

**AN ANALYSIS OF TAX
ADMINISTRATION ISSUES RAISED
BY A CONSUMPTION TAX, SUCH
AS A NATIONAL SALES TAX OR
VALUE ADDED TAX**

An Analysis of Tax Administration Issues Raised by a Consumption Tax,
Such as a National Sales Tax or Value Added Tax

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TABLE OF CONTENTS

Introduction	38
Why is the National Taxpayer Advocate discussing consumption taxes?.....	38
Why is a value added tax (VAT) or retail sales tax (RST) being considered?	38
What types of VATs have been proposed?.....	40
How does a VAT work?	42
Credit invoice method VATs can resemble RSTs.....	42
VATs can be computed using a subtraction method.....	43
Subtraction method VATs can be “naive” or “sophisticated”	43
Subtraction method VATs can resemble corporate income taxes.....	43
The business component of a flat tax is a modified VAT.....	43
Examples of VATs and RSTs	44
Credit invoice method VATs can have “exempt” and “zero-rated” sales	45
There are special problems with administering exemptions and zero ratings under a subtraction method VAT	46
Credit invoice method VATs can use “reverse charges” to promote compliance and reduce burdens	47
VATs can be complex.	47
VAT preferences generate complexity, controversy, and burden	48
Real property typically gets special treatment under a VAT	50
Sales to dealers in used property are often subject to special rules	50
Financial services are often subject to special rules	51
Recommendation	52
Discussion	53
A credit invoice method VAT may promote voluntary tax compliance better than a comparable subtraction method VAT or RST.	53
Empirical evidence regarding VAT and RST compliance is limited.....	53
Credit invoice method VAT rates can climb to higher levels than RSTs before triggering significant noncompliance.....	54
Unique credit invoice method VAT design features promote compliance.....	55
VATs are susceptible to refund fraud	59
Good VAT design could minimize fraud.....	60
Under a simple credit invoice method VAT, reporting compliance gains could overshadow refund fraud losses	61

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An Analysis of Tax Administration Issues Raised by a Consumption Tax,
Such as a National Sales Tax or Value Added Tax

Establishing only one rate and limiting tax preferences	
would minimize compliance costs and noncompliance	62
Tax preferences including multiple rates increase costs and reduce compliance	62
VAT preferences and complexity may prompt lawmakers to exempt small businesses and others	63
Policymakers could reduce small business compliance burdens in other ways	63
A subtraction method VAT could make preferences more difficult to administer	64
A credit invoice method VAT or RST applicable to imports but not exports	
<i>(i.e., a “destination-based” tax)</i> reduces the need for complex international tax rules	65
Origin-based VATs may foster complexity and provide opportunities for noncompliance	66
Destination-based taxes establish a transparently level international playing field	66
Certain subtraction method VATs could not be destination-based without violating trade rules	67
At low rates, the administrative costs of an RST may be lower than for a VAT,	
but a VAT may be less costly if high rates are needed	68
A VAT would generate more returns than an RST	69
A credit invoice method VAT would not necessarily entail significantly more than a subtraction method VAT	69
A federal RST or credit invoice method VAT could leverage and accelerate	
state RST coordination and simplification efforts	70
Multi-state groups have been working to coordinate and simplify state sales tax rules for over a decade	70
A national VAT or RST could leverage and accelerate state simplification efforts	71
State level coordination and simplification would be easier with fewer federal preferences	72
A federal VAT could replace state RSTs	72
Conclusion	73

INTRODUCTION

Why is the National Taxpayer Advocate discussing consumption taxes?

The National Taxpayer Advocate is required to include legislative recommendations in her Annual Report to Congress to resolve problems encountered by taxpayers.² Consumption taxes are being discussed by policy experts and legislators as a means to raise revenue that could be used to reform other taxes, reduce the deficit, or for other purposes, as described below. Any consumption tax proposal should be analyzed to ensure it is administrable and minimizes opportunities for noncompliance and conflict. In connection with her testimony before the President's 2005 Tax Reform Panel, the National Taxpayer Advocate developed a number of tax reform principles with these goals in mind, as follows:³

- The tax system should not “entrap” taxpayers;
- The Internal Revenue Code should be simple enough that taxpayers can prepare their own returns without professional help;
- The tax system should anticipate the largest areas of noncompliance and minimize the opportunities for such noncompliance;
- The tax law should provide some choices, but not too many choices;
- Refundable credits are not inherently problematic – it’s all in the design; and
- The tax system should incorporate a periodic review of the tax code – in short, a sanity check.

The sole purpose of this report is to highlight tax administration issues that policymakers should consider as they evaluate consumption tax proposals. The National Taxpayer Advocate is not taking a position with respect to the imposition of any new tax.

Why is a value added tax (VAT) or retail sales tax (RST) being considered?

A value added tax (VAT) is similar to a retail sales tax (RST). Instead of being collected all at once on retail sales, however, it is collected at each stage of production. Assuming, for example, that gasoline sells for the total of the value added by an oil producer, refiner, distributor, and gas station, a small tax would be due from each. By contrast, under an RST the government collects the entire tax from the retailer – the gas station in this example.⁴

² See IRC § 7803(c)(2)(B)(ii)(VIII)-(XI) (requiring this report to include “recommendations for such administrative and legislative action as may be appropriate to resolve problems ... [recommendations for remedying] compliance burdens ... [and] such other information as the National Taxpayer Advocate may deem advisable”).

³ See National Taxpayer Advocate, *Testimony before the President's Advisory Panel on Federal Tax Reform* (Mar. 2005), <http://www.irs.gov/pub/irs-utl/ntacomplexity030105final3.ppt>. For further discussion of these principles, see National Taxpayer Advocate 2005 Annual Report to Congress 375 (Key Legislative Recommendation: *A Taxpayer-Centric Approach to Tax Reform*).

⁴ Sellers are sometimes required to reflect RST or VAT on receipts and this may create the expectation that they have passed the tax along to customers. While some may in fact pass the entire tax cost on to customers, others might reduce prices to retain the same after-tax price.

An Analysis of Tax Administration Issues Raised by a Consumption Tax,
Such as a National Sales Tax or Value Added Tax

Since a VAT was first used as a national tax about 60 years ago, more than 140 countries have adopted it, including China, Russia, India, and every member of the Organization for Economic Cooperation and Development (OECD) except the United States.⁵ Every OECD country that has a VAT also has an income tax.⁶

Experts have suggested that the revenue generated by a U.S. VAT could be used to finance deficit reduction, entitlement reform (including health care), or to eliminate the income tax applicable to corporations or low and middle income individuals.⁷ Revenue needs and renewed interest in pay-as-you-go deficit control legislation may accelerate this debate.⁸ The Congressional Budget Office (CBO) projects that the public will hold \$7.6 trillion in U.S. debt by the end of 2009, and this figure will nearly double to \$14 trillion as we add another \$7 trillion in cumulative deficits over the 2010 to 2019 period.⁹

According to one estimate, each percentage point of a VAT could generate revenue in the range of 0.4 to 0.6 percent of GDP, depending on the number of exemptions and preferences.¹⁰ Based on the 2008 GDP of \$14.44 trillion, this estimate suggests each VAT percentage point could raise revenue in the range of \$58 billion to \$87 billion per year.¹¹ By comparison, the corporate income tax, which taxes most corporate income at the top

⁵ See Leah Durner et al., *Why Vat Around the Globe?*, 2009 TNT 223-7 (Nov. 23, 2009) (citing 1948 as the first VAT adoption date and listing 145 countries); OECD, *Consumption Tax Trends*, Annex 2 (2008) (listing 143 countries); Government Accountability Office (GAO), GAO-08-566, *Value-Added Taxes: Lessons Learned from Other Countries on Compliance Risks, Administrative Costs, Compliance Burden, and Transition* 9 (Apr. 2008) (hereinafter GAO Report) (citing 1954 as the first VAT adoption date).

⁶ GAO Report at 9. A VAT is a requirement for membership in the European Union (EU). Sixth Council Directive, *On the Harmonization of the Laws of the Member States Relating to Turnover Taxes – Common System of Value Added Tax: Uniform Basis of Assessment*, Official J. No. L145 (May 17, 1977), recast by Council Directive, *On the Common System of Value Added Tax*, Official J. No. L347 (Nov. 28, 2006) (hereinafter Recast Sixth Directive).

⁷ See, e.g., *Financing Healthcare Reform, Testimony Before the Senate Committee on Finance* (May 12, 2009) (statement of Leonard E. Burman); Kenneth J. Kies, *The Obama Budget, 2010, and the Impending Fiscal Nuclear Winter*, 123 Tax Notes 601 (May 4, 2009); Alan Auerbach and William Gale, *The Economic Crisis and the Fiscal Crisis: 2009 and Beyond*, Tax Policy Center (June 23, 2009); Rudolph Penner, *Do We Need a Value-Added Tax to Solve Our Long-Run Budget Problems?*, Urban Institute (June 22, 2009); Reuven S. Avi-Yonah, *An Add-on VAT for the United States: Summary and Recommendations*, ABA Section of Taxation May 2009 Meeting (Feb. 9, 2009) (conference draft); Michael J. Graetz, *100 Million Unnecessary Returns: A Fresh Start for the U.S. Tax System*, 112 Yale L. J. 261 (Oct. 16, 2002). Fiscal pressures recently prompted California to consider a VAT. See California's Commission on the 21st Century Economy, *Final Report* (Sept. 2009), <http://www.cotce.ca.gov/documents/reports/> (recommending lowering personal income tax rates, and eliminating sales, use, and corporate income taxes with revenue from a subtraction method VAT, called a "Business Net Receipts Tax"). The policy benefits of a VAT are the subject of debate. See, e.g., Curtis S. Dubai, *WebMemo #2532, Value-Added Tax: No Solution for Health Care or Fiscal Woes*, Heritage Foundation (July 9, 2009) (arguing a VAT would lead to more government spending).

⁸ See, e.g., Congressional Budget Office (CBO), *An Analysis of H.R. 2920, the Statutory Pay-As-You-Go Act of 2009* (July 14, 2009) (letter to Paul Ryan). Based on the conclusion that revenue needs will spark this debate, KPMG's Washington National Tax Office is conducting an initiative to inform the debate over the VAT as a tax reform option in the United States. See Leah Durner et al., *Why All the Buzz About VAT?*, 2009 TNT 199-7 (Oct. 19, 2009).

⁹ CBO, *The Budget and Economic Outlook: An Update ix*, 2 (Aug. 2009), <http://www.cbo.gov/ftpdocs/105xx/doc10521/08-25-BudgetUpdate.pdf>. Other estimates suggest we may add more than \$12 trillion to the deficit over this period. *Ten-Year Deficit Could Top \$12 Trillion, Says Budget Watchdog Group*, 2009 TNT 170-3 (Sept. 4, 2009).

¹⁰ William G. Gale and C. Eugene Steuerle, *Tax Policy Solution*, in *RESTORING FISCAL SANITY* 113 (Alice M. Rivlin and Isabel Sawhill, eds., Brookings Institution Press 2005). This is consistent with a more recent estimate, which suggests a 5 percent VAT could raise \$3.3 trillion over 10 years. *Tax Policy Center Estimates Impact of 5 Percent VAT*, 2009 TNT 224-41 (Nov. 24, 2009), <http://www.taxpolicycenter.org/numbers/Content/pdf/T09-0442.pdf>.

¹¹ Bureau of Economic Analysis, *National Income and Product Accounts Table 1.1.5, Gross Domestic Product* (Sept. 30, 2009).

An Analysis of Tax Administration Issues Raised by a Consumption Tax, Such as a National Sales Tax or Value Added Tax

statutory rate of 35 percent, generated about \$354 billion in fiscal year (FY) 2008 – only about \$10 billion per point.¹²

Most major analyses of U.S. tax reform options include VAT-like taxes, but they are rarely called VATs. For example, some VATs and VAT-like taxes are called Goods and Services Taxes (GST), Business Transfer Taxes (BTT), Business Activity Taxes (BAT), Flat Taxes, X-Taxes, or Growth and Investment Taxes (GIT).¹³ Some would be computed using the standard “credit invoice” method, and others, such as a flat tax, would be computed using a “subtraction method,” as described below.¹⁴

Some surveys suggest that U.S. taxpayers would prefer a national RST to a federal income tax increase.¹⁵ Politicians and experts, including two former Federal Reserve chairmen, Alan Greenspan and Paul Volcker, the Speaker of the House of Representatives, Nancy Pelosi, and the Senate Budget Committee Chair, Kent Conrad, have recently joined those suggesting the U.S. may need to consider a VAT or VAT-like tax.¹⁶

What types of VATs have been proposed?

A diverse group of U.S. policymakers and tax experts have been considering VATs and VAT-like taxes for decades, either as supplements or replacements for the income tax. To highlight just a few:

- The Nixon Administration considered a VAT in the early 1970s to fund grants to state and local governments to finance education;¹⁷
- Former Ways and Means Committee Chairman Ullman proposed a credit invoice method VAT in 1980 to fund cuts in income and payroll taxes;¹⁸

¹² See IRS Pub. 55B, Data Book, *Table 1 – Collections and Refunds, by Type of Tax* (2008) (corporate tax receipts); IRC § 11 (corporate tax rate). These figures are computed as follows: \$354 billion in corporate tax receipts / 35 percent = \$10 billion per point. According to preliminary figures, however, corporate income tax receipts fell by more than 55 percent in FY 2009. Joint Statement of Tim Geithner, Secretary of the Treasury and Peter Orszag, Director of the Office of Management and Budget, on *Budget Results for Fiscal Year 2009*, TG-322 (Oct. 16, 2009). VAT revenues are generally less volatile than income tax revenues.

¹³ See, e.g., Alvin Warren, *The Business Enterprise Income Tax: A First Appraisal*, 118 Tax Notes 921 (Feb. 25, 2008).

¹⁴ The method we refer to as “credit invoice” is sometimes called “credit-subtraction” and the method we refer to as “subtraction” is sometimes called “sales-subtraction.”

¹⁵ According to a national survey, “[F]orty-eight percent (48%) say a national sales tax is fairer than an income tax while 26% hold the opposite view.” Rasmussen Reports, *18% Favor National Sales Tax, 68% Oppose* (May 29, 2009), http://www.rasmussenreports.com/public_content/business/taxes/may_2009/18_favor_national_sales_tax_68_oppose. These views are consistent with survey results from the 1980s, which found that taxpayers would prefer a national sales tax to an income tax increase. See Congressional Research Service (CRS), *The Value-Added Tax: Concepts, Issues, and Experience*, reprinted in 47 Tax Notes 447 (Apr. 23, 1990) (citing a 1983 Gallup survey, a 1988 Harris poll, and a 1988 Media General Research poll). One study suggested a significant number of U.S. taxpayers favor replacing the income tax with a flat tax or RST, in part, because of the misconception that the income tax is regressive. Joel Slemrod, *The Role of Misconceptions in Support for Regressive Tax Reform*, 59 Nat'l Tax J. 57-75 (Mar. 2006).

