost 2 percent and reduces online purchases from in-state sellers by over 3 percent.

Anecdotal evidence shows business behavior is altered by current sales tax enforcement limitations. Amazon and at least some other firms appeared to be selecting locations only after careful consideration of the implications for nexus and to use corporate structures in an effort to avoid nexus for online retail firms. One example is decisions by Amazon to locate distribution centers in South Carolina, Tennessee, and Texas but only after agreements were reached to limit sales tax collections, at least for a period of time. More recently Amazon appears to be accepting nexus in an increasing number of states as it alters its business model. Amazon, after collecting for only five states for several years, is collecting for nine states in 2013 and is adding seven more states by the year’s end. In one research paper on the subject, Bruce, Fox, and Luna (2012) examined the determinants of the states where firms establish nexus and concluded that firms are more likely to create nexus in larger states (consistent with the home state effect observed by Ellison and Ellison and Einav et al.) and less likely in states with higher sales tax rates.

Russo (2005) examined effects of extending the sales tax to Internet sales. He finds that state economies would be slightly larger and the level of wellbeing higher if all Internet sales could be taxed. Presumably this is because the incentives to avoid the tax by purchasing out of state via the Internet are eliminated. The result is also consistent with the conclusion that low sales tax rates are better for DC’s economy because it reduces the incentive to buy outside.

Efforts to Enhance Collection of Sales Tax on Remote Sales

Efforts have been made both in Congress and in a number of states to expand sales tax collections on remote sales. The court ruled in *Quill v. North Dakota* that requiring remote vendors to collect and remit the sales tax would hamper interstate commerce because these firms would be subject to an undue compliance burden. Specifically, the decision, made prior to e-commerce and technologies, was heavily based on the argument that the costs for remote vendors to comply with the sales tax in multiple jurisdictions were greater than the compliance costs for local firms in a single state. This section discusses federal and state efforts to expand the capacity to collect taxes on remote sales.

Federal Activity

Congress can regulate interstate commerce, so it can enact legislation that allows states to require remote firms to collect the tax. Three bills to extend state nexus to at least some remote sales were introduced in Congress during 2011[17] and the Marketplace Fairness Act of 2013 was introduced earlier this year with 23 sponsors in the Senate and 48 in the House of Representatives. An advisory vote taken in the Senate several months ago passed 75 to 24 to allow states to collect tax on remote sales. Since then several procedural measures passed in the Senate by strong margins and the Senate passed the legislation 69 to 27. The House has yet to begin considering the bill. Maryland, Missouri and Virginia passed budget legislation that would use the resources generated from federal passage of the legislation.

The Marketplace Fairness Act would allow states that adopt the simplification criteria built into the Streamlined Sales Tax Agreement or that enact a set of specified simplification steps to require remote vendors to collect their sales tax. The simplifications include:

- providing firms with advance notification of sales tax rate changes
- using a single tax collection agency for both state and local sales taxes
- creating a uniform sales tax base for the entire state
- using destination sourcing
- providing free sales tax compliance software
- relieving remote sellers of any liability associated with incorrect compliance because of errors made by a certified software provider.

The legislation includes a small seller exception and only permits states to impose the compliance responsibility on firms with at least $1.0 million in *online U.S.* sales. The small seller exception still leaves out significant remote sales, though the legislation requires aggregation of businesses based on ownership relationships. Several papers have concluded that there are millions of e-commerce firms and only 1000 or so would be covered by the Marketplace Fairness Act. Internet Retailer reports that 388 firms in the Internet 500 (the largest 500 B2C firms) would be affected by the bill. Many bricks and mortar retailers that have significant sales may not have a collection responsibility for their e-commerce activity because their online sales are below the threshold.

[17] The Main Street Fairness Act (S. 1452, 112th Cong., 1st Sess. (2011); H.R. 2701, 112th Cong., 1st Sess. (2011)), the Marketplace Fairness Act (S. 1832, 112th Cong., 1st Sess. (2011)), and the Marketplace Equity Act (H.R. 3179, 112th Cong., 1st Sess. (2011)) were all introduced.

Passage of the legislation would generate significant new revenues for the District, but the $35 million loss mentioned above is an estimate of loss and not a revenue estimate associated with a particular bill in Congress. First, the small seller exception limits the collection responsibility for many firms and provides an incentive for firms to arrange their structure to avoid the collection responsibility. More than one-third of the revenue loss will likely continue because of the small seller exception alone. Second, non-compliance can remain an issue. The approaches to enforcing the legislation have not been articulated and could hamper the states to some extent. Thus, budgets should be cautious in their expectations of the revenue gains, and particularly until the details of any legislation are more clearly articulated.

State Activity

States have followed three avenues to expand collections on remote sales: work cooperatively, define the meaning of physical presence (nexus) more inclusively and enforce use tax compliance more effectively.

Working Together. The Streamlined Sales Tax Governing Board is a cooperative effort by states to simplify the sales tax so that Congress is more likely to enact legislation allowing states to require collection by remote vendors. The streamlined sales tax project has been underway for more than a decade and 24 states are currently in full compliance with the Streamlined Sales and Use Tax Agreement (SSUTA). Alternatively, states may seek to return to the courts arguing that the simplifications implicit in the SSUTA plus other changes in technology and retailing have resulted in a sales tax that is no longer an impediment to interstate commerce.

The District of Columbia can expect two benefits from becoming a full member of SSUTA: additional revenue and simplification of the sales tax. More than 1900 firms are voluntarily complying with the SSUTA, which has resulted in an additional $1.2 billion in collections since 2005.[18] The District could expect some additional revenues from the voluntary compliance program, which appears to be concentrated in firms that already have nexus in a number of SSUTA states and not to the wide range of firms with more limited connection to these states. Significant revenues can only be expected from the SSUTA if Congress enables members of SSUTA to require remote vendors to collect the sales tax.

Defining Nexus. The Quill case indicates that physical presence is necessary to require a collection responsibility, but does not define physical presence.[19] Nexus clearly is established through any form of owning or leasing real or personal property but a number of states have legislated more expansive definitions of physical presence. Nexus has been asserted based on having company owned vehicles in a state or relying on third party distributors to ship or deliver

[18] Daniel C. Vock, "States Rack Up Victories in Bids to Collect Online Sales Taxes," *Stateline*, April 2013.
[19] See Bruce, Fox and Luna (2012) for a broader discussion of sales tax nexus concepts.

goods in the state. Some states have also asserted that having a local phone number, being listed in the phone book or having a bank account or a P.O. Box in the state is sufficient presence. Some states also argue that nexus is established by having employees in a state, including to make sales calls or provide repair services.

States have become more aggressive in asserting nexus using concepts of attributional and affiliate nexus. Affiliate nexus generally ignores corporate structures and focuses on the relationships between in-state retailers and remote vendors, such as shared ownership or trademarks. Affiliate nexus has been argued in cases where the in-state seller provides any services for the remote firm. For example, a statute being considered in Florida would establish nexus if a person, other than a common carrier:

- Sells a similar line under a different name
- Maintains an office, warehouse, etc. to facilitate delivery or services sold by the dealer
- Uses trademarks that are the same or substantially the same as the dealer
- Delivers, installs, assembles, or maintains for the dealer
- Facilitates the dealer's delivery of property
- Conducts any other activities that are significantly associated with the dealer's ability to maintain a market in Florida.[20]

Click-through-nexus, enacted through what have been termed Amazon laws, has been enacted by a number of states including Connecticut, New York, and North Carolina. Kansas' Governor signed legislation on April 16, 2013 enacting the latest click-through-nexus statute, which includes a $10,000 de minimus rule. The West Virginia legislature also approved click-through-nexus on April 1, 2013. These laws attribute nexus to remote firms in circumstances where affiliates with physical presence in the state direct more than a de minimus amount of sales to the remote firm in exchange for a percent of the sales price. In these cases the affiliates do not have shared ownership or products. New York law presumes the seller is doing business in the state if the seller "contracts with New York residents and pays them a commission for referring customers to its website."[21] Amazon challenged the New York law arguing that the law violated the commerce clause because it requires firms without physical presence to collect and remit sales taxes. The New York court denied the claim and said that physical presence did not need to be substantial and can be met by economic activities performed on behalf of the seller. Effectively, the court ruled that the relationship between Amazon and the affiliates was sufficient to establish substantial nexus. The Illinois courts are still considering the issue.

[20] "Florida Bill would Amend Definition of "Mail-Order Sale" to Include Internet Sales," *CCH State Tax Review*, March 27, 2013, Volume 74, No. 13.
[21] Shonda Humphrey, "New York's Highest Court Rejects Challenge to Amazon Law," *State Tax Notes*, April 1, 2013, pp 12-13.

Click-through-nexus will only affect a small number of relatively large firms that have these affiliate relationships. Amazon and Overstock have threatened to eliminate the affiliate relationships in states that adopt the legislation and in some cases have done so – though not in the large states of New York where the litigation has taken place and California where an alternative agreement was reached. Thus, consideration of click-through-nexus (and any nexus changes) must be considered in light of how affected firms may choose to respond in addition to potential revenues and ensuring even taxation of remote and bricks and mortar vendors.

Encouraging Sales and Use Tax Compliance. Buyers are required to remit the use tax in circumstances where the sales tax has not been collected. As noted above, use tax compliance is generally regarded as the weakest of any state tax. At least 25 states seek to enhance compliance by including a line on the individual income tax return requiring tax filers to report use tax due.[22] The District of Columbia could follow this approach though it generally raises very little revenue. Manzi reports that New York receives the greatest amount of revenue from this provision at $34.6 million, and California is the only other state to collect more than $5.0 million. Nine of the states obtain less than $1.0 million. Further, one percent or less of income tax returns reports any liability in at least one-half of the states with the line on their income tax return. Still, states like Louisiana, Massachusetts and Michigan saw significant growth in use tax revenues after the line was added to returns. State provisions differ to some extent. For example, Manzi finds that slightly more returns include sales tax liability and the amount is slightly higher in states requiring taxpayers to clearly indicate no liability if they have none.

Also, several states have enacted legislation requiring remote retailers to provide buyers with notice that use taxes might be due on the transactions. Oklahoma, South Dakota, Vermont and most recently Kentucky have enacted such legislation. Some questions have been raised about the constitutionality of such provisions and the court ruled that Colorado's reporting requirements were unconstitutional. South Dakota and Vermont's legislation appears to have no penalties for vendors who fail to comply.

[22] See Nina Manzi "Use Tax Collection on Income Tax Returns in Other States," Policy Brief, Research Department, Minnesota House of Representatives, April 2012.