¹⁶ See, e.g., Sam Goldfarb, *Policy Experts Revisit VAT as Debt Crisis Looms*, 2009 TNT 152-1 (Aug. 11, 2009); Lori Montgomery, *Once Considered Unthinkable, U.S. Sales Tax Gets Fresh Look*, Washington Post, May 27, 2009; Robert Altman, *We'll Need to Raise Taxes Soon, Expect Congress to Seriously Consider a Value-Added Tax*, The Wall Street Journal, A15, June 30, 2009; The Charlie Rose Show, with Nancy Pelosi, Current Affairs (Oct. 5, 2009); Jeanne Sahadi, *We're Broke ... Time for a New Tax*, CNNMoney.com (Oct. 12, 2009).

¹⁷ The Report of the President's Task Force on Business Taxation 61 (1970).

¹⁸ Tax Restructuring Act of 1980, H.R. 7015, 96th Cong. § 301 (1980).

An Analysis of Tax Administration Issues Raised by a Consumption Tax, Such as a National Sales Tax or Value Added Tax

- Treasury Department officials discussed a VAT as an option for reforming business taxes in 1984, 2002, and 2007;¹⁹
- Senator Roth proposed a subtraction method VAT (called a Business Transfer Tax) in 1985 and suggested that 85 percent of the burden would be borne by importers;²⁰
- The American Bar Association (ABA) Tax Section developed a model credit invoice method VAT in 1989;²¹
- Senator Hollings proposed credit invoice method VATs in 1989 and 1991 to fund deficit reduction and national health care;²²
- In 1994 Congressman Armev and Senator Shelby proposed to replace the corporate and individual income taxes with a subtraction method VAT and a wage tax at the same flat rate (called a flat tax) and this concept was later endorsed by Steve Forbes in connection with his 1996 run for the presidency;²³
- Senators Nunn, Domenici, and Kerrey proposed a modified subtraction method VAT (called a Unlimited Savings Allowance or USA Tax) in 1995, which was also proposed by Congressman English in 2003 as a replacement for the corporate income tax along with modifications to the individual income tax;²⁴
- President Bush's bipartisan Advisory Panel on Federal Tax Reform considered a VAT and a flat tax in 2005;²⁵
- Governor Huckabee proposed a national RST in connection with his 2008 run for the presidency;²⁶ and

¹⁹ See Treasury Department, *Approaches to Improve the Competitiveness of the U.S. Business Tax System for the 21st Century* (Dec. 20, 2007), http://www.ustreas.gov/press/releases/reports/hp749_approachesstudy.pdf; Tax Reform Materials Memorandum for Secretary O'Neil from Pamela F. Olson (Nov. 7, 2002), <http://thepriceofloyalty.ronsuskind.com/thebushfiles/archives/000093.html>; Treasury Department Report to the President, *Tax Reform, Fairness, Simplicity, and Economic Growth*, vol. 1, ch. 10 and vol. 3 (Nov. 1984), <http://www.treas.gov/offices/tax-policy/library/tax-reform/>.

²⁰ See, e.g., Tax Foundation, Working Paper, *Uses of a Business Transfer Tax 2* (Dec. 20, 1985), <http://www.taxfoundation.org/files/wp5-19851220.pdf>. See also Alan Schenk, *The Business Transfer Tax: The Value Added by Subtraction*, 30 Tax Notes 351 (1986).

²¹ Alan Schenk, ABA, *Value Added Tax: A Model Statute and Commentary* vii (1989) (hereinafter ABA Model VAT). The staff of the International Monetary Fund has also drafted a number of model VAT statutes. See *Tax Law Design and Drafting*, vol. 1, ch. 6 (Victor Thuronyi, ed. International Monetary Fund 1996); *Tax Law Drafting Samples: VAT Including Hypothetical Tax Laws* (Jan. 24, 2006), <http://www.imf.org/external/np/leg/tlaw/2003/eng/tlvat.htm>.

²² Deficit and Debt Reduction and Health Care Financing Act of 1995, S. 237, 104th Cong. (1995).

²³ Freedom and Fairness Restoration Act, H.R. 2060, 104th Cong. (1995); Freedom and Fairness Restoration Act of 1995, S. 1050, 104th Cong. (1995). See also, CRS, RL98529, *Flat Tax: An Overview of the Hall-Rabushka Proposal 1* (Feb. 1, 2008). In 1997, then-Texas Governor George W. Bush proposed replacing the Texas franchise tax with a modified value added tax. Martin Sullivan, *Business Tax Reform: Lessons from Texas*, 48 State Tax Notes 347 (May 5, 2008).

²⁴ USA Tax Act, S. 722, 104th Cong. (1995); Simplified USA Tax Act of 2003, H.R. 269, 108th Cong. (2003). Like the flat tax, this bill also included modifications to the income tax.

²⁵ Report of the President's Advisory Panel on Federal Tax Reform, *Simple, Fair, and Pro-Growth: Proposals to Fix America's Tax System* (Nov. 2005), <http://govinfo.library.unt.edu/taxreformpanel/final-report/index.html>.

²⁶ See, e.g., Bruce Bartlett, *Why the FairTax Won't Work*, 117 Tax Notes 1241 (Dec. 24, 2007).

An Analysis of Tax Administration Issues Raised by a Consumption Tax,
Such as a National Sales Tax or Value Added Tax

- At least six bills proposed a VAT or modified VAT in just the first half of 2009.²⁷

Most OECD countries have shifted from RSTs and gross receipts taxes to credit invoice method VATs, and the only OECD country with a subtraction method VAT is Japan.²⁸ Nonetheless, many of the recent U.S. proposals have involved either an RST or a modified subtraction method VAT, which is often packaged as part of a flat tax.²⁹ This is perhaps because of the popularity of the flat tax concept and the familiarity of the U.S. with RSTs.

How does a VAT work?³⁰

As described above, a VAT taxes the value added by each business in the production chain. It can be computed using a “subtraction” method or a “credit invoice” method.³¹

Credit invoice method VATs can resemble RSTs.

From a consumer’s perspective, a credit invoice method VAT can be identical to an RST. Although a VAT is sometimes described as a hidden tax, a credit invoice method VAT could either be broken out on receipts provided to retail customers like a sales tax or hidden like a corporate income tax.³²

Under both an RST and VAT, sales between businesses should not generate a net tax liability. Under an RST, businesses are allowed to make RST-free purchases for resale so that the tax is only imposed on retail sales to consumers. They generally claim this exemption

²⁷ National Health Insurance Act, H.R. 15 (VAT to fund healthcare); Roadmap for America’s Future Act of 2009, S. 1240 (VAT to fund healthcare and other reforms); Simplified, Manageable, and Responsible Tax (SMART) Act, S. 932 (flat tax to replace the income tax); Flat Tax Act of 2009, S. 741 (same); Freedom Flat Tax Act, H.R. 1040 (elective flat tax to replace the income tax); Optional One Page Flat Tax Act, S. 963 (same). For a discussion of other recent bills, see CRS, RL34343, *Tax Reform: An Overview of Proposals in the 110th Congress* (Jan. 2008); CRS, RL33619, *Value-Added Tax: A New U.S. Revenue Source?* (Aug. 2006).

²⁸ See, e.g., Alan Schenk and Oliver Oldman, *Value Added Tax, A Comparative Approach* 41 (Cambridge Univ. Press 2007). A subtraction method VAT was once used by Finland and is being used by the Navaho Nation. See Michael J. McIntyre and Richard D. Pomp, *A Policy Analysis of Michigan’s Mislabeled Gross Receipts Tax*, 53 Wayne L. Rev. 1283, 1296 (Winter 2007). Michigan also employs a tax best described as a subtraction method VAT. *Id.* at 1325.

²⁹ See, e.g., Itai Grinberg, *Implementing a Progressive Consumption Tax: Advantages of Adopting the VAT Credit-Method System*, 59 Nat’l Tax J. 929, 933 (Dec. 2006); Martin A. Sullivan, *Economic Analysis: A Hitchhiker’s Guide to Corporate Tax Reform*, 2009 TNT 232-1 (Dec. 7, 2009); CRS, Report 98-529, *Flat Tax: An Overview of the Hall-Rabushka Proposal* 1 (Feb. 1, 2008) (noting bills sponsored by Representative Michael Burgess, Senator Richard Shelby, and Senator Arlen Specter in the 110th Congress; and by former House Majority Leader Richard Arney in the 107th Congress).

³⁰ Unless otherwise indicated, our description of the VAT is drawn from: Alan Schenk and Oliver Oldman, *Value Added Tax, A Comparative Approach* (Cambridge Univ. Press 2007); ABA Model VAT; GAO Report; Tax Executives Institute (TEI), *Value-Added Taxes, A Comparative Analysis* 113-26 (1992) (hereinafter TEI Report); Joint Committee on Taxation, JCS-18-95, *Description and Analysis of Proposals to Replace the Federal Income Tax* (June 5, 1995) (hereinafter JCT Report); Charles McLure, *The Value-Added Tax: Key to Deficit Reduction?* (American Enterprise Institute for Public Policy Research 1987); American Institute of Certified Public Accountants (AICPA), *Understanding Tax Reform: A Guide to 21st Century Alternatives* (Sept. 2005); AICPA, *Design Issues in a Credit Method Value-Added Tax for the United States* (May 1990); ABA, *A Comprehensive Analysis of Current Consumption Tax Proposals, Chapter 1: A Tax Reform Primer* 7 (1997). For purposes of this analysis we assume that if the U.S. adopted a VAT or RST, the income tax might be reduced but would not be abolished. If the income tax were repealed at the same time, significantly more transition issues would arise. See, e.g., Ronald A. Pearlman, *Transition Issues in Moving to a Consumption Tax*, in *ECONOMIC EFFECTS OF FUNDAMENTAL TAX REFORM* 393 (Henry Aaron and William Gale, eds., Brookings Institution Press 1996).

³¹ There are other methods for computing VAT, which are beyond the scope of this discussion. See, e.g., Alan Schenk and Oliver Oldman, *Value Added Tax, A Comparative Approach* (Cambridge Univ. Press 2007).

³² See, e.g., AICPA, *Understanding Tax Reform: A Guide to 21st Century Alternatives* 59-52, 66 (Sept. 2005) (noting as a “con” that a credit invoice method VAT could be hidden from consumers and that a subtraction method VAT would be hidden).

by presenting the seller with an exemption certificate.³³ Under a VAT a seller does not need to inquire about the tax status of a purchaser because the seller collects (or at least pays) VAT on every sale, including business-to-business sales. Rather than presenting sellers with exemption certificates, as they do under an RST, purchasing businesses receive tax invoices from sellers and then claim VAT credits directly from the government.

VATs can be computed using a subtraction method.

A VAT can also be computed using a subtraction method. Under the subtraction method, a business cannot claim a credit for VAT shown on its purchase invoices because the tax is not shown on invoices. Instead, a business would deduct or “subtract” allowable purchases (called “input costs” in VAT parlance) from gross receipts to compute “value added,” and then apply the VAT rate to compute the tax (or refund).³⁴

Subtraction method VATs can be “naive” or “sophisticated.”

A so-called “naive” subtraction method VAT allows businesses to deduct input costs even if the purchase was not subject to tax. By contrast, a “sophisticated” subtraction method VAT only allows businesses to deduct input costs associated with taxable purchases.³⁵

Subtraction method VATs can resemble corporate income taxes.

In form, both types of subtraction method VATs resemble a corporate income tax that applies to both incorporated and unincorporated businesses. A VAT (including a credit invoice method VAT) differs from an income tax because capital expenditures are immediately deductible, but employee compensation and interest are typically not taxable or deductible to anyone.³⁶ Rather, employee compensation is indirectly taxed to the extent employees add value to the business’s taxable products or services.

The business component of a flat tax is a modified VAT.

Although perhaps the most notable feature of a flat tax is the flat rate applicable to both individuals and businesses, the business component of a flat tax is a modified subtraction method VAT. Unlike a typical VAT, however, a flat tax allows businesses to deduct wages. It taxes those wages at the same rate as the business tax, after applying a personal exemption. This exemption makes the flat tax somewhat progressive. While we are not aware of any flat tax employing a credit invoice method, such a tax could be devised.

³³ In practice, however, state RSTs do not exempt all business to business sales, leading to double taxation (called cascading), as described below.

³⁴ Although either type of VAT could require returns and payments at any frequency, credit invoice VATs are sometimes described as being “transaction” based, requiring returns and payments more frequently (e.g., monthly rather than yearly) than subtraction method VATs, which are described as “accounts” based.

³⁵ See Charles McLure, *The Value-Added Tax: Key to Deficit Reduction?* 71-102 (American Enterprise Institute for Public Policy Research 1987).

³⁶ Our discussion is limited to consumption-type VATs.

An Analysis of Tax Administration Issues Raised by a Consumption Tax,
Such as a National Sales Tax or Value Added Tax

Examples of VATs and RSTs.

Assume a farmer sells a container of oranges to a processor for \$30, the processor sells orange juice to a restaurant for \$60, and the restaurant sells the juice to retail customers for \$100. The farmer and the processor each add \$30 of value to the product and the restaurant adds \$40 of value. Assuming a 10 percent VAT applies, the farmer and the processor each pay \$3 (\$30 value added x 10 percent tax), the restaurant pays \$4 (\$40 value added x 10 percent tax), and the government collects a total of \$10 (\$3 + \$3 + \$4).

Under a subtraction method VAT, the restaurant subtracts its \$60 in (taxable) purchases from its \$100 in gross receipts and multiplies the resulting \$40 in value added by the 10 percent rate to compute a VAT liability of \$4. Under a credit method VAT, by contrast, the restaurant gets a credit for the VAT paid by the processor, rather than a deduction. The restaurant only gets the credit, however, if it is a registered business and receives an invoice showing the amount of VAT the processor paid in connection with its sale of juice to the restaurant.³⁷ Assuming the restaurant is registered and receives an invoice from the processor showing \$6 in VAT, it could claim this amount as a credit against the \$10 in VAT it will owe on its sale of the juice. After applying this \$6 credit, the restaurant would pay the same \$4 to the government under a credit invoice method VAT.

Under an RST, the government would collect the same \$10, but it would collect the entire amount from the restaurant. Sales by the farmer and processor to other businesses would be exempt.

³⁷ Under a subtraction method VAT, a business might still have to retain expense receipts to claim a deduction. Under the current income tax, the restaurant would also generally need to retain its expense receipts from the processor to be able to deduct its juice purchase. See, e.g., IRC § 6001; Treas. Reg. § 1.6001-1. Under a “sophisticated” subtraction method VAT, however, only taxable purchases from registered businesses would be deductible. The primary difference between such a sophisticated subtraction method VAT and a credit invoice method VAT is that under the subtraction method, the invoice would not reflect the tax paid by the seller.

TABLE 1: Computation of a 10 percent subtraction method VAT, credit invoice method VAT, or retail sales tax.³⁸

Business activity	Farmer	Processor	Restaurant	Total
Taxable sales	\$30	\$60	\$100	
Taxable purchases	(\$0)	(\$30)	(\$60)	
Value added (sales - purchases)	\$30	\$30	\$40	\$100
Subtraction Method VAT				
Tax (10% x value added)	\$3	\$3	\$4	\$10
Credit Method VAT				
Gross tax on sales (10% x sales)	\$3	\$6	\$10	\$19
Less: credit shown on purchase invoices	(\$0)	(\$3)	(\$6)	(\$9)
Net tax	\$3	\$3	\$4	\$10
Retail Sales Tax				
Tax on sales (10% of retail sales)	Exempt	Exempt	\$10	\$10

Credit invoice method VATs can have “exempt” and “zero-rated” sales.**How do exemptions work?**

Under a credit invoice method VAT, unregistered and exempt businesses are treated like final consumers under an RST. They pay VAT charged by suppliers, but do not collect it on sales or claim VAT input credits. VAT laws often provide that small businesses are exempt and do not have to register for VAT or file VAT returns. Unless the exempt business is a retailer, the exemption does not reduce VAT revenue and may *increase* it.

Revenue increases because suppliers pay VAT on sales to exempt businesses that can not claim a credit for it, and upstream businesses later pay VAT on the same value added. This double tax is called “cascading.” In the example above, if the processor were exempt, the restaurant would still pay \$10 of VAT, but nobody could claim an input credit on the taxable purchase from the farmer. Thus, because the portion of the value added by the farmer is taxed twice – once upon the farmer’s sale to the processor and again upon the restaurant’s sale to customers – VAT collected by the government would increase from \$10 to \$13.³⁹

Specific products or services can also be exempt. However, businesses cannot recover input credits for taxable purchases associated with the production of exempt sales. Thus,

³⁸ For simplicity we assume the parties do not purchase any other taxable inputs (except exempt inputs). For purposes of this example, the purchase prices do not include the tax. If an item costs \$100 plus a \$10 RST or credit invoice method VAT charge (i.e., \$110), most people would consider the tax to be levied at a 10 percent rate. This is known as the “tax-exclusive” tax rate. The same tax is also correctly described as being levied at a 9 percent “tax-inclusive” rate, which is computed by dividing the \$10 tax payment by the total cost to the consumer ($\$10/(\$100+\$10) = 9$ percent). Income taxes and subtraction method VATs are typically quoted at tax-inclusive rates. For example, a person that earns \$110 and pays \$10 in income taxes would normally consider the tax to be levied at a 9 percent ($\$10/\110) tax-inclusive rate.

³⁹ Exemptions provide an incentive for vertical integration. For example, the processor could avoid cascading and the additional \$3 tax by purchasing the restaurant, i.e., vertically integrating.

An Analysis of Tax Administration Issues Raised by a Consumption Tax,
Such as a National Sales Tax or Value Added Tax

exemption of final sellers under a credit invoice VAT removes only a portion of the VAT on the final sale to the consumer. Exemptions can also cause complexity and controversy. For example, because certain financial services are often exempt, financial service providers may have to segregate inputs allocable to financial services and inputs allocable to other products and services, as further described below.

How does zero rating work?

In contrast to exemptions, “zero rating” never increases government revenue. Zero-rated sales are subject to tax at a zero percent rate, meaning no tax is collected on sales, but the *seller can still claim any input credits associated with producing the item*. Income tax exempt entities and exports are often zero-rated.

If the restaurant in the previous example were zero-rated, it would not charge VAT on its sales, but could still claim a \$6 input credit for VAT it paid to the processor. As a result, government revenues would decline by the full \$10.

There are special problems with administering exemptions and zero ratings under a subtraction method VAT.

Under a subtraction method VAT, an exempt business would not be taxed on its receipts and could not deduct its input costs. By contrast, while a zero-rated business would not be taxed on its receipts, it could deduct its input costs. Thus, zero-rated businesses would likely receive significant refunds, as they would under a credit invoice method VAT.

Under a subtraction method VAT, however, because a business does not receive invoices reflecting the tax associated with each purchase, the value of business deductions cannot be tied to the amount of tax paid by suppliers. Under a sophisticated subtraction method VAT – one in which businesses could only deduct inputs that had been taxed – businesses might need to ask suppliers for information that would have been provided automatically under a credit invoice method VAT, *i.e.*, whether the purchase was subject to tax.⁴⁰ Even with this information, the value of the deduction might exceed the tax paid by the supplier if more than one VAT rate (including a zero rate) exists. Some have argued that such a system is unworkable.⁴¹

The possibility that refunds could exceed tax revenue is also likely to prompt policymakers to protect revenue by substituting more complex net operating loss carryforwards for

⁴⁰ If suppliers are taxed at different rates, however, the mere indication that an item was subject to tax would not allow the purchaser to compute the amount of tax paid by the supplier. Thus, the value of the purchaser's deduction may exceed (or be less than) the tax paid by the supplier.

⁴¹ See David Weisbach, *Does the X-Tax Mark the Spot?*, U. Chicago L. & Econ., Olin Working Paper No. 163 (Sept. 24, 2002); JCT Report 23 (noting that multiple VAT rates on different items is all but impossible under the subtraction method). However, the GIT, the flat tax proposed by the Tax Reform Panel in 2005, would only have allowed deductions on purchases from businesses subject to the tax. Report of the President's Advisory Panel on Federal Tax Reform, *Simple, Fair, and Pro-Growth: Proposals to Fix America's Tax System* 163 (Nov. 2005). The Japanese VAT allows businesses to deduct purchases from exempt suppliers, but not the purchase of goods or services that are exempt. Alan Schenk and Oliver Oldman, *Value Added Tax, A Comparative Approach* 49, 52 (Cambridge Univ. Press 2007). However, the Japanese VAT has been revised to require businesses to retain more of the information and receipts that would have been provided on credit invoices if they had adopted a credit invoice method VAT. See Alan Schenk, *Japanese Consumption Tax After Six Years: A Unique VAT Matures*, 69 *Tax Notes* 899, 911 (Nov. 13, 1995).

simple VAT refund mechanisms.⁴² In addition, it is unclear whether or how certain innovative features of a credit invoice method VAT, such as “reverse charges” (described below), could be implemented under a subtraction method VAT.

Credit invoice method VATs can use “reverse charges” to promote compliance and reduce burdens.

A reverse charge is a requirement that the purchaser (rather than the seller) pay the VAT to the government. States with RSTs often apply a kind of reverse charge, called a “use” tax, to consumers who use items within their jurisdiction, if the customer did not pay a sales tax on the purchase. Businesses have a significantly greater incentive to report reverse charges than consumers, however.⁴³ Under a credit invoice method VAT, a business reporting and paying a reverse charge receives VAT input credits, which fully offset the charge. Thus, the purchasing business does not need to come up with funds to make a net VAT payment. By contrast, consumers are not entitled to claim VAT input credits.

Policymakers often use VAT reverse charges to address noncompliance by sellers in sectors that are difficult to tax. For example, some countries use reverse charges to require general construction contractors to pay VAT on the purchase of business services from subcontractors, relieving subcontractors from having to collect and pay VAT when providing services to general contractors.⁴⁴ Other countries apply reverse charges to imported marketing or accounting services, which can sometimes avoid tax because they do not physically cross borders, or to imports of small high-value items, such as cellular phones and computer chips, which can circumvent border controls.⁴⁵

VATs can be complex.

In practice, no broad-based tax is simple and a VAT is no exception.⁴⁶ However, VAT complexity results mostly from tax preferences and other features necessary to address hard-to-tax areas, which are often exempt under an RST. The following discussion highlights a few of these problematic areas.

⁴² See Report of the President’s Advisory Panel on Federal Tax Reform, *Simple, Fair, and Pro-Growth: Proposals to Fix America’s Tax System* 171 (Nov. 2005) (recommending that exporting firms receive refunds but businesses operating at a loss receive net operating loss carryforwards that would bear interest, along with complicated rules to police the allocation of a single firm’s expenses between items produced for domestic sales (which could not generate refunds) and for export sales (which could generate refunds)).

⁴³ For a discussion of some of the EU’s challenges with respect to VAT on e-commerce services to consumers, see, e.g., Ba Van Der Merwe, *VAT in the European Union and Electronically Supplied Services to Final Consumers*, 16 S. Afr. Mercantile L.J. 577 (2004).

⁴⁴ See, e.g., Ivan Massin, *Introduction of a General Anti-VAT Avoidance Measure in Belgium*, *International VAT Monitor* 37, 38 (Jan./Feb. 2006) (surveying measures to address VAT avoidance).

⁴⁵ GAO Report 32-33. For example, when a person purchases an imported item in Sweden he or she is sometimes required to pay VAT on the entire purchase price directly to the government rather than the seller. See, e.g., Swedish Tax Agency, *The VAT Brochure* (2009) (discussing “reverse charges”).

⁴⁶ As with any flat tax, however, an RST or VAT would not create marriage or singles penalties or the complex rules needed to address them. For a discussion of these problems, see, e.g., National Taxpayer Advocate 2005 Annual Report to Congress 407 (Key Legislative Recommendation: *Another Marriage Penalty: Taxing the Wrong Spouse*).

An Analysis of Tax Administration Issues Raised by a Consumption Tax,
Such as a National Sales Tax or Value Added Tax

VAT preferences generate complexity, controversy, and burden.

One criticism of the VAT is that it is a regressive tax, meaning that lower-income individuals pay more tax as a percentage of their annual income than higher-income individuals. To counter this regressive nature of the VAT, necessities such as food, health care, housing, and education are often exempt, zero-rated, or subject to special preferential rates. Most VAT commentators agree that it is much simpler and easier to administer a VAT without tax preferences.⁴⁷ Some have argued strongly against such preferences.⁴⁸

First, they argue that VATs (and RSTs) are proportional with respect to income or at least less regressive than they appear when evaluated over a lifetime (rather than annually).⁴⁹ Many households borrow to acquire education, housing, and consumer goods in early years while reporting little income; repay outstanding debts and accumulate savings during middle years while reporting high income; and consume savings during retirement years while reporting low income. This makes a VAT look more regressive when comparing taxpayers with the same lifetime incomes at different ages because the low-earning young and old spend more in relation to their income than the high earners in middle years.⁵⁰ A related argument is that annual consumption may be a better measure of ability to pay than annual income, reducing the importance of progressivity with respect to annual income.

Second, some commentators argue that the burden of a VAT (and presumably an RST) is not always passed along to consumers in the form of higher prices.⁵¹ It is not clear that a VAT would be fully passed along to consumers since other business level taxes (*e.g.*, corporate income taxes) are not.⁵² Research suggests the corporate income tax is likely borne, in

⁴⁷ See, *e.g.*, JCT Report 27.

⁴⁸ See, *e.g.*, David G. Raboy, Consumption Tax Preferential Treatment: Poor Cure for Regressivity, 72 Tax Notes 901 (Aug. 12, 1996).

⁴⁹ See, *e.g.*, Gilbert Metcalf, *Life Cycle Versus Annual Perspectives on the Incidence of a Value Added Tax*, National Bureau of Economic Research 45-64 (Nov. 1993); Don Fullerton and Dianne Rogers, Working Paper No. 3750, *Lifetime vs. Annual Perspectives on Tax Incidence*, National Bureau of Economic Research (June 1991). See also CBO, *Effects of Adopting a Value-Added Tax*, Ch. IV, 43 (Feb. 1992) (noting VATs are less regressive over a lifetime). Some empirical evidence also suggests that the VAT is progressive on an annual basis, in part, because low income persons are more likely to purchase items from the informal economy (*i.e.*, outside the tax system). See, *e.g.*, Glenn Jenkins, et al., *Is the Value Added Tax Naturally Progressive?*, Working Paper No. 1059, Queen's Econ. Dept. (2006).

⁵⁰ The Treasury Department has been studying the possibility of expanding its analysis to take more life cycle effects into account as part of its distributional analysis. See Julie-Anne Cronin, *U.S. Treasury Distributional Analysis Methodology*, OTA Paper 85, 36 (Sept. 1999). For further discussion of problems with distributional analysis, see for example, Leonard E. Burman et al., *Towards a More Consistent Distributional Analysis*, National Tax Association Annual Conference on Taxation (Nov. 18, 2005), http://urbaninstitute.org/UploadedPDF/411480_Towards_Consistent.pdf.

⁵¹ See, *e.g.*, David Raboy, *Value Added Taxes and International Competitiveness*, 10 Tax Notes Int'l 600 (Aug. 28, 1995) (summarizing the debate about VAT incidence); Matthew Haskins, *The Theory and Politics of Tax Integration*, 67 Tax Notes 401 (1995) (same). Moreover, to be accurate any distributional analysis also has to make adjustments to account for flaws in the U.S. consumption data. See generally John Sabelhaus, *What is the Distributional Burden of Taxing Consumption?*, 46 Nat'l Tax J. 331, 342 (Sept. 1993) (identifying data anomalies and concluding that "it is reasonable to infer that existing studies using the residual method to compute saving are biased toward determining that consumption taxes are more regressive than what is probably the case.").

⁵² One recent commentary asserted:

Modern economists in the U.S. take the view that consumers bear only about 50% of the VAT Our own simple general equilibrium model suggests that about 33% of the VAT tax is borne by people in proportion to their relative wage levels, about 17% in proportion to their capital, and about 50% in proportion to their consumption. Ernest S. Christian and Gary A. Robbins, *The Dangers of a Value-Added Tax*, WSJ.com (Oct. 14, 2009).

However, economists that we spoke with did not believe there was any consensus that consumers bear only 50 percent of the VAT.

An Analysis of Tax Administration Issues Raised by a Consumption Tax,
Such as a National Sales Tax or Value Added Tax

part, by shareholders and employees.⁵³ The extent to which a VAT or RST is passed along might vary from item to item.⁵⁴ For some items, businesses might reduce prices so that the after-tax price is roughly the same as before the tax was imposed. Thus, the argument goes, if a portion of a VAT may not be passed along to consumers, there is less need to exempt necessities.