4. Sales Tax and the Economy

Sales taxes induce several effects on economic activity:

- they raise the cost of producing or selling in the District
- they encourage the purchase of goods relative to services, since the former is taxed more heavily
- they encourage purchase online, via catalog or through cross border shopping because the tax is more effectively collected when sales are made in bricks and mortar stores

Tax Pyramiding and Effects on Business

A considerable portion of sales tax revenue comes from taxing business-to-business transactions in the District. This tax on business inputs has the potential to impact how firms behave, such as where they locate or whether they vertically integrate. The Council on State Taxation estimates that businesses paid $300 million in sales taxes to the District in 2011, representing somewhat over 30 percent of sales tax collections.[23] The share paid by business is small relative to the share that has been estimated for many other states.[24] This section describes the types of distortions in business behavior that can arise and what we know about the likely magnitude of the influences, though the empirical work on the effects is limited. Concerns about tax pyramiding in DC may be less pronounced than in many states given the lack of manufacturing and small geographic size in the District. Still, many inputs purchased by service firms operating in DC are taxed, as evidenced by the COST analysis, and this raises the cost of operating in the District relative to places where these inputs are not taxed. Thus, concerns about pyramiding cannot be ignored.

Economists almost uniformly oppose taxes on business-to-business transactions. One reason is that the sales tax is intended as a tax on consumption, but businesses do not consume, they produce.[25] It is reasonable to presume that everything businesses purchase is necessary to produce and sell their product (regardless of whether the firm is a manufacturer, wholesaler, or retailer) and does not fit within the conceptual framework of a consumption tax. An exception is that an argument can be made to impose the tax on business inputs in cases where the final output is not taxed through the sales tax. Indeed, a tax on all inputs is comparable to a tax on the output. But, even in this case taxing the inputs may discourage production of some goods and services in the District.

Second, taxes on business inputs can potentially alter business behavior and harm the District's economy as firms seek to limit the amount of tax they pay. Firms can substitute non-taxable inputs for taxable ones, to the extent that taxability differs and input substitution is possible. Alternatively, firms can vertically integrate and bring more production within a single company,

[23] See Council on State Taxation and Ernst & Young and Cline, Phillips and Neubig (2013).
[24] For example, see Ring (1999) who estimated that instate consumers pay 59 percent of the sales tax in the average state. Ring finds consumers pay 56 percent of DC's sales tax, which is lower than the COST results.
[25] This statement ignores any propensity to use a company to make purchases of goods that are intended for personal consumption. This can be a form of tax evasion that is intended to lower sales and income tax liabilities, and is not production.

that is, they can self-provide the service. For example, a firm can hire its own accountants and lawyers to avoid a tax on purchased services. Firms' costs net of taxes will rise to the extent that taxes alter the way that business operates, since firms would bring the lawyers and accountants into the firm without the tax if this were generally the lowest cost way to operate.[26] No evidence exists on the extent to which firms vertically integrate to lessen their tax burdens, but the largest responses are expected from big firms, which are best able to vertically integrate. Not only are smaller businesses less able to vertically integrate but they may also be hurt as larger companies outsource less in response to tax on transactions between firms.

Third, input taxes raise the cost of producing in the District, which can cause some firms to locate their production in states that impose lower tax burdens on business transactions. No empirical research directly examines the extent to which taxes on business inputs harm a state's economy, though some research considers whether higher sales taxes (measured by the tax rate) generally harm a state's economy. For example, Bruce, Deskins, and Fox (2007) find that Gross State Product falls as states increase their sales tax rates. They argue that the effects of taxes on location are growing because technology makes it increasingly easy for firms to geographically separate their production from their markets. Carroll and Wasylenko (1994) study how a number of fiscal variables, including the sales tax, affect total employment and manufacturing employment in a state. They observe no relationship between sales taxes and total employment. However, they found that states with higher sales tax rates had lower manufacturing employment in the years between 1967 and 1983, though the effects were no longer present when they studied 1984 to 1988. This suggested that the effects of taxes on business location are diminishing, the opposite conclusion of Bruce, Deskins, and Fox. But, the Carroll and Wasylenko study entirely predates recent technology and the Internet and may be less applicable to today's more mobile economy.

This research does not directly examine the key issue of whether firms move their production activity in response to states' decisions to tax business inputs and to tax them at higher rates. Still, it is reasonable to presume that bigger taxes on business purchases reduce the propensity for firms to locate or produce in the District, whether the firms are in manufacturing, retailing, or service production. Further, these effects are likely largest for those firms purchasing the greatest amount of taxable inputs and those firms that can most easily separate their point of production and their markets (such as many firms producing for national or international markets). Thus, the effects are likely to vary across industries and sizes of firms.

Fourth, the sales tax on business purchases pyramids as tax is collected at several levels of the production process and on final sales that already include tax levied on inputs. This means that effective rates on some purchases exceed 5.75 percent. The extent of pyramiding depends on the complexity of the production process (how many levels of production a good or service goes through), the tax treatment of the various business transactions, and the propensity to vertically integrate in the industry. Though a gross receipts tax differs somewhat from a sales tax, the State of Washington found that gross receipts taxes pyramided an average of 2.5 times. The extent of pyramiding differed significantly by type of good.

[26] Of course, vertical integration is the best business model for some activities in some firms even without the encouragement from taxes.

The District, like the states, limits pyramiding through some of its exemptions. Still, pyramiding exists and varies significantly across economic sectors. Assuming that business purchases of capital equipment, communications equipment, utilities, and office supplies are taxable, Hawkins (2002) finds that the sales tax is imposed on inputs equal to 14.7 percent of the revenues of electric producers, 11.2 percent for firms taking fees and admissions, and 11.5 percent for firms providing non-shelter lodging. The cascading can have important economic effects as it raises the relative price of some goods and causes people to purchase less of these goods. Hawkins finds that the loss in wellbeing in a state as a result of differential effective tax rates because of pyramiding is small in states with broad based taxes, and the losses are much larger if states adopt narrow tax bases. [27] This conclusion follows because the sales tax distortions, other than from pyramiding, are smaller for states with broad based sales taxes. The Hawkins' pyramiding estimates are for an average state and do not necessarily fit the District. The problem of pyramiding may be smaller than in the average state because the base may be somewhat larger than average. Further, pyramiding may be less likely in the relatively small size of the District. On the other hand, the very open economy in which the District operates will increase the economic effects of high effective tax rates resulting from pyramiding.