Most importantly, however, commentators agree that exempting necessities is a very costly and inefficient way of benefiting low income consumers. Zero rating food in the U.K. and Canada reduced total VAT revenue collected by 11-12 percent in 2004.⁵⁵ A large portion of the foregone revenue goes to high-income taxpayers who purchase more necessities than lower-income taxpayers. By one 1996 estimate, even assuming any VAT (or VAT savings) would be fully passed along to consumers, exempting food, housing, and health care, would provide over three times the relief to households in the highest income quintile as households in the lowest quintile.⁵⁶ Thus, policymakers could address distributional concerns more efficiently through the income tax code (*e.g.*, by expanding the earned income tax credit or adjusting rates) or by tying VAT revenues to progressive expenditures.⁵⁷

Administrative line-drawing problems also arise in connection with tax preferences. For example, businesses may find themselves litigating over whether dandruff shampoo is a health product entitled to a tax preference if other types of shampoo are not.⁵⁸ The GAO recently observed:

In Canada, basic processories [sic] are zero-rated. Basic processories do not include snacks. Thus, salted peanuts are taxable and plain peanuts are zero-rated. The sale of five or fewer donuts in a single transaction is taxable, but the sale of six or more is zero-rated. In Australia takeout food is taxable if it is served as a single item for consumption away from the place of purchase. However, hot fresh bread is not subject to VAT unless it has sweet filling or coating, or is sold in combination, such as sausage and onion on a slice of bread. Australian and Canadian tax agencies spend resources to maintain lists of processories that fit the definition of zero-rated sales and enforcing these rules.⁵⁹

⁵³ See, *e.g.*, Alan Auerbach, National Bureau of Economic Research Working Paper 11686, *Who Bears the Corporate Tax? A Review of What We Know* (Oct. 2005); William Gentry, Treasury Office of Tax Analysis (OTA) Paper 101, *A Review of the Evidence on the Incidence of the Corporate Income Tax* (Dec. 2007), <http://www.ustreas.gov/offices/tax-policy/library/ota101.pdf>.

⁵⁴ See, *e.g.*, Stephen Entin, Heritage Center for Data Analysis, CDA04-12, *Tax Incidence, Tax Burden, and Tax Shifting: Who Really Pays the Tax?* (Nov. 5, 2004) (illustrating how the “elasticity” of demand and supply for a given product affects the initial incidence of a tax on that product).

⁵⁵ GAO Report 27-28.

⁵⁶ See, *e.g.*, David G. Raboy, *Consumption Tax Preferential Treatment: Poor Cure for Regressivity*, 72 Tax Notes 901, 906-07 (Aug. 12, 1996).

⁵⁷ See, *e.g.*, *Financing Healthcare Reform, Testimony Before the Senate Committee on Finance* (May 12, 2009) (statement of Leonard E. Burman) (suggesting a VAT could fund healthcare reform).

⁵⁸ TEI Report 21 (describing the shampoo controversy).

⁵⁹ GAO Report 27-28.

An Analysis of Tax Administration Issues Raised by a Consumption Tax,
Such as a National Sales Tax or Value Added Tax

From a tax administration perspective, it would obviously be better to avoid preferences, if only to avoid the complexity, controversy, and burden they entail.⁶⁰

Real property typically gets special treatment under a VAT.

Real property is typically subject to special treatment under a VAT. The special treatment favored by some is to tax all real property sales, but to exempt leases and the sale of owner-occupied residences.⁶¹ The European Union Sixth Directive generally exempts leases and sales of real property (including commercial transactions), but taxes the sale of new construction and repairs.⁶² Under the ABA model VAT, the sale or lease of all real property would be subject to VAT, regardless of whether the seller is a business.⁶³ The model would allow a non-business purchaser to take a VAT credit for the purchase of real property, which could not be claimed until the purchaser sold the property. Thus, a person who purchased a home for \$100,000 plus \$10,000 in VAT and later sold it for \$120,000 plus \$12,000 in VAT would remit only \$2,000 in VAT upon selling the property.

Another approach is to provide relief more directly. In Australia, VAT is due on the value of the property added since July 1, 2000 – the date the VAT was introduced.⁶⁴ To offset VAT on new home purchases, the Australian government gave new home buyers a \$6,497 home buyer's grant.⁶⁵

Sales to dealers in used property are often subject to special rules.

The purchase and sale of used goods (*e.g.*, cars, art, furniture, pawn shop inventory, etc.) by registered businesses may be subject to double tax (*i.e.*, cascading) in the absence of special rules. For example, because consumers (and exempt or unregistered businesses) do not collect VAT in connection with sales of used cars to used car dealers, the dealers are not entitled to a credit for the purchase of those cars under a credit invoice method VAT, even if the consumer (or unregistered business) paid VAT on its initial car purchase. As a result, in the absence of special rules, a VAT would cascade with respect to the resale of used cars by used car dealers.

Some countries do not adopt any special rules to address this type of cascading.⁶⁶ In other countries, dealers in used property are exempt.⁶⁷ Another approach is to allow the dealer to claim a credit for the amount of VAT it would have collected if its purchase of used goods

⁶⁰ New Zealand's credit invoice method VAT, which has the broadest base and few exceptions, is generally considered by VAT experts to have the simplest VAT design among the OECD VATs. GAO Report 12.

⁶¹ See, *e.g.*, Sijbren Cnossen, *VAT Treatment of Immovable Property*, in *Tax Law Design and Drafting* 231, 244 (Victor Thuron, ed., IMF, 1996); Alan Schenk and Oliver Oldman, *Value Added Tax, A Comparative Approach* 409-10 (Cambridge Univ. Press 2007) (discussing approaches adopted in Canada and Australia).

⁶² See Recast Sixth Directive, art. 12 and 135.

⁶³ ABA Model VAT 76-77.

⁶⁴ GAO Report 55.

⁶⁵ *Id.*

⁶⁶ See Alan Schenk and Oliver Oldman, *Value Added Tax, A Comparative Approach* 174 (Cambridge Univ. Press 2007) (citing Uganda).

⁶⁷ See TEI Report 24.

An Analysis of Tax Administration Issues Raised by a Consumption Tax,
Such as a National Sales Tax or Value Added Tax

were subject to VAT. This is the approach taken by the ABA model VAT and some state sales taxes.⁶⁸ The EU Sixth Directive reaches a similar result by requiring member states to tax only the profit margin (rather than receipts) on the sale of secondhand goods by a taxable dealer.⁶⁹ Each of these measures would add complexity, however.

Financial services are often subject to special rules.

The value added by financial intermediation services, such as lending, brokerage, and insurance services, is often difficult to quantify and tax. This difficulty results because charges for these potentially taxable services are often embedded in markups, interest rates, and insurance premiums, which may not be subject to tax. To address this problem, financial service charges that are not separately stated are often exempt.⁷⁰ Exempting financial services and insurance is a costly solution. The U.K. estimated its exemption of financial services and insurance reduced net VAT revenues by approximately five percent in 2006.⁷¹

Exemptions also create administrative problems. If certain financial services are exempt, financial institutions are not allowed to claim input credits on supplies purchased to produce those financial services. However, if they are allowed to claim input credits with respect to supplies needed to provide other services, they must allocate inputs between exempt and nonexempt outputs. In addition to complexity and recordkeeping burdens, this may lead to tax evasion and controversy when the tax administrator challenges such allocations.

If, instead, a financial service provider is entirely exempt, however, the business has an incentive to acquire suppliers such as cleaning and stationary companies so they can avoid being taxed on input purchases (*e.g.*, stationary supplies and cleaning services) for which they receive no input credits. Such vertical integration has, in turn, prompted some governments to add another layer of complexity by taxing self-supplied goods and services.⁷²

Scholars have recently developed several methods of computing and taxing the value of financial intermediation services.⁷³ The leading methods compute value added based on a

⁶⁸ ABA Model VAT, ch. 5, 104-06.

⁶⁹ Revised Sixth Directive Art. 315.

⁷⁰ See, *e.g.*, Alan Schenk and Oliver Oldman, *Value Added Tax, A Comparative Approach* 304-56 (Cambridge Univ. Press 2007). The ABA committee opposed zero rating or exempting insurance, but it did not provide rules for taxing financial intermediation services because the authors could not agree on a workable method for doing so. ABA Model VAT 169, 173-74.

⁷¹ GAO Report 24. It is unclear if this estimate takes into account the revenue generated by denying credits for inputs used in financial intermediation services. To avoid the cascading associated with an exemption, the insurance industry in New Zealand supported efforts to include property and casualty premiums in the VAT base, which subjected both premiums and insurance payouts to VAT, but allowed insurers to claim input credits. See, *e.g.*, Richard Bromley, *Flat Taxes, Consumption Taxes, and Value-Added Taxes: Overview and Issues for Insurance Companies*, 10 *Ins. Tax Rev.* 2213 (Jan. 1996).

⁷² See, *e.g.*, Alan Schenk and Howell Zee, *Treating Financial Services Under a Value Added Tax: Conceptual Issues and Country Practices*, 22 *Tax Notes Int'l* 3,309 (June 25, 2001).

⁷³ See, *e.g.*, Alan Schenk and Oliver Oldman, *Value Added Tax, A Comparative Approach* 304-56 (Cambridge Univ. Press 2007); Howell H. Zee, *A New Approach to Taxing Financial Intermediation Services Under a Value-Added Tax*, 58 *Nat'l Tax J.* 77-92 (Mar. 2005); Pierre-Pascal Gendron, ITP Paper 0701, *Value-Added Taxes and Financial Services: An Assessment and Policy Proposal for Developing Countries*, Univ. of Toronto (Apr. 2007); Tim Edgar, *The Search for Alternatives to the Exempt Treatment of Financial Services Under a Value Added Tax* (May 25, 2009); Satya Poddar and Morley English, *Taxation of Financial Services Under a Value-Added Tax: Applying the Cash-Flow Approach*, 50 *Nat'l Tax J.* 89-112 (Mar. 1997).

An Analysis of Tax Administration Issues Raised by a Consumption Tax,
Such as a National Sales Tax or Value Added Tax

formula, which incorporates cash flows and interest rates. One variation would zero rate business-to-business financial service fees that are not separately stated.⁷⁴ This approach is based on the assumption that any value added by business-to-business financial services would show up in the businesses taxable products or services.

While these approaches are more complicated than a typical VAT computation, financial services businesses are generally sophisticated enough to handle more complex rules. If these methods are simple enough to avoid significant evasion or controversy, they may be preferable to exempting financial services.

Recommendation

As noted above, this report focuses on certain administrative features of VATs and RSTs. Administrability considerations are particularly important because tax design features that reduce complexity, burden, and conflict between taxpayers and the IRS can promote voluntary compliance, potentially allowing the government to raise the same amount revenue at lower rates.⁷⁵ The National Taxpayer Advocate is not taking a position with respect to the imposition of any new tax. However, the National Taxpayer Advocate recommends that policymakers consider the following administrative aspects of RSTs and other VAT-like taxes before deciding to adopt any of them.⁷⁶

1. A credit invoice method VAT may promote voluntary tax compliance better than a comparable subtraction method VAT or RST. Because business buyers claim credits for VAT shown on purchase invoices under a credit invoice method VAT, they have an incentive to ensure that the seller's invoices properly reflect the VAT. If a business's tax liabilities (or credits) are correctly reflected on invoices, tax preparation could involve the simple exercise of adding up the tax (or credit) shown on the invoices. The possibility that the IRS could easily audit these invoices may also discourage under-reporting and minimize opportunities for noncompliance.
2. Establishing only one rate and limiting tax preferences would minimize compliance costs and opportunities for noncompliance. Multiple rates and preferences increase complexity, recordkeeping requirements, compliance costs, tax sheltering opportunities, and disputes about whether transactions qualify for the reduced rate or preference.

⁷⁴ See, e.g., Tim Edgar, *The Search for Alternatives to the Exempt Treatment of Financial Services Under a Value Added Tax* (May 25, 2009) (describing alternatives developed by others).

⁷⁵ Lower rates reduce the incentive for evasion even further. See, e.g., William Gale and Janet Holtzblatt, *The Role of Administrative Issues in Tax Reform: Simplicity, Compliance, and Administration* 8 (Dec. 2000) (citing a number of studies and concluding "the weight of available evidence suggests that lower tax rates reduce evasion rates").

⁷⁶ This analysis does not address the important issue of whether a federal VAT or RST could or should apply to income-tax exempt entities, including federal, state, and local governments. Nor does it address issues associated with transitioning to any new tax. However, policymakers would need to delay the effective date of any new tax to allow businesses and the IRS to put procedures in place to administer it. The administrations in Australia, Canada, and New Zealand took from 15 to 24 months to implement a new VAT. See GAO Report 41.

3. A credit invoice method VAT or RST applicable to imports but not exports (*i.e.*, a “destination-based” tax) reduces the need for complex international tax rules.⁷⁷ A destination-based tax would not require many of the foreign tax credit and transfer pricing rules that are needed under an origin-based tax such as the income tax. Because foreign tax credit and transfer pricing rules are a source of complexity, controversy, and recordkeeping burden, a destination-based tax that did not require them could significantly reduce administrative problems, compliance burdens, and opportunities for noncompliance.
4. At low rates, the administrative costs of an RST may be lower than for a VAT, but a VAT may be less expensive if high rates are needed. Businesses that do not make retail sales are generally not required to file or pay an RST. Under a VAT, however, these businesses would still have to file returns and pay the tax, making a VAT more burdensome for them. As tax rates rise, however, because the revenue lost to noncompliance and correlative enforcement costs and burdens would rise at a faster rate for an RST than for a VAT, these benefits may be more than offset by enforcement costs and burdens.
5. A federal RST or credit invoice method VAT could leverage and accelerate state RST coordination and simplification efforts. To the extent Congress could use the uniform definitions, sourcing rules, forms, and procedures provided by the Streamlined Sales and Use Tax Agreement for a credit invoice method VAT or RST, it would be relatively easy for states to conform their sales and use taxes to the national RST or VAT tax base. Such conformity could provide opportunities to reduce compliance burdens as well as public and private costs to administer both federal and state taxes.

DISCUSSION

A credit invoice method VAT may promote voluntary tax compliance better than a comparable subtraction method VAT or RST.

Empirical evidence regarding VAT and RST compliance is limited.

Estimates of the VAT tax gap – the gap between the amount legally due and timely paid – in various European countries range from 2.4 percent to 34.5 percent.⁷⁸ However, the tax gap is difficult to estimate. According to one set of estimates, the U.K. VAT tax gap ranged from 0.4 percent to 6.5 percent from 1991 to 1993, but official estimates for the same period were over three times higher.⁷⁹ For 2002 to 2007, the U.K. estimates its VAT tax gap ranged between 12.4 and 16.1 percent, which is slightly smaller than the U.S. income tax

⁷⁷ As discussed below, certain subtraction method VATs could not be destination-based without violating trade rules.

⁷⁸ See Michael Keen and Stephen Smith, *VAT Fraud and Evasion: What Do We Know and What Can Be Done?*, 59 Nat'l Tax J. 861, 876 (Dec. 2006).

⁷⁹ See Michael Keen and Stephen Smith, *VAT Fraud and Evasion: What Do We Know and What Can Be Done?*, 59 Nat'l Tax J. 861, 876 (Dec. 2006) (comparing Andrea Gebauer and Rudger Parsche, *Evasion of Value-Added Taxes in Europe: IFO Approach to Estimating the Evasion of Value-Added Taxes on the Basis of National Accounts Data (NAD)*, CESifo DICE Report No. 2, 40-44 (Summer 2003) with U.K. Government, HM Revenue and Customs, *Measuring and Tackling Indirect Tax Losses – 2003* (Dec. 2003)).

An Analysis of Tax Administration Issues Raised by a Consumption Tax,
Such as a National Sales Tax or Value Added Tax

gap of 16.3 percent.⁸⁰ VAT tax gaps in other countries are estimated to be in the ten percent range.⁸¹ Simple VATs at low rates with few preferences are likely to have lower noncompliance rates.

One study estimated the Washington state sales and use tax gaps at 1.3 percent and 27.3 percent, respectively;⁸² another estimated Minnesota's combined sales and use tax gap at about 11 percent.⁸³ State sales tax noncompliance would likely be higher if they were imposed at higher rates. Certain unique credit invoice method VAT design features (described below) may also promote compliance better than typical RSTs.

Credit invoice method VAT rates can climb to higher levels than RSTs before triggering significant noncompliance.

At high levels, a tax may be perceived as unreasonably burdensome, eroding the public's willingness to pay voluntarily. Consider how many people would voluntarily pay a 95 percent income tax.⁸⁴ For this reason, some experts have concluded that a national RST of more than about 10 to 14 percent would probably not be feasible.⁸⁵ One survey found the median U.S. state and local sales tax rate was about five percent, with none exceeding 9.35 percent.⁸⁶ Thus, when combined with state sales taxes in the five percent range, a federal RST of more than about five to ten percent could begin to generate significant compliance problems.⁸⁷

⁸⁰ GAO Report 34; IRS, Tax Gap Map for Year 2001 (Feb. 2007), http://www.irs.gov/pub/irs-utl/tax_gap_update_070212.pdf.

⁸¹ GAO Report 34.

⁸² William Fox and Matthew Murray, *Sales Taxation in a Global Economy*, in *TAKING THE HARD-TO-TAX* 221, 34 (James Alm et al., eds., Elsevier, 2004) (estimating the sales tax gap in Washington state to be 1.3 percent, and the related use tax gap to be 27.9 percent).

⁸³ The 11 percent figure for Minnesota is derived by dividing year 2000 tax gap estimates from a tax gap study (\$451,110,584) by the sum of (1) the tax gap and publicly available data about Minnesota sales and (2) use tax collection in 2000 (\$3.7 billion + \$451,110,584 = \$4.151 billion; \$451,110,584/\$4.151 billion = 11 percent). See Eric Cook et al., American Economics Group, Inc., *Minnesota Sales and Use Tax Gap Project: Final Report* (Nov. 12, 2002) (estimating the 2000 use and sales tax gap at \$451,110,584); Minnesota Revenue, *Minnesota's Sales and Use Tax, Overview* (2005) (indicating Minnesota's sales and use tax raised \$3.7 billion in fiscal year 2000).

⁸⁴ See, e.g., Tamás K. Papp and El d Takáts, *Tax Rate Cuts and Tax Compliance – The Laffer Curve Revisited*, IMF Working Paper No. 08/7 (Jan. 2008) (concluding that at some levels of tax an income tax cut could increase revenue by reducing evasion).

⁸⁵ See, e.g., ABA Model VAT ch. 1, 3 (1989) (“[t]he Canadian Royal Commission on Taxation has estimated this point [beyond which RST evasion becomes a problem] at 14 percent.”); Alan A. Tait, *VALUE-ADDED TAX: INTERNATIONAL PRACTICE AND PROBLEMS* 18 (International Monetary Fund, 1988) (observing: “At 5 percent, the incentive to evade [an RST] is probably not worth the penalties of prosecution, at 10 percent, evasion is more attractive, and at 15-20 percent, becomes extremely tempting.”); Vito Tanzi, *TAXATION IN AN INTEGRATING WORLD* (The Brookings Institution 1995) (concluding “10 percent may well be the maximum rate feasible under an RST”); Charles McLure, *THE VALUE-ADDED TAX: KEY TO DEFICIT REDUCTION?* 107 (American Enterprise Institute 1987) (concluding that “at rates higher than about 10 percent the enforcement and efficiency advantages of the VAT probably outweigh the advantages of the retail sales tax.”). See also George R. Zodrow, *The Sales Tax, the VAT, and Taxes in Between – or, Is the Only Good NRST a “VAT in Drag”?* 52 *Nat'l Tax J.* 429, 431 (Sept. 1999).

⁸⁶ William Fox and Matthew Murray, *Sales Taxation in a Global Economy*, in *TAKING THE HARD-TO-TAX* 221, 224 (James Alm et al., eds., Elsevier, 2004).

⁸⁷ Treasury Department Report to the President, *Tax Reform, Fairness, Simplicity, and Economic Growth*, vol. 1, ch. 3, 34-35 (Nov. 1984) (“A Federal retail sales tax, when combined with the retail sales taxes levied by most states, would provide an irresistible inducement to tax evasion at the retail level. By comparison, the VAT would involve collection of about two-thirds of revenue before the retail stage. Moreover, a VAT would contain self-enforcement features that, while easily overstated, are quite important.”).

By contrast, research suggests that VAT rates can increase to about 20 or 25 percent before noncompliance diminishes VAT revenue.⁸⁸ One survey found that about two thirds of the VATs levied by OECD member countries were between 15 and 22 percent.⁸⁹ The relatively higher rates that could be imposed using a VAT are likely due to features of a credit invoice method VAT that promote compliance. These features may also allow a credit invoice method VAT to have a broader base that includes more difficult-to-tax sectors. If so, a VAT might be able to generate more revenue at lower rates than an RST.

Unique credit invoice method VAT design features promote compliance.

VATs expand third party withholding.

As explained above, manufacturers and wholesalers essentially withhold a portion of the tax for retailers by paying VAT to the government that retailers can later claim as a credit. IRS research confirms that withholding and information reporting are extremely important in promoting tax compliance. Taxpayers report more than 98 percent of all income subject to third party information reporting and withholding, as compared to less than 50 percent of all income not subject to information reporting or withholding.⁹⁰ Thus, the reporting and withholding associated with a VAT should have a positive effect on compliance.

VATs rely more on upstream producers and less on retailers than RSTs.

The withholding associated with a VAT also reduces the revenue lost with each unreported sale in the same way that wage withholding reduces the income tax revenue lost when a wage earner does not ultimately file an income tax return. For example, if the restaurant in the above example did not report its sale, VAT revenue would decline from \$10 to \$6, rather than by the entire \$10, unless the restaurant also claimed a \$6 input credit on its input purchase, which the IRS should be more likely to detect.

By contrast, an RST attempts to collect tax on the entire value added at the final retail sale, which is often made by small businesses that are less likely to have internal controls than

⁸⁸ See, e.g., Ali Agha and Jonathan Haughton, *Designing VAT Systems: Some Efficiency Considerations*, *Review of Economics and Statistics* 303-08 (May 1996) (estimating that a one percentage point increase in the VAT rate from the sample average of 15.8 percent would reduce the compliance rate by 2.7 percentage points, and suggesting that the revenue maximizing VAT rate may be less than 25 percent because of increased evasion resulting at higher rates); Kent Matthews and Jean Lloyd-Williams, *Have VAT Rates Reached Their Limit? An Empirical Note* 7, *Applied Econ. Letters* 111-15 (Feb. 2000) (suggesting the revenue maximizing VAT rate is about 20 percent). At the same time, some have concluded that it might not be worth introducing a VAT with a rate of less than five percent. Charles McLure, *THE VALUE-ADDED TAX: KEY TO DEFICIT REDUCTION?* 23 (American Enterprise Institute 1987) (explaining that the administrative costs of a five percent broad based VAT would constitute less than one percent of revenues, which is comparable to the income tax, but at a VAT rate of two percent these costs would consume two to three percent of revenues).

⁸⁹ OECD, *Consumption Tax Trends* 46 (2008).

⁹⁰ See IRS, *Tax Gap Map for Year 2001* (Feb. 2007). Other IRS research confirms the value of prepayments. One study found that taxpayers who owe a balance upon filing their returns are more likely to understate their tax liability than other taxpayers. Wage and Investment Division, Research Group 5, Project No. 5-03-06-2-028N, *Experimental Tests of Remedial Actions to Reduce Insufficient Prepayments: Effectiveness of 2002 Letters* 7 (Jan. 16, 2004).

An Analysis of Tax Administration Issues Raised by a Consumption Tax,
Such as a National Sales Tax or Value Added Tax

larger upstream suppliers that would be charged with collecting a VAT.⁹¹ Small businesses that underreport income are responsible for the largest component of the federal income tax gap.⁹² As a result, it may be problematic to rely on this sector to remit tax attributable to value added by them and their suppliers as is the case under an RST. Because a VAT collects significantly more revenue before the retail sale than an RST, only a small fraction of a VAT is avoided when retailers do not report retail sales. This VAT feature should reduce both the motive for, and revenue lost to, underreporting at the retail level.

Market-based incentives promote accurate credit invoices.

Unlike an RST, a credit invoice method VAT creates conflicting incentives that may prevent buyers and sellers from colluding to produce inaccurate invoices. Buyers have an incentive to overstate the purchase price to inflate input credits, while sellers have an incentive to understate it to reduce output taxes. For this reason a credit invoice method VAT is sometimes said to be “self enforcing.”⁹³ This is an important benefit, but it may be somewhat overstated. As with an RST, these positive incentives do not extend to purchases by final consumers who do not get any credit for the VAT shown on invoices.

Credit invoice method VATs facilitate matching and audits.

Once the amount of VAT is self-reported on an invoice, inadvertent errors should decline.⁹⁴ In addition, detecting noncompliance becomes much easier. The mere possibility that the IRS could crosscheck invoices lodged in a third party’s files (*i.e.*, the purchaser’s invoice, which shows the amount of tax the seller was required to pay) is likely to discourage noncompliance. In addition, at some point in the future, automated matching and cross-checking may become feasible, especially as electronic invoices become the norm, thereby reducing opportunities for noncompliance.

In the meantime, tax administrators could develop sales-to-VAT ratios for each industry and create automated processes that flag suspicious VAT returns. In France, approximately

⁹¹ See, e.g., George R. Zodrow, *The Sales Tax, the VAT, and Taxes in Between – or, Is the Only Good NRST a “VAT in Drag”?*, 52 Nat’l Tax J. 429-42 (Sept. 1999); Michael Keen and Stephen Smith, *VAT Fraud and Evasion: What Do We Know and What Can Be Done?*, 59 Nat’l Tax J. 861-88 (Dec. 2006). When Congress changed the point of taxation for the diesel fuel excise tax from the wholesaler/distributor to the terminal, it reduced the number of filers and curtailed tax evasion, increasing revenue collections by 58.5 percent. See Statement of Margaret Milner Richardson, Commissioner of Internal Revenue, Before the Subcommittee on Oversight Committee on Ways and Means, *reprinted* as Richardson’s Testimony at W&M Oversight Hearing on Tax Refund Fraud, 94 TNT 193-33 (Sept. 29, 1994).

⁹² See, e.g., National Taxpayer Advocate 2007 Annual Report to Congress vol. 2 (*A Comprehensive Strategy for Addressing the Cash Economy*); SB/SE Research, *Strategic Assessment FY 2009-FY 2010*, 22-25 (Feb. 2008).

⁹³ See Michael Keen and Stephen Smith, *VAT Fraud and Evasion: What Do We Know and What Can Be Done?*, 59 Nat’l Tax J. 861, 865 (Dec. 2006) (describing the “self enforcing” characterization by VAT advocates).

⁹⁴ The desire to avoid a VAT combined with an unwillingness to falsify invoices or claim VAT credits from the government, however, could cause groups of business to operate in the cash economy – outside the VAT system. But, a VAT could reduce the number of unregistered businesses operating in the cash economy because only registered businesses can claim input credits and registered business customers generally prefer to deal with registered businesses so that it is easier for them to compute their input credits, as noted below. Australia sought to leverage this effect when it introduced a VAT by requiring payors to withhold on payments to businesses that did not provide a tax registration number that could be verified, but compliance gains have been difficult to measure. See, e.g., Christopher Bajada, *Recent Government Initiatives in Tackling the Underground Economy in Australia*, in *SIZE, CAUSES AND CONSEQUENCES OF THE UNDERGROUND ECONOMY: AN INTERNATIONAL PERSPECTIVE*, 243-72 (Christopher Bajada and Friedrich Schneider, eds., Ashgate Publishing Ltd. 2005).

88 percent of the VAT returns identified as risky and audited are ultimately reassessed.⁹⁵ Once a business is identified as potentially noncompliant, a review of invoices should make it relatively easy for auditors to identify unpaid tax. Federal VAT invoices and audits could also yield information that would help the IRS identify income tax underreporting, potentially reducing the income tax gap.⁹⁶ No similar audit trail or incentives exists under an RST or a subtraction method VAT.

Credit invoice method VATs provide market-based incentives for sellers to register.

Under a credit invoice method VAT, registered businesses have an incentive to purchase inputs only from other registered businesses. As noted above, they can only claim VAT credits on purchases from registered suppliers. In the absence of more than one VAT rate, if a business obtains inputs only from registered businesses that collect VAT, the business can also compute its input credits, in large part, by multiplying its costs of goods sold by the VAT rate. This may reduce compliance burdens.

If large businesses prefer to deal with registered suppliers, then suppliers have an incentive to register and collect VAT, even if they are not legally required to do so. Registered businesses are also entitled to claim VAT credits. Perhaps for these reasons, over 30 percent of the registered businesses in Australia and Canada registered voluntarily even though they had sales below the registration thresholds (\$75,000 and \$30,000 respectively).⁹⁷ Some small businesses may also register to conceal the small size of their operations from customers.

A subtraction method VAT would not necessarily establish the same incentives unless the deductibility of inputs hinged on the taxability of the supplier (or supplies). Such a “sophisticated” subtraction method VAT, however, would require a seller to reliably communicate its tax status and the tax status of the items being sold to the buyer – the same information that could easily be communicated by listing the tax (if any) due in connection with the transaction on an invoice under the credit invoice method VAT. Moreover, because the tax liability would not be shown on any invoice, a subtraction method VAT would not provide as clear of an audit trail.

⁹⁵ GAO Report 29.