Firms may limit pyramiding by purchasing inputs from lower tax jurisdictions, buying online and not paying the use tax, or changing their behavior to purchase fewer taxed inputs. From a policy perspective, reducing taxation of business input purchases is the best means available to limit pyramiding. But reducing taxation of business purchases is often difficult because of the problem of distinguishing between businesses and consumers when purchases are made.

While taxing business-to-business transactions causes the perverse effects previously described, it allows a lower tax rate to raise a specific amount of revenue, given the resulting larger tax base. The base is broader simply because a series of intermediate transactions (purchases by one business from another) is taxable in addition to taxes imposed on final sales. Lower tax rates reduce the disincentives described above, such as for purchasing untaxed items relative to taxed items (for both businesses and consumers) and for vertically integrating. Lower rates also lessen the disincentive to work caused by the tax being imposed on purchased items.[28] Thus, the net effect on a state's economy from taxing business inputs depends on the relative size of benefits from the lower tax rate versus costs from altering business behavior. Russo (2005) finds that eliminating the tax on business inputs results in a small increase in the size of a state's economy and an improvement in the state's wellbeing, even though the tax rate must be higher.

The Sales Tax and Consumption

The sales tax can affect consumer behavior in two key ways, given that consumers bear the tax on local purchases and may not pay on remote purchases. First, they can alter *where or how* people buy, as was discussed in the section on e-commerce above.

Second, sales taxes can change *what* consumers buy since the relative price of exempt items is lower than for taxable items. Also, the relative prices of goods and services are changed to the

[27] Effects on a state's wellbeing are measured by changes in the excess burden of the tax.
[28] Specifically, the sales tax is not imposed on leisure time but is imposed on many goods and services purchased by consumers.

extent that taxes pyramid more into one set of goods than another. The effects on behavior and tax revenues depend on how responsive consumers are to the price of the exempt versus the taxable goods. Merriman and Skidmore (2000) indirectly investigated this question by studying how the sales tax rate affected the allocation of expenditures between retail activity and service activity between 1982 and 1992. This is a reasonable test of the effect that sales taxes have on exempt versus non-exempt purchases since many services are exempt in most states and many goods are taxable in most states. Merriman and Skidmore find evidence that the share of the economy in the retail sector fell, and the share in the service sector rose in high sales tax rate states. This suggests, as would be expected, that sales taxes alter consumption behavior by increasing the quantity demanded for exempt items compared with taxable items. Thus, adding services to the District's base can be expected to reduce the amount of purchases, at least to some extent or to shift purchases to outside the District.

5. Selective Sales Taxes

The District of Columbia levies selective sales taxes on tobacco, alcohol, transient accommodations, parking, and food for immediate consumption, both through the sales tax and with special excises. The District's use of higher sales tax rates on specific commodities is more common than in most states.[29] The District has a 14.5 percent rate on transient accommodations, 18 percent on parking, 12 percent on tobacco products, 10 percent on restaurant meals (including liquor), and 10 percent on liquor for consumption off the premises. The overall tax burden often is a function of several different tax structures, making comparisons across states somewhat problematic. Still, it is possible to make indicative comparisons by combining taxes to measure the overall burden in the District relative to the states. The percentages above the standard 5.75 rate can be thought of as selective sales taxes.

The District raises 1.2 percent of tax revenue using selective unit sales taxes on motor fuel, alcohol, and tobacco (see Figure 1). The average state and local government, on the other hand, collects 4.8 percent from these selective sales taxes. Maryland governments generate 4.2 percent and Virginia 4.1 percent of revenues from these taxes. The District's collections are also very low in per capita terms, particularly for motor vehicle fuel taxes. Per capita DC collections are lower than the national average for all three categories and are lower than Maryland for tobacco, are lower than Virginia for alcohol, and are lower than both states for motor vehicle fuel.

In addition to these unit taxes, the states' sales tax rates are frequently levied on these purchases. In some cases, such as D.C., the rates are above the standard sales tax rate. The District levies high rates on alcohol and tobacco through the sales tax, and these revenues are not reflected in the percentages provided in the previous paragraph. The motor vehicle excise tax is also imposed on the purchase of vehicles. Thus, the overall relative revenue collected from taxation of these commodities by the District is understated in Figure 1.

The combined additional sales tax (amount above the standard rate) and unit tax rates in the District are generally high for alcohol and tobacco, which means there is likely to be considerable cross border shopping. The result is more likely to be limited purchasing by residents, which reduces the unit sales and probably explains some of why the per capita unit tax collections in the District are low.

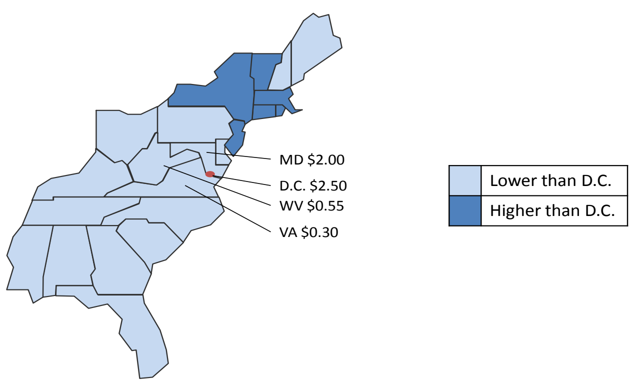
[29] Other variants from the standard rate exist. For example, several states offer a preferred (lower) rate for food for consumption at home. Hawaii taxes a number of transactions at lower than the standard 4.0 percent rate. As described below, a number of states have different rates on vehicle sales.