⁹⁶ A pilot program pursuant to which the IRS uses state sales tax data to select income tax returns for audit has enabled it to identify returns that are less likely to result in no changes (*i.e.*, lower no-change rates) and more likely to yield higher dollars per hour than returns selected using the IRS’s DIF program – its state-of-the-art computer algorithm. IRS response to TAS information request (May 19, 2009).

⁹⁷ GAO Report 29.

An Analysis of Tax Administration Issues Raised by a Consumption Tax,
Such as a National Sales Tax or Value Added Tax

Under a credit invoice method VAT, noncompliance does not always reduce government revenue.

The government does not lose any revenue when business suppliers operate outside a VAT tax system, unless they make domestic retail sales.⁹⁸ Any value added by these businesses is taxed when incorporated into other products or services ultimately purchased by domestic consumers in taxable transactions. In the example above, assume the farmer did not collect VAT on his sale of oranges. Because the processor would not be entitled to VAT credit for its orange purchase, its net VAT liability would increase by \$3 – the same amount the farmer was required to pay. Thus, government revenue would not decline.

VATs may be perceived as more “fair” than RSTs that cascade.

By some accounts, VATs solve “one of the most vexing administrative problems of a retail sales tax” by eliminating the need for businesses to present a resale exemption certificate to avoid cascading.⁹⁹ State sales tax exemptions generally only apply to property purchased for resale or incorporated into property the sale of which is subject to tax.¹⁰⁰ For example, some states apply an RST to electricity used by manufacturers to produce products that will also be subject to the RST.¹⁰¹ By one estimate, approximately 44 percent of state sales taxes are collected on intermediate goods, thus resulting in double taxation.¹⁰²

Such cascading can produce tax administration and collection problems if it promotes the view that the tax is unfair.¹⁰³ One proposal would reduce sales tax cascading by allowing businesses to apply for refunds of RST paid on inputs, just like they could under a VAT.¹⁰⁴ Policymakers contemplating an RST may wish to consider such innovations, but the introduction of frequent refunds may raise the same concerns about refund fraud that exist under a VAT.

⁹⁸ A VAT or RST would also be charged on sales to businesses operating in the underground economy, including those participating in organized crime and assumed to be operating outside the tax system. Some commentators discount this as a benefit, however, because even a corporate income tax could be passed along by businesses to customers participating in the underground economy to the same extent as a VAT or RST. Moreover, underground economy businesses are unlikely to collect or pay VAT or RST on their retail sales.

⁹⁹ AICPA, *Understanding Tax Reform: A Guide to 21st Century Alternatives* 47 (Sept. 2005).

¹⁰⁰ JCT Report 47.

¹⁰¹ See, e.g., N.C. Gen. Stat. § 105-164.4(a)(1f) (West 2009).

¹⁰² See Andrew Phillips et al., *Total State and Local Business Taxes: 50-State Estimates for Fiscal 2007*, 48 *State Tax Notes* 471 (May 12, 2008). See also Raymond Ring, *Consumers' Share and Producers' Share of the General Sales Tax*, 52 *Nat'l Tax J.* 79-90 (Mar. 1999) (estimating the consumer share of sales taxes at 59 percent, leaving 41 percent as the business share). For additional discussion of this problem, see Robert Cline et al., *Sales Taxation of Business Inputs: Existing Tax Distortions and the Consequences of Extending the Sales Tax to Business Services*, 2005 *STT* 29-1 (Jan. 28, 2005).

¹⁰³ See, e.g., Richard Lavoie, *Cultivating a Compliance Culture: An Alternative Approach for Addressing the Tax Gap*, U. of Akron Legal Studies Research Paper No. 08-05, 5-7 (Sept. 1, 2008) (explaining that “[s]ince the deterrence model fails to accurately predict tax evasion levels, other forces must be influencing citizens to comply despite the apparently overwhelming economic utility of cheating. The hodgepodge of non-coercive forces and behavioral traits that influence the degree of tax evasion are generally referred to under the umbrella rubric of a society's tax morale.”); National Taxpayer Advocate 2007 Annual Report to Congress vol. 2, 138 (Marjorie E. Kornhauser, *Normative and Cognitive Aspects of Tax Compliance: Literature Review and Recommendations for the IRS Regarding Individual Taxpayers*) (describing various research findings regarding the effect of personal values, social norms and tax morale on taxpayer compliance).

¹⁰⁴ See George R. Zodrow, *The Sales Tax, the VAT, and Taxes in Between – or, Is the Only Good NRST a “VAT in Drag”?*, 52 *Nat'l Tax J.* 429, 431 (Sept. 1999), citing Peter Mieszkowski and Michael Palumbo, *Is a National Retail Sales Tax Administrable? A Proposal for a Hybrid NRST* (1999) (manuscript).

VATs are susceptible to refund fraud.

All taxes are susceptible to fraud and a VAT is no exception. In the case of a VAT or RST, such fraud may include: (1) failing to register; (2) underreporting sales (*e.g.*, by not reporting cash sales, diverting items for consumption by employees or owners of the business, or underreporting the value of related party sales); (3) misclassifying sales as those subject to lower rates if more than one rate is available (*e.g.*, reporting taxable domestic sales as zero rated exports); (4) collecting tax but not remitting it, for example, by going bankrupt or disappearing (called missing trader fraud).¹⁰⁵

Because a VAT generally depends on input credits (or deductions) that give rise to refunds, it is also susceptible to refund fraud. One report estimated that VAT refunds constitute 40 to 50 percent of gross VAT collections among typical EU countries, and 10 to 20 percent in Africa, Asia, and Latin America, with variations depending largely on the level of exports and extent to which zero rating is used.¹⁰⁶

If some items are exempt from VAT, a business may improperly claim VAT credits (or deductions) by over-allocating inputs to taxable outputs (for which the input credit or deduction is available) and under-allocating inputs to exempt outputs (for which the input credit or deduction is unavailable). Alternatively, a business may generate false invoices solely to generate fraudulent VAT credits or deductions. These basic problems have many variations.¹⁰⁷ The European Commission has stated that up to ten percent of VAT receipts have reportedly been lost to fraud in some member states.¹⁰⁸

Exploitation of zero-rated exports is particularly problematic in countries that pay rapid VAT credits and do not collect VAT on imports at the border.¹⁰⁹ Because the full value of any import (rather than just the value added by the importer) is taxed at the border, more tax is at stake when imports escape taxation than when a single business in the domestic production chain does so. In 1984, the Treasury Department suggested that the U.S. Customs Service could collect a U.S. VAT on imports at the border.¹¹⁰ Thus, the relatively few land borders between the U.S. and other countries combined with good VAT design could mean that refund fraud attributable to reimportation (*i.e.*, claiming credits on items supposedly exported but actually reimported or otherwise diverted to domestic consumers) might be less of a problem in the U.S. than in many EU countries. Moreover, refundable credits are not inherently problematic – it's all in the design.¹¹¹

¹⁰⁵ See, *e.g.*, Michael Keen and Stephen Smith, *VAT Fraud and Evasion: What Do We Know and What Can Be Done?*, 59 Nat'l Tax J. 861-88 (Dec. 2006); GAO Report 9.

¹⁰⁶ See Graham Harrison and Russell Krelove, IMF Working Paper No. 05/218, *VAT Refunds: A Review of Country Experience* (2005).

¹⁰⁷ See, *e.g.*, Michael Keen and Stephen Smith, *VAT Fraud and Evasion: What Do We Know and What Can Be Done?*, 59 Nat'l Tax J. 861, 866-68 (Dec. 2006).

¹⁰⁸ European Commission, *EU Coherent Strategy Against Fiscal Fraud – Frequently Asked Questions*, MEMO/06/221 (May 31, 2006).

¹⁰⁹ See generally Michael Keen and Stephen Smith, *VAT Fraud and Evasion: What Do We Know and What Can Be Done?*, 59 Nat'l Tax J. 861, 870 (Dec. 2006).

¹¹⁰ See Treasury Department Report to the President, *Tax Reform, Fairness, Simplicity, and Economic Growth*, vol. 3, ch. 9, 113-17 (Nov. 1984). Australia and New Zealand have programs that allow businesses with an established compliance history to defer VAT payments on imports, paying in regular intervals, rather than on a per shipment basis. GAO Report 32. The U.S. could consider a similar approach.

¹¹¹ For a discussion of how income tax credits should be structured, see *Running Social Programs Through the Tax System*, *infra*.

Good VAT design could minimize fraud.**Offset VAT credits against other tax liabilities before paying refunds.**

There are a wide variety of ways to reduce refund fraud, but many are overly burdensome or complicated. For example, some countries (1) delay refunds until after a VAT audit; (2) require VAT credits to first offset the person's liability for VAT or other taxes for the current period or a specified number of future periods before paying any refund; (3) delay any refund until after the purchaser has paid the entire purchase price of the asset for which the credit is claimed; (4) require businesses to carry VAT credits forward (indefinitely or for a limited period) before refunding them;¹¹² or (5) pay VAT refunds in bonds, which could be offset in the case of fraud, rather than in cash.¹¹³

The 2005 Tax Reform Panel recommended allowing refunds only with respect to exports.¹¹⁴ Other losses would only generate net operating loss carryforwards. The panel likely took this bifurcated approach because VAT refunds cannot be denied to exporters without significantly impeding business operations. Because exporters may never have sufficient taxable receipts to absorb the VAT deductions or credits generated by zero-rated exports, only those with profitable domestic sales would have been able to use loss carryforwards.¹¹⁵ However, the bifurcated approach would increase the incentive to misallocate deductions or credits associated with domestic sales to exports.

By contrast, the ABA Model VAT recommended treating VAT credits as an overpayment of tax and would allow businesses to elect to have the credits offset other tax liabilities so they could be utilized more rapidly.¹¹⁶ This approach of simply offsetting VAT credits against outstanding tax liabilities might help reduce net VAT refunds without unduly burdening taxpayers, especially if combined with other strategies (described below) to address refund fraud.

Expedite VAT refunds to compliant taxpayers; review large refunds; deny them to noncompliant taxpayers.

Governments can reduce the risk of VAT fraud if they allow tax administrators sufficient time to verify the validity of VAT refunds before paying them. The U.S. government currently reviews the propriety of large income tax refund requests.¹¹⁷ However, such requests are more infrequent than they would be under a VAT and delays are costly for businesses. In the countries recently reviewed by the GAO, tax administrators were generally required

¹¹² The EU's Sixth Directive requires member states to either make a refund or carry excess credits forward to the next period. Recast Sixth Directive, art. 183.

¹¹³ See, e.g., Alan Schenk and Oliver Oldman, *Value Added Tax, A Comparative Approach* 167-70 (Cambridge Univ. Press 2007).

¹¹⁴ See Report of the President's Advisory Panel on Federal Tax Reform, *Simple, Fair, and Pro-Growth: Proposals to Fix America's Tax System* 171 (Nov. 2005).

¹¹⁵ While loss carryforwards are theoretically feasible for domestic businesses, they frequently go unused under the income tax as well. See, e.g., Michael Cooper and Matthew Knittel, *Partial Loss Refundability: How Are Corporate Tax Losses Used?*, 59 *Nat'l Tax J.* 651-63 (Sept. 2006) (estimating that approximately 25-30 percent are never used). Thus, loss carryforwards may be a relatively complicated and inefficient method of returning VAT credits.

¹¹⁶ ABA Model VAT ch 5, at 98.

¹¹⁷ See IRC § 6405.

to compensate businesses for such delays by paying interest on VAT refunds that are not paid within a standard period, which ranged from 14 to 21 days.¹¹⁸

Some have also suggested that paying refunds more quickly to businesses with a history of tax compliance and also those that obtain a guarantor could minimize the delays needed to prevent fraud.¹¹⁹ Others would deny refunds to those that have recently committed fraud.¹²⁰

Use reverse charges and systems that can implement real-time matching.

Other approaches to minimize the payment of improper refunds to exporters include the use of reverse charges (described above) or computerized information exchange systems. For example, the EU imposes reverse charges on intra-EU imports. In other words, VAT is paid by the domestic purchasing business that is generally claiming an offsetting input credit, rather than by the foreign seller.¹²¹ The EU also requires exporters to electronically verify that their customers are registered with the tax administrator in the importing country.¹²² This system could allow the tax administrator for the exporting country to automatically determine if the importer paid any tax due on the import before paying refunds of input credits (called border tax adjustments) to the exporter.¹²³ However, such systems may depend, at least in part, on cooperation by foreign tax agencies.

Under a simple credit invoice method VAT, reporting compliance gains could overshadow refund fraud losses.

While refund fraud must be taken seriously, a dollar lost to underreporting or underpayment is just as costly for the government as a dollar lost to refund fraud. Moreover, far more taxpayers are likely to be willing to underreport or underpay an RST, or make a tax-free sale, than would be willing to engage in outright fraud by claiming an improper credit or refund directly from the government. Thus, the other features of a credit invoice method VAT that promote improved compliance would likely outweigh concerns about

¹¹⁸ GAO, GAO-08-566, *Value-Added Taxes, Lessons Learned from Other Countries on Compliance Risks, Administrative Costs, Compliance Burden and Transition* 17 (Apr. 2008).

¹¹⁹ See, e.g., Michael Keen and Stephen Smith, *VAT Fraud and Evasion: What Do We Know and What Can Be Done?*, 59 Nat'l Tax J. 861, 879, 881 (Dec. 2006).

¹²⁰ Under the Eighth Council Directive, persons found to have committed refund fraud can be denied refund credits for the later of two years or until they pay the penalty for fraud. Eighth Council Directive, *On the Harmonization of the Laws of the Member States Relating to Turnover Taxes – Arrangements for the Refund of Value Added Tax to Taxable Persons Not Established in the Territory of the Country*, art. 7 (Dec. 6, 1979).

¹²¹ The domestic purchaser pays VAT to the government rather than to the foreign seller on its input costs. If the purchaser can claim an input credit on the purchase, the credit can offset the VAT due on the purchase. As illustrated above, input credits can normally result in refunds or offset VAT due on taxable sales. However, if the credit is used to offset the VAT due on an input purchase, it cannot generate refunds or offset VAT due on the purchaser's taxable sales.

¹²² The EU has a system called the VAT Information Exchange System (VIES) for use by exporters to other EU countries. See http://ec.europa.eu/taxation_customs/taxation/vat/traders/vat_number/index_en.htm.

¹²³ Because of the lags involved, VIES reportedly does not always allow tax administrators to verify that import taxes were paid before paying out refunds to exporters. Michael Keen and Stephen Smith, *VAT Fraud and Evasion: What Do We Know and What Can Be Done?*, 59 Nat'l Tax J. 861, 880 n.22 (Dec. 2006). However, because the system will eventually detect irregularities, it probably discourages noncompliance. One option could be to delay refund payments until the system verifies that import taxes were actually paid.

An Analysis of Tax Administration Issues Raised by a Consumption Tax,
Such as a National Sales Tax or Value Added Tax

refund fraud, at least if the tax has few preferences and is designed to limit the potential for refund fraud.

The risk of refund fraud is also present under a subtraction method VAT, but it does not have some of the beneficial features of a credit invoice method VAT that would promote reporting compliance. For example, under a subtraction method VAT, no invoice would allow the IRS to match the buyer's VAT credit to the seller's VAT payment.

While there is less danger of refund fraud under an RST than a VAT, an RST relies more heavily on small business retailers, which account for a significant portion of the income tax gap.¹²⁴ Moreover, RSTs are generally imposed on a narrower base, thus, requiring higher rates to raise the same amount of revenue. Higher rates would provide additional incentives for noncompliance, tilting the scales in favor of a VAT if the RST rate would need to exceed about ten percent, at least according to one expert.¹²⁵

Establishing only one rate and limiting tax preferences would minimize compliance costs and noncompliance.

Tax preferences including multiple rates increase costs and reduce compliance.

As described above, tax preferences increase noncompliance as well as the costs of tax compliance and administration.¹²⁶ Some have suggested that complexity could increase the cost of the VAT examination program by 30 to 50 percent.¹²⁷ One study estimated that each distinct VAT rate would reduce compliance by seven percentage points, and that a one percentage point increase in the VAT rate from the sample average of 15.8 percent would reduce the compliance rate by 2.7 percentage points.¹²⁸ As with the income tax, preferences can also reduce transparency, making it more difficult for taxpayers to compute their effective tax rate. A well-designed VAT, therefore, avoids tax preferences, especially the application of exemptions or special rates to specific items.

¹²⁴ See, e.g., National Taxpayer Advocate 2007 Annual Report to Congress vol. 2 (*A Comprehensive Strategy for Addressing the Cash Economy*); SB/SE Research, *Strategic Assessment FY 2009-FY 2010*, 22-25 (Feb. 2008).

¹²⁵ See, e.g., Charles McLure, *The Value-Added Tax: Key to Deficit Reduction?* 107 (American Enterprise Institute for Public Policy Research 1987) (concluding, in part, that at rates higher than about ten percent enforcement advantages of a VAT outweigh an RST, and because half of the states have RSTs of at least five percent (three quarters of the states if local taxes are included), the choice should probably be a VAT).

¹²⁶ According to one estimate, compliance costs borne by both the government and taxpayers eat up 10 percent of U.S. income tax revenue, between 2.4 and 4.8 percent of sales tax revenue, between 3 and 5 percent of VAT revenue. Joel Slemrod, *Which Is the Simplest Tax System of All?* in *ECONOMIC EFFECTS OF FUNDAMENTAL TAX REFORM* 355, 368-69, 373-74 (Henry Aaron and William Gale, eds., Brookings Institution Press 1996) (summarizing other studies; observing that variations in compliance costs are attributable to the complexity and preferences typically associated with each tax, and that the RST compliance cost estimate may not be comparable to other taxes because imposing an RST at the higher rates typically associated with VATs and income taxes would significantly increase evasion and associated compliance costs as a percentage of revenue).

¹²⁷ See GAO, GAO/GGD-93-78, *Value-Added Tax: Administrative Costs Vary with Complexity and Number of Businesses* 7 (May 1993).

¹²⁸ See Ali Agha and Jonathan Haughton, *Designing Vat Systems: Some Efficiency Considerations*, 78 *Rev. Econ. Stat.* 303-08 (May 1996).

VAT preferences and complexity may prompt lawmakers to exempt small businesses and others.

Estimates of the VAT compliance burden range from approximately two percent of revenue for businesses with less than \$50,000 in sales to 0.04 percent for those with over \$1 million in sales.¹²⁹ Thus, VAT compliance costs may fall disproportionately on small businesses.

One common way to address VAT compliance burdens and administrative costs is to exempt small businesses from VAT altogether. According to one study, an exemption that reduced the number of businesses subject to the tax by 63 percent (from 24 million to 9 million) would reduce the VAT revenue base by less than three percent.¹³⁰

However, a high small business exemption threshold could complicate coordination of a federal VAT with state RSTs, as described below, and distort competition with slightly larger businesses. More importantly, a high exemption threshold may not significantly reduce small business burdens because many already collect RST or are likely to register for the VAT voluntarily. Moreover, exemptions can increase overall compliance costs for other businesses that need to segregate exempt purchases from taxable ones to compute their deductions or credits, particularly if the purchaser does not receive credit invoices (e.g., under a sophisticated subtraction method VAT).

Policymakers could reduce small business compliance burdens in other ways.

Cash flow benefits, tax credits, and less frequent filing requirements could also reduce or offset small business VAT compliance burdens. The cash flow benefits of holding VAT collected from customers that is not yet due to be paid to the government may provide a significant benefit to businesses. The value of this benefit has been estimated to offset the overall gross compliance burden by almost 40 percent.¹³¹ Allowing businesses to hold VAT collections for long periods of time before paying them over to the government, however, increases the risk that those funds will not be paid over at all.¹³²

Another option might be to authorize payment card companies to act as intermediaries for businesses. If the VAT were simple enough and had so few preferences that payment card companies could determine which transactions were taxable and at what rate, they could automatically deduct VAT from payment card receipts and pay it over to the government on behalf of the business. They could also claim VAT credits from the government on behalf of businesses that make taxable (creditable) purchases with a payment card.¹³³ We are

¹²⁹ GAO Report 16.

¹³⁰ GAO, GAO/GGD-93-78, *Value-Added Tax: Administrative Costs Vary with Complexity and Number of Businesses* 3-4 (May 1993).

¹³¹ GAO Report 17.

¹³² According to IRS research, taxpayers who owe a balance upon filing a return are more likely to understate their tax liability than other taxpayers and more than 20 percent of such taxpayers with a balance due fail to pay it in full. Wage and Investment Division, Research Group 5, Project No. 5-03-06-2-028N, *Experimental Tests of Remedial Actions to Reduce Insufficient Prepayments: Effectiveness of 2002 Letters 1-7* (Jan. 16, 2004).

¹³³ This program could build on the qualified payment card agent (QPCA) program, which allows payment card companies to satisfy information reporting obligations for both the payee and payor. See, e.g., Treas. Reg. § 31.3406(j)-1; Notice 2007-59, 2007-30 I.R.B. 135.

An Analysis of Tax Administration Issues Raised by a Consumption Tax,
Such as a National Sales Tax or Value Added Tax

not aware of any jurisdiction using such a “paperless” VAT system. This could be due to the fact that most national VATs were implemented before payment cards became as prevalent as they are today. If it were feasible, however, a paperless system could significantly reduce the administrative burdens of a VAT for both taxpayers and the IRS.¹³⁴

Tax credits have also been used to help small businesses with VAT implementation costs. In Australia, the government gave small businesses tax credits worth \$186 to help them purchase equipment to facilitate initial VAT implementation.¹³⁵ Canadian businesses received one-time credits of up to \$1,159.¹³⁶

Another option is to allow small businesses to file less frequently and to use more flexible accounting methods. Large businesses are often required to file and remit VAT monthly, but small businesses often have the option to file and remit VAT less frequently, such as quarterly or annually, reducing VAT compliance costs.¹³⁷ Some tax administrators also allow small businesses to use modified accounting methods to calculate their net VAT due for a given period based on payment dates, the invoice dates, or a combination of both.¹³⁸

In addition, small businesses are sometimes given the option to pay a reduced VAT rate on retail sales based on the average industry markup in lieu of claiming input credits.¹³⁹ Another variation of this approach would allow small businesses to compute their input credits by adding up expenses for inputs (including those not subject to VAT or subject to lower VAT rates) and applying a fixed rate, rather than having to sum each input credit shown on an invoice.¹⁴⁰ These options could be considered as ways to reduce small business compliance costs, but the potential for complexity and confusion may outweigh the benefits of these approaches. As noted above, the tax law should provide some choices, but not too many choices. Too many choices can result in a complicated system that entraps taxpayers or does not minimize opportunities for noncompliance.

A subtraction method VAT could make preferences more difficult to administer.

Because exemptions and multiple rates are regarded as undesirable, some view the inflexibility of a subtraction method VAT in accommodating them as a positive feature.¹⁴¹ For

¹³⁴ To the extent such a system encouraged businesses to accept payment cards in lieu of cash, it could also reduce income tax underreporting attributable to the cash economy. However, any additional tax also increases the incentive for businesses to operate in cash and outside the tax system.

¹³⁵ GAO Report 42.

¹³⁶ GAO Report 44.

¹³⁷ GAO Report 30.

¹³⁸ GAO Report 31-32. Similar accommodations are available under the income tax. For example, small businesses are generally allowed to use the cash method of income tax accounting. See generally IRC § 448.

¹³⁹ See, e.g., HMRC Notice 733 (Mar. 2007); Alan Schenk and Oliver Oldman, *Value Added Tax, A Comparative Approach* 178 (Cambridge Univ. Press 2007); Canada Revenue Agency, RC4070(e), *Guide for Canadian Small Businesses* 21-22 (2008) (describing the “quick method” for claiming input tax credits).

¹⁴⁰ Canada Revenue Agency, RC4070(e), *Guide for Canadian Small Businesses* 21-22 (2008) (describing the “simplified method” for claiming input tax credits).

¹⁴¹ See, e.g., TEI Report 25. Multiple VAT rates on different items are all but impossible under the subtraction method. See, e.g., JCT Report 23. From a purely administrative perspective, if a subtraction method VAT were adopted, the corporate income tax might also seem redundant because the administrative and compliance burdens of both taxes would overlap to a significant extent.

example, it would be burdensome to require businesses to segregate different types of receipts and expenses and then apply more than one rate without invoices that reflect the tax associated with each transaction. Others argue, however, that given the possibility that such complexity will be adopted, it is better to have systems in place – such as those provided by a credit invoice method – to collect the information taxpayers will need to comply with the law.¹⁴² Indeed, in 1987 Canada considered and rejected a subtraction method VAT, in part, because it was viewed as a less practical alternative for administering exemptions and multiple rates.¹⁴³

Moreover, a subtraction method VAT would not necessarily be immune to exemptions and preferences. Under the U.S. corporate income tax, which is collected in a similar manner, capital expenditures are generally recovered over time instead of being deductible. But, some capital expenses are nevertheless deductible (affording them preferential treatment), and some receipts are taxed at preferential rates (*e.g.*, receipts from domestic production activities or those earned by small corporations with income below the amount subject to the top marginal rates).¹⁴⁴ Similarly complicated preferences could be enacted under a subtraction method VAT, but they would be more difficult to administer without the benefit of credit invoices.¹⁴⁵

A credit invoice method VAT or RST applicable to imports but not exports (*i.e.*, a “destination-based” tax) reduces the need for complex international tax rules.

Most VATs imposed around the world are destination-based, meaning they apply to all goods and services destined for consumers in the taxing jurisdiction, regardless of where they originate.¹⁴⁶ Under a destination-based credit invoice method VAT, exporters receive a refund for tax paid on inputs and the export is not subject to tax (*i.e.*, exports are zero-rated). Imports are taxed at the border. The net tax refunds or payments associated with imports and exports are called “border tax adjustments” or BTAs.

Under a destination-based system, both domestic and foreign businesses providing goods and services to U.S. consumers would be subject to tax at the same U.S. VAT rate. Similarly, given the prevalence of destination-based VATs overseas, goods and services provided to foreign consumers by U.S. and foreign businesses would be taxed at the same foreign VAT rate.

¹⁴² See, *e.g.*, David Weisbach, *Does the X-Tax Mark the Spot?*, U. Chicago L. & Econ., Olin Working Paper No. 163 (Sept. 24, 2002).

¹⁴³ TEI Report 102.

¹⁴⁴ See generally IRC §§ 167, 168, 199.

¹⁴⁵ In 1989, the American Bar Association adopted a resolution that if Congress imposes a VAT it should (1) employ the “credit method” rather than the “subtraction method,” and (2) levy the tax at a uniform rate, with a zero rate for exports and certain necessities, and as few exemptions as possible. ABA, *House of Delegates Resolution on Value Added Tax*, 1986-1 ABA Repts. 301 (Feb. 11, 1986). In 1999, the Tax Section recommended revoking the 1989 resolution because the 1989 policy explicitly mentioned only two systems and “could be interpreted to prohibit comments on other systems.” ABA, Section of Taxation, *Report to the House of Delegates* (Feb. 1999), www.abanet.org/tax/pubpolicy/1999/vat99.html.

¹⁴⁶ See, *e.g.*, Keith Kendall, *Using Destination and Origin Principles in Developing VAT Legislation*, 42 Tax Notes Int’l 983 (June 12, 2006); Alan Schenk and Oliver Oldman, *Value Added Tax, A Comparative Approach* 182 (Cambridge Univ. Press 2007).

An Analysis of Tax Administration Issues Raised by a Consumption Tax,
Such as a National Sales Tax or Value Added Tax

By contrast, under an origin-based tax, goods and services originating in the U.S. would be subject to tax in the U.S. regardless of where they are consumed. Without special rules, exports would be taxed in the U.S. and also in a foreign jurisdiction.

Origin-based VATs may foster complexity and provide opportunities for noncompliance.

An origin-based VAT could subject U.S. exports to double taxation unless it was coupled with a system of foreign tax credits to reimburse the exporter for taxes paid abroad.¹⁴⁷ In addition, as with the current origin-based U.S. income tax, an origin-based VAT would require complicated transfer pricing rules.¹⁴⁸ These rules would be needed to keep businesses from understating their domestic taxable receipts from domestic production by paying artificially high prices to affiliated foreign suppliers, thereby shifting taxable receipts overseas where they would not be subject to the U.S. tax.

By contrast, under a destination-based VAT, any tax lost as a result of below market sales among affiliates at intermediate stages of production is recovered in connection with the final arms-length sale to U.S. consumers, potentially reducing any such concerns. For these reasons, among others, some tax experts believe that origin-based taxes are also more susceptible to tax avoidance schemes.¹⁴⁹

Others have suggested that origin-based taxes might be easier to administer when taxing jurisdictions have few border controls because taxpayers can avoid destination-based taxes if imports are not taxed immediately (*i.e.*, at the border).¹⁵⁰ As noted above, however, because of the relative geographic isolation of the United States, tax avoidance through VAT-free importation may be less of a problem.

Destination-based taxes establish a transparently level international playing field.