Alcohol and Tobacco Taxes

DC, like essentially every state, imposes special unit taxes on tobacco and alcohol products, with DC's cigarette unit tax rate being relatively high and the alcohol rates relatively low. The overall relative tax burden is the sum of the sales tax and the selective salestax.

The District levies a $2.50 tax per pack of cigarettes and an in lieu sales tax of $0.36 per pack. The unit tax was increased from $0.65 to $1.00 in 2003 and from $1.00 to $2.50 in 2009. The District's current combined tax on cigarettes is considerably higher than the median state's $1.36 per pack and the $0.30 per pack in Virginia and $2.00 per pack in Maryland.[31] Still, nine states led by New York's $4.35 per pack have higher rates. Generally, cigarette tax rates are much higher from the District going north than they are in Virginia and other states south along the Atlantic Ocean (see Figure 3). Indeed, Virginia has the second lowest tax rate, with only Missouri having a lower rate. A federal tax and local taxes in many cities and counties are also levied on cigarettes.

Figure 3: State Cigarette Excise Tax Rates, as of Jan. 1, 2013 (Dollars per 20-pack)



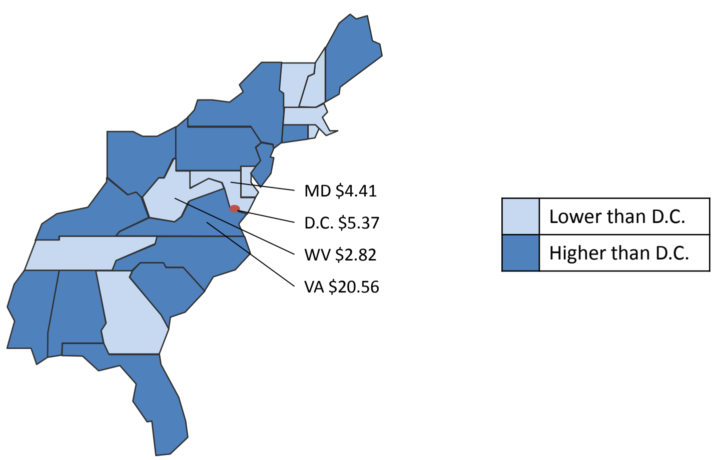
Source: The Tax Foundation

Taxes on alcohol products can be more difficult to compare across governments because they differ significantly by type of product. The District uses relatively low specific taxes on alcohol products but the tax is not unusually low when the sales tax is included. DC is tied with Virginia for the lowest specific tax rate on distilled spirits at $1.50 per gallon.[32] But, DC's tax on spirits rises considerably when the sales tax is included. The Tax Foundation lists the D.C. tax as $5.37 per gallon including both the sales and specific taxes, which is higher than Maryland's, much

[31] See http://taxadmin.org/fta/rate/cigarette.pdf
[32] Eighteen states have state liquor stores.

lower than Virginia's, and approximately in the middle of all states (see Figure 4).[33] The District's $0.30 per gallon tax on wine is well below the median state's $0.70, Virginia's $1.51 per gallon and Maryland's $0.40 per gallon.[34] Five states have lower rates than the District and several have the same rate. Again, the District's rate is not low when the sales tax differential is included. The Tax Foundation lists the District as 6th highest relative to the states, a little higher than both Virginia and Maryland. Similarly, the District imposes relatively low unit beer taxes at $0.09 per gallon, which is well under the median state's $0.19. Maryland also uses a $0.09 rate and Virginia has a $0.26 per gallon tax. Six states have lower rates and several have the same rate. DC does not impose a higher sales tax rate on purchase of beer for use at home.

Figure 4: State Spirits Excise Tax Rates, as of Jan. 1, 2013 (Dollars per Gallon)



Source: The Tax Foundation

Selective taxes are generally imposed on tobacco and alcohol because of some combination of intent to:

- generate revenue
- impose charges for negative externalities (for both the users and secondary participants) from consumption
- discourage consumption
- tax non-residents

[33] The Tax Foundation data only include sales taxes that are specific to the product, so they may overstate the District's relative position to some extent.
[34] Rates vary based on alcohol content and some wine in Virginia is only available in state liquor stores.

Several points can be emphasized about these expectations regarding D.C.'s selective sales taxes. In sum, the structure appears to generate additional revenue (though less than would be expected given the cross border shopping induced by high rates relative to neighboring states on some products) and increase revenue growth, raise the costs of buying and consuming alcohol and tobacco in the District as a charge for negative externalities, have little effect on consumption and generate significant revenue from those visitors who purchase the commodities in the District.

First, ad valorem tax rates on cigarettes and alcohol offer better revenue elasticity than unit taxes so the District obtains better revenue growth from the selective sales taxes than do many states that rely only on unit taxes. Ad valorem tax revenues grow with both consumption and price increases whereas unit tax revenue only rises with consumption growth (and higher prices can actually reduce revenues because of reductions in quantity of sales). Slow revenue growth is one reason for more than 100 cigarette tax rate increases across the country since 2000 (including the two in the District).[35] Consideration could be given to imposing ad valorem rates on cigarettes. Such a step would be inconsistent with states, which have generally used unit taxes and imposed discrete rate increases to generate more revenue rather than levy specific ad valorem excise tax rates on tobacco. Imposition of the sales tax on cigarettes already adds some elasticity to the tax on tobacco.

Second, high rates encourage purchasing from lower price options outside the District. Recent research, focused particularly on cigarette taxes, evidences a very strong response to price/tax differentials across states. For example, Lovenheim (2008) concludes that 63 percent of DC residents who smoke engage in casual cigarette smuggling because of the District's high tax rate relative to neighbors, and particularly relative to Virginia. Lovenheim's estimates are based on data from the late 1990s and early 2000s and the incentives are even greater for casual smuggling today given the larger state tax rate differentials and growth in the Internet.[36] As a result, the high rates raise less revenue than would have been expected and cigarette consumption is reduced much less than would have been anticipated because many cigarettes smoked by DC residents are likely purchased in neighboring states rather than the District. Lovenheim concludes that the tax rate has little impact on cigarette smoking because many buyers view the price/tax in the lower tax option (Virginia for example) as the relevant price for deciding whether and how much to smoke.

Similar research is not available on the extent to which alcohol tax differences affect casual smuggling but it is reasonable to think the effects would be smaller given the bulkiness of the products and the lower tax differentials across DC, Maryland and Virginia. Still, some smuggling almost surely occurs to take advantage of lower rates in nearby states and for convenience.

[35] See http://www.taxadmin.org/fta/rate/cig_inc02.html
[36] See Goolsbee, Lovenheim, and Joel Slemrod (2010).

Finally, many governments impose taxes with the hope of collecting revenues from tourists and commuters. The District receives revenues from non-residents who purchase cigarettes and alcohol while in the city for work or tourism, but no data are available on the extent to which this occurs. The current high sales and excise tax rates on cigarettes and alcohol may be intended to "export" the tax by collecting revenues from people who are willing to pay the high price for current consumption during their brief stay in the District, while many residents purchase much of their products in other places. Economists are concerned that revenue from tax exporting creates an incentive for government to be excessively large, but politicians may like collecting taxes from those who do not vote.

Motor Vehicle and Motor Fuel Taxes

All states plus the District of Columbia levy taxes on motor fuels, which are normally intended to finance some construction and maintenance of the roads. Pearl Richardson (1999) has written that these taxes are not user fees, which "are prices that the government charges identifiable individuals or entities for a service or good that it controls, and, more narrowly, as prices the government charges to recover its costs of providing special benefits to an identifiable recipient beyond those that accrue to the general public." Instead she refers to these taxes as beneficiary charges, which "differ from (user) fees, not only in structure of the charge but also in the degree of connection between the payers of the charge and the benefits or services that are financed with the proceeds." Thus, there may be some relationship between payment of the motor fuel tax and use of the road but it is much less direct that exists with user charges.

In some jurisdictions, such as the District, the rate is the same on gasoline, diesel fuel, and gasohol, but nearly 20 states have different rates between at least two of the fuel types. The District recently eliminated a 23.5 cents per gallon tax on fuel, which was just above the median of state rates, and replaced it with an 8.0 percent ad valorem tax on the wholesale price.[37] Maryland also uses a 23.5 cent tax and Virginia has a lower 17.5 cents per gallon tax. Many states impose a range of other taxes on fuel or vehicles. For example, at least seven states also levy the general sales tax on fuel, several states impose some sales tax but not the general rate, several allow local sales taxes, and a number of other taxes are also levied.

Maryland and Virginia implemented fuel tax rate changes in July. Virginia raised the sales tax rate to 5.3 percent (though the rate is 6.0 percent in northern Virginia) and levied an ad valorem tax on the wholesale price of motor fuel. Maryland is indexing its fuel tax rate to the consumer price index (which means the rate goes up as inflation occurs) and imposing a one percent sales tax rate on most fuel. The sales tax rate on fuel is scheduled to rise in coming years. The District is following the same approach as Virginia with the tax on the wholesale price of fuel. These

[37] See http://www.taxadmin.org/fta/rate/mf.pdf A special fee/tax is included in this calculation.

states and DC are adding elasticity (responsiveness of tax revenue to growth in the nominal or real economy) to their fuel tax revenues, though using different approaches. Indexing the rate to the CPI is intended to cause revenues to rise with general inflation in the economy and the ad valorem tax causes revenues to rise (and fall) with movement in the price of fuel. History over the past several decades shows that oil prices rise faster than inflation which suggests that the approach chosen by DC will result in faster growth in revenue (though a higher price for fuel in the District could shift some purchases to Maryland or Virginia). Further, revenue growth in DC will be better over the long term than with the per gallon tax that only rose with purchases of fuel. On the other hand, taxes based on fuel prices, as enacted in DC, will add more volatility to the revenue system than the specific tax that was previously in effect or the Maryland approach of using a tax rate that rises with inflation. One evidence is that the CPI has only fallen two years since 1946, but oil prices have fallen three years since 2000.

For many years fuel taxes have been an important source of revenues across the country that is earmarked for road construction and maintenance. Unit taxes only grow with consumption which is rising very slowly so the fuel taxes have low revenue elasticity. A number of states have begun to think about alternative taxes on electric or hybrid cars to offset at least one source of erosion in oil sales and seek to maintain the relative importance of these taxes as a means of financing roads. However, research on the subject has generally concluded that electric and hybrid vehicles will remain a small share of the total fleet for many years into the future and that the damage to the roads from these vehicles is relatively small. As a result, a tax on these vehicles will not be an important source of revenues, though a case can still be made for a revenue contribution from these vehicles.

Sales taxes are also imposed on the purchase of vehicles in most states, but there are a range of different approaches. Some of these alternatives are listed here. DC levies the motor vehicle excise tax at a 6 percent sales tax rate on small vehicles but imposes a 7 percent tax on mid-sized vehicles and an 8 percent rate on the largest vehicles. Connecticut also has progressive rates, though based on price rather than weight. Connecticut has a 6.35 percent rate on vehicles $50,000 and under and 7 percent on higher priced vehicles. Maryland uses the standard 6 percent rate on vehicles. Some states, such as Virginia, Alabama and Mississippi use an ad valorem tax but at lower than the standard sales tax rate. Virginia's rate is 3 percent, though it is scheduled to rise to 4.0 percent in July. Similarly, North Carolina has a 3 percent highway use tax rather than the standard sales tax rate. South Carolina levies the standard 5 percent sales tax rate but with a maximum of $300 per vehicle. Delaware, on the other hand, has a 3.75 percent tax on vehicle sales, but has no general sales tax. Kentucky levies the standard sales tax rate but places the receipts in the highway fund rather than the general fund.

The District generally has the right approach on taxing vehicles, at least if they are used by consumers. The sales tax should be imposed on the purchase of vehicles as a form of consumption, which is effectively DC's approach. Presumably the higher rates on larger vehicles are intended to create a limited form of progressivity and to provide modest additional revenue from heavier vehicles.

Hotel, Restaurant and Parking Taxes

The District and nearly every large city imposes taxes on tourism related activity, including on hotel rooms, restaurants and parking, using a combination of state and local tax structures. Combined tax rates that exceed those imposed through the general sales tax are often imposed. Mak (2004) identifies five reasons to levy taxes on tourism:

1. to compensate the city (state) for costs imposed by non-residents while in the city
2. to export local tax burdens
3. to diversify the local tax structure
4. to tax excess profits available to hotel and other tourism service providers by virtue of their location
5. to fund tourism promotion.

Cities may seek compensation for a series of public service and other costs imposed by visitors, including both tourists and commuters. These costs include police, fire, road and other public service costs plus congestion and related effects on citizens. The taxes can be thought of as benefit charges to the extent that they are intended to cover actual costs. These costs are borne by city taxpayers unless mechanisms, such as selective sales taxes on tourists, are used to finance them. Cities also seek to export taxes to non-residents, particularly if visits are relatively unresponsive to higher hotel tax rates. Exported taxes allow either expanded public services or lower taxes for residents, and in this sense provide an incentive for excessive government since they are not financed by resident taxpayers. The ability to diversity revenue sources, similar to how investors seek to diversify their portfolios, is a related advantage. Hotels may be able to earn high profits by locating in a very attractive place and the city may want to tax some of the resulting "excess" profits. Finally, tourism revenues, and particularly hotel taxes, are often used to finance tourism promotion.

DC levies a 14.5 percent hotel tax, 10 percent restaurant tax, 18 percent parking tax and 10 percent tax on rental cars. D.C. generally levies these taxes through differential rates in the sales tax structure. Alexandria imposes a 10.5 percent rate on hotels, Arlington a 9 percent rate, and Fairfax an 8 percent rate. Prince Georgia's County Maryland has a higher 16 percent rate and Montgomery County a 15 percent rate. Virginia taxes restaurant sales at 8.3 percent and Maryland at 6 percent and both tax parking at 6 percent. The effects of taxes on restaurants and parking have received relatively little careful analysis among economists, but it is possible to conceptually describe these taxes.

No sources compiles data on hotel, restaurant and parking tax rates across jurisdictions, so the rates must be found separately for individual states or local governments. Table 1 provides hotel tax rates for selected large cities across the U.S. The rates in other cities are generally a combination of a state sales tax rate, a local sales tax rate, and a local occupancy tax, though there are a wide range of different structures. D.C.'s rate is tied for 10^{th} highest among the 13 cities in the table. Research has generally found that hotel tax rates can be forward shifted to tourists, suggesting that higher tax rates have relatively little effect on the number of nights stayed in a city, though the taxes may have a greater implication for business and convention travelers and may have greater effects in metropolitan areas where tourists can stay just across a border and avoid some of the tax.[38] Taxes on other forms of amusement are generally harder to shift to consumers and at least some of them are likely to be borne by the seller.

The question arises whether the District has additional capacity to raise its hotel tax rate or its rates on other transient services. Key factors are the effects on tourism in the District, including hotel room nights stayed, restaurant meals purchased, and related consumption, and the effect on tax revenues. An econometric study was not conducted for this paper on how responsive hotel room usage or restaurant meals would be to rate increases so only qualitative comments can be given. The likely conclusion is that the District does not have significant unused capacity to raise rates further on tourism activity, though such decisions are clearly marginal judgments. The District could surely generate some additional tax revenues but this probably would come at the expense of some economic activity in the city. Further, income tax revenues could be reduced if earnings are lowered as tourism activity moves to Maryland or Virginia. The District's rates are approximately as high or higher than other jurisdictions in the metropolitan area and care must be taken to avoid disadvantaging businesses and workers in the District. The exception is Maryland where hotel tax rates are already higher. Higher rates in D.C. would generally expand the differentials on restaurant meals and hotels relative to Virginia. Limited capacity to raise hotel taxes might exist given the high rates in Maryland but the differential with Virginia would grow. The Table suggests that D.C.'s hotel tax is generally in line with other large cities, though some impose rates as much as 2.5 percent higher (or 2.0 percent lower). Cities in the Table with higher rates than the District are generally located in the interior of a state without the significant cross state competitive effects that could arise for the District, particularly with Virginia. Thus, care should be taken for any significant rate increases.

Similarly, the District imposes higher taxes on restaurant food (10 percent) than do neighboring states (Virginia, 8.3 percent, and Maryland, 6 percent), which lessens the potential for additional rate increases. Parking taxes are likely to have their greatest effects on people who live in the metropolitan area and commute for work or leisure. Greater carpooling and use of the Metro can be expected as tax rates rise, or parking owners will reap less after tax profit.

[38] See Mak (2004) for a comprehensive discussion of hotel taxes.

Table 1

Hotel Tax Rates for Selected Cities

City	Tax Rate
Atlanta	16.0%
Boston	14.95%
Chicago	16.4%
Denver	14.75%
Houston	17.0%
Los Angeles	15.5%
Miami	13.0%
New York City	14.375% + $3.50 room
Orlando	12.5%
Philadelphia	14.5%
Seattle	15.6%
San Francisco	17.0%
Washington, DC	14.5%

Source: Selected websites

6. Policy Options for the Tax Commission

A series of policy changes that the Tax Commission could consider for the District's sales tax base include:

Taxation of Goods

1. Limit the set of new exemptions for consumer goods.
2. Impose the tax on currently not taxed consumer goods such as food for consumption at home and non-prescription drugs.
3. Seek business purchases to exempt.

Taxation of Services

Identify currently untaxed consumer services that could be included in the tax base such as:

- Construction contractors
- Carpentry and other construction related services
- Storage of household goods
- Mini-storage
- Water for consumption at home
- Barber and beautician services
- Carpet and upholstery cleaning
- Health clubs and tanning studios
- Carwashes
- Bowling alleys and billiard parlors

Taxation of Remote Sales

Significant improvements in the District's ability to collect tax on remote sales await Congressional action. Congress can regulate interstate commerce, so it can enact legislation that allows states to require remote firms to collect the tax. Steps the District can consider in the interim include:

1. Support passage of the Marketplace Fairness Act, the federal law allowing states to require remote firms to collect their sales tax.
2. Become a full member of the Streamlined Sales and Use Tax Agreement to support reform and ultimately allow the District to implement the Marketplace Fairness Act.
3. Add a line to the personal income tax return allowing residents to easily remit their use tax obligations.
4. Expand the definition of nexus using approaches such as click through nexus.

Excise Taxes

The District's overall taxation of alcohol and tobacco is generally high on the standards of neighboring states and often relative to many other states. DC has limited capacity to raise rates on hotel rooms, restaurant purchases and parking given that rates are generally high relative to neighboring states.

7. References:

Besley, Timothy J. and Harvey S. Rosen. 1999. Sales taxes and prices: An empirical analysis, *National Tax Journal* 52 (2): 157-178, June.

Bruce, Donald, John Deskins, and William F. Fox. 2007. "On the Extent, Growth and Efficiency Consequences of State Business Tax Planning," forthcoming in *Corporate Income Taxation in the 21st Century,* Alan Auerbach, James Hines, and Joel Slemrod, editors, Cambridge University Press.

Bruce, Donald, William F. Fox, and LeAnn Luna. 2009. "State and Local Sales Tax Revenue Losses from E-commerce," *State Tax Notes*, May 18.

Bruce, Donald, William F. Fox, and LeAnn Luna. 2012. "The Effect of State Tax Policies on Where E-Tailers Collect Sales Tax," Paper presented at the Annual Conference of the National Tax Association, Nov. 18, draft.

Robert Cline, Andrew Phillips and Thomas Neubig. 2013. "What's Wrong with Taxing Business Services," *State Tax Notes*, April 23, pp. 311-324.

Carroll, Robert and Michael Wasylenko, "Do State Business Climates Still Matter – Evidence of a Structural Change," *National Tax Journal* 47 (1): 19-37, March 1994.

Council on State Taxation and Ernst & Young, *Total State and Local Business Taxes*, July 2012.

Fox, William F. 2006. Hawaii's General Excise Tax: Should the Base Be Changed? Report Prepared for the 2005-2007 Hawaii Tax Review Commission, October 4.

Goolsbee, Austan, Michael F. Lovenheim, and Joel Slemrod. 2010. "Playing with Fire: Cigarettes, Taxes and Competition from the Internet." American Economic Journal: Economic Policy 2(1):131-54.

Hawkins, Richard. 2002**. "**Popular Substitution Effects: Excess Burden Estimates for General Sales Taxes," *National Tax Journal* 55 (4): 755-770, December.

Mak, James. 2004. *Tourism and the Economy*, University of Hawaii Press: Honolulu.

Merriman David and Mark Skidmore. "Did Distortionary Sales Taxation Contribute to the Growth of the Service Sector," *National Tax Journal* 53 (1): 125-142, March 2000.

Poterba, James. 1996. "Retail Price Reactions to Changes in State and Local Sales Taxes," *National Tax Journal* 44 (2): 165-76, June.

Richardson, Pearl. 1999. "User Charges, Federal," in *The Encyclopedia of Taxation and Tax Policy*, edited by Joseph J. Cordes, Robert D. Ebel, and Jane G. Gravelle, The Urban Institute Press, pp. 419-421.

Ring, Raymond. 1999. "Consumers' Share and Producers' Share of the General Sales Tax," *National Tax Journal* 52 (1): 79-90, March.

Russo, B. 2005. An Efficiency Analysis of Proposed State and Local Sales Tax Reforms, *Southern Economic Journal* 72 (2): 443-462, October.