Some argue that countries with a destination-based VAT have a competitive advantage because exports generate tax credits while imports are subject to the tax.¹⁵¹ The competitive

¹⁴⁷ U.S. taxpayers can obtain foreign tax credits (FTCs) against U.S. income tax for income tax paid to foreign countries. See IRC § 901, *et seq.* They cannot obtain FTCs for VAT paid to foreign countries because VATs are considered “indirect” taxes that are really borne by the buyer rather than the seller who is generating taxable income in the U.S. Some have disputed this premise and suggested U.S. taxpayers should also get income tax credits for indirect taxes, such as foreign VATs. See, e.g., Reuven S. Avi-Yonah, *A Creditable VAT?*, 114 Tax Notes 793 (Feb. 19, 2007); Andres Bazo Pisani, *Should the U.S. Allow Foreign Tax Credits for the VAT?*, 51 Tax Notes Int’l 341 (July 28, 2008).

¹⁴⁸ See, e.g., Report of the President’s Advisory Panel on Federal Tax Reform, *Simple, Fair, and Pro-Growth: Proposals to Fix America’s Tax System* 167-72 (Nov. 2005).

¹⁴⁹ See, e.g., Report of the President’s Advisory Panel on Federal Tax Reform, *Simple, Fair, and Pro-Growth: Proposals to Fix America’s Tax System* 167-72 (Nov. 2005) (providing an example of one such scheme); David Weisbach, *Does the X-Tax Mark the Spot?*, U. Chicago L. & Econ., Olin Working Paper No. 163 (Sept. 24, 2002).

¹⁵⁰ When the EU first proposed tax harmonization, it was expected the origin principle could be applied to intra-community trade while the destination principle would continue to apply to extra-community trade, but the origin principle was ultimately abandoned. See, e.g., TEI Report 100-01.

¹⁵¹ See, e.g., David Hartman, *The Case for Border-Adjusted Taxation in the United States*, 35 Tax Notes Int’l 1183 (Sept. 27, 2004).

An Analysis of Tax Administration Issues Raised by a Consumption Tax,
Such as a National Sales Tax or Value Added Tax

advantages of giving exporters hefty tax refunds (*i.e.*, BTAs), while imposing a tax on importers seems obvious, at least in the short run.¹⁵²

In the long run, exchange rates and input prices are theoretically supposed to adjust to offset any apparent competitive advantages.¹⁵³ In practice, such adjustments could be delayed or even derailed by currency manipulation, uneven application of the tax (*e.g.*, tax preferences), or other unanticipated factors.¹⁵⁴ Even if a destination-based VAT has no long-term effect on trade, it has the benefit of being a simple way to transparently level the playing field for domestic businesses. They do not have to trust that invisible exchange rate and price adjustments will eventually do so. Thus, aside from the broader policy implications of the choice between destination- and origin-based taxation, a transparent and fair destination-based tax may have a clear administrative advantage – voluntary compliance may be higher if the tax is perceived to be fair.

Certain subtraction method VATs could not be destination-based without violating trade rules.

The U.S. might be charged with violating international trade rules if it adopted a destination-based flat tax or similar subtraction method VAT with border tax adjustments (BTAs). BTAs are prohibited for “direct” taxes, but are permitted for “indirect” taxes.¹⁵⁵ A direct tax includes a tax “on wages, profits ...and all other forms of income,” while an indirect tax includes “sales, excise, turnover, value added ...and all taxes other than direct taxes.”¹⁵⁶ BTAs are also prohibited if “in excess of those levied in respect of the production and distribution of like products when sold for domestic consumption.”¹⁵⁷ Some have argued that a progressive subtraction method VAT (*e.g.*, a flat tax) could not be implemented with BTAs because of its (1) similarity to an income tax (*i.e.*, a direct tax), and (2) lack of a mechanism

¹⁵² See, *e.g.*, Joint Committee on Taxation, JCX-23-02, *Background Materials on Business Tax Issues Prepared for the House Committee on Ways and Means Tax Policy Discussion Series 70* (Apr. 4, 2002) (noting: “In the short term, destination-principle consumption taxes are thought to be economically superior to origin-principle consumption taxes...”). Some economists, however, would disagree.

¹⁵³ See, *e.g.*, David Raboy, *Value Added Taxes and International Competitiveness*, 10 Tax Notes Int'l 600 (Aug. 28, 1995) (summarizing the debate); Paul Krugman and Martin S. Feldstein, *International Trade Effects of Value Added Taxation*, NBER Working Paper No. W3163 (Nov. 1989). Some empirical evidence suggests that a destination-based VAT may not give domestic businesses a competitive advantage even in the short run. See Michael Keen and Murtaza Syed, *Domestic Taxes and International Trade: Some Evidence*, IMF Working Paper (Feb. 2006); Mihir Desai and James Hines Jr., *Value-Added Taxes and International Trade: The Evidence*, Harvard Business School (2002).

¹⁵⁴ As used in this discussion, “currency manipulation” means that a foreign central bank sets currency exchange rates so as to keep the U.S. dollar artificially high and its own currency artificially low in order to gain an unfair trade advantage by making its country's products cheaper in the U.S. as compared to U.S.-produced products. For a recent analysis of the complicated economic effects of currency manipulation, see Robert W. Staiger and Alan O. Sykes, Working Paper 14600, “*Currency Manipulation and World Trade*,” National Bureau of Economic Research (Dec. 2008).

¹⁵⁵ See Article 1.1(a)(1)(2) and Annex I (e)-(h) of the World Trade Organization Agreement on Subsidies and Countervailing Measures, 33 I.L.M. 1125 (1994) (hereinafter SCM). Academics have also argued that some types of consumption taxes, such as the flat tax or USA tax, which are progressive subtraction method VATs could be “direct” taxes that would have to be “apportioned” among the states pursuant to the fourth Clause of Article I, Section 2, of the U.S. Constitution or “laid ... in Proportion to the Census,” as required by Section 9 of Article I. See Erik Jensen, *The Apportionment of “Direct Taxes”: Are Consumption Taxes Constitutional?*, 97 Colum. L. Rev. 2334 (Dec. 1997). Others have countered that these direct tax limitations should be interpreted narrowly. See Bruce Ackerman, *Taxation and the Constitution*, 99 Colum. L. Rev. 1 (Jan. 1999). Income taxes are direct taxes, but do not have to be apportioned because of the Sixteenth Amendment. *Id.*

¹⁵⁶ SCM n.58.

¹⁵⁷ SCM Annex I(g).

An Analysis of Tax Administration Issues Raised by a Consumption Tax,
Such as a National Sales Tax or Value Added Tax

to prevent BTAs paid on exports from exceeding the tax levied on similar products sold into the domestic market.¹⁵⁸

The first argument – that a subtraction method VAT is a direct tax because it looks like an income tax and thus could not utilize BTAs – is difficult to assess because it is based on form rather than substance. The form of a subtraction method VAT does not clearly require it to be categorized as either a direct or indirect tax. However, a naive subtraction method VAT (*e.g.*, one permitting deductions for inputs that were not subject to tax) could violate the second rule by paying excessive BTAs to exporters. For example, an exporter would be entitled to deduct supplies purchased from exempt or zero-rated suppliers.¹⁵⁹ Thus, the BTAs received by exporters under a naive subtraction method VAT could exceed the VAT paid by suppliers. As a result, BTAs paid on exports could exceed the tax levied on the same items sold into the domestic market from abroad. This might be deemed a violation of the rules.

A sophisticated subtraction method VAT with multiple rates could also produce excessive BTAs. It would allow a business to fully deduct the cost of inputs acquired in taxable transactions, even if the value added by its suppliers (or their suppliers) was subject to tax at a reduced rate (potentially including the zero rate). As a result, even a sophisticated subtraction method VAT could face challenges if implemented with BTAs. A sophisticated subtraction method VAT with BTAs might avoid producing excessive BTAs if it were implemented with a single rate and permitted deductions only for expenses acquired in transactions subject to tax at that single rate. However, it might still be subject to challenge if it is deemed a “direct” tax.

At low rates, the administrative costs of an RST may be lower than for a VAT, but a VAT may be less costly if high rates are needed.

According to one estimate, the compliance costs borne by both the government and taxpayers amount to 10 percent of U.S. income tax revenue, between 2.4 and 4.8 percent of RST revenue, and between 3 and 5 percent of VAT revenue.¹⁶⁰ The authors of this estimate argue, however, that the RST estimate may not be comparable to other taxes because imposing an RST at the higher rates typically associated with VATs and income taxes would significantly increase evasion and associated compliance costs as a percentage of revenue.

¹⁵⁸ See, *e.g.*, Itai Grinberg, *Implementing a Progressive Consumption Tax: Advantages of Adopting the VAT Credit-Method System*, 59 *Nat'l Tax J.* 929-30 (Dec. 2006); David Weisbach, *Does the X-Tax Mark the Spot?*, U. Chicago L. & Econ., Olin Working Paper No. 163 (Sept. 24, 2002). Japan's three percent destination-based subtraction method VAT was not subject claims of illegality, perhaps because it was not progressive. See, *e.g.*, TEI Report 112. However, some have suggested that even a plain subtraction method VAT (*i.e.*, one without a business deduction for wages) could be subject to claims of illegality. See JCT Report 28, *citing* George Carlson and Richard Gordon, *VAT or Business Transfer Tax: A Tax on Consumers or on Businesses?*, 41 *Tax Notes* 329 (Oct. 17, 1988). Others have suggested that a subtraction method VAT could legally include BTAs based solely on the “political power of the United States and the argument that these taxes are equivalent to border-adjustable, credit invoice VATs.” Martin A. Sullivan, *Economic Analysis: A Hitchhiker's Guide to Corporate Tax Reform*, 2009 *TNT* 232-1 (Dec. 7, 2009).

¹⁵⁹ See, *e.g.*, Charles McLure, *The Value-Added Tax: Key to Deficit Reduction?* 79-81 (American Enterprise Institute for Public Policy Research 1987).

¹⁶⁰ Joel Slemrod, *Which Is the Simplest Tax System of All?* in *ECONOMIC EFFECTS OF FUNDAMENTAL TAX REFORM* 355, 368-69, 373-74 (Henry Aaron and William Gale, eds., Brookings Institution Press 1996) (summarizing other studies).

Nonetheless, at low rates, these estimates suggest that compliance costs would be lower (as a percentage of revenue) for an RST than for a VAT, and significantly lower than for the income tax.

A VAT would generate more returns than an RST.

The compliance costs for a VAT would be higher for a VAT than for an RST because a VAT requires more taxpayers to file returns (*i.e.*, taxpayers that do not make retail sales). However, a VAT would require fewer additional returns than one might assume. By one estimate, an RST would involve only about ten percent fewer firms than a VAT because many business suppliers also make retail sales.¹⁶¹ Moreover, returns filed by business-to-business suppliers create incentives (described above) that make a VAT less prone to cascading and noncompliance than an RST.

A credit invoice method VAT would not necessarily entail significantly more recordkeeping than a subtraction method VAT.

As noted above, a business can only claim a VAT credit under the credit invoice method if it is registered and receives invoices showing VAT paid by suppliers. While the production and retention of such invoices is burdensome, in many cases, businesses already have to retain invoices to substantiate income tax deductions. Moreover, they would probably need to retain records containing much of the same information if a sophisticated subtraction method VAT were adopted.¹⁶² As a result, the additional invoice-related burden associated with adopting a credit invoice method VAT as compared to a subtraction method VAT might be relatively small. The additional burden might consist, primarily, of modifying billing and accounting systems to enable them to reflect the VAT and the seller's VAT registration number. As noted above, other countries have offset these transition costs by allowing a one-time credit for any such modifications.

¹⁶¹ Treasury Department, *Tax Reform for Fairness, Simplicity, and Economic Growth*, vol. 3, ch. 4, 32 (1984) (explaining that “[t]he reason the difference is not greater is because a retail sales tax is not confined exclusively to retailers. Nonretail firms making retail sales must also register for the tax. Moreover, even firms making tax-free purchases, and no retail sales, must be checked by auditors to verify that the purchases were for exempt uses.”).

¹⁶² The Japanese subtraction method VAT has been revised to require businesses to retain more information and receipts that would have been provided on credit invoices if they had adopted a credit invoice method VAT. See Alan Schenk, *Japanese Consumption Tax After Six Years: A Unique VAT Matures*, 69 *Tax Notes* 899, 911 (Nov. 13, 1995). The Tax Reform Panel's GiT provides “that deductible purchases be allowed only from businesses that are subject to the tax, and that these purchases be substantiated.” Report of the President's Advisory Panel on Federal Tax Reform, *Simple, Fair, and Pro-Growth: Proposals to Fix America's Tax System* ch. 7, 163 (Nov. 2005).

A federal RST or credit invoice method VAT could leverage and accelerate state RST coordination and simplification efforts.*Multi-state groups have been working to coordinate and simplify state sales tax rules for over a decade.*

Since 1967, U.S. Supreme Court precedent has barred states from requiring out-of-state mail order sellers to collect use tax in the absence of federal authorization.¹⁶³ The burden of requiring them to collect a wide variety of nonconforming taxes in thousands of local jurisdictions violates the Commerce Clause.¹⁶⁴ Thus, only businesses with an in-state physical presence were required to collect the tax. Federal law also prohibits a state from imposing a tax on the net income derived from in-state sales of businesses whose only activity within the state is the solicitation of orders for the sale of tangible personal property filled from out-of-state.¹⁶⁵ As a result, state revenues shrank and main-street retailers argued that out-of-state mail order vendors had a competitive advantage, prompting states to seek ways to both reduce sales tax complexity and level the playing field.

For at least the last 12 years, the Streamlined Sales and Use Tax Project (SSTP) and predecessor groups have been working to produce the Streamlined Sales and Use Tax Agreement (SSUTA), which would simplify and coordinate state sales and use tax laws to reduce the multi-state tax compliance burden.¹⁶⁶ Once state laws are coordinated, the Commerce Clause might not prohibit the states from requiring out-of-state mail order vendors (and service providers) to collect local use taxes. Even if it does, however, Congress could authorize the states to require out-of-state sellers to collect local use taxes.

Although the states have not agreed on a uniform RST base, SSUTA requires one rate to be imposed per state, and establishes uniform definitions (*e.g.*, product and service definitions), sourcing rules for determining which state's tax applies, multi-state forms, and

¹⁶³ See *National Bellas Hess, Inc. v. Dept. of Revenue*, 386 U.S. 753 (1967) (holding that a state law violated the Due Process Clause and the Commerce Clause by imposing liability on an out-of-state mail order firm to collect use taxes due from in-state customers where the mail order firm had no in-state physical presence); *Quill Corp. v. North Dakota*, 504 U.S. 298 (1992) (affirming the *Bella Hess* Commerce Clause holding, but reversing the Due Process clause holding because the remote sellers purposefully availed themselves of the benefits provided by the state). Because Congress has the power to regulate interstate commerce, it could authorize the states to require mail order sellers to collect state use tax. *Id.* at 318. Destination-based sales taxes do not apply to goods shipped to out-of-state customers. In such cases the customer is often subject to a "use" tax in his or her state of residence, but states use a reverse charge mechanism (*i.e.*, having businesses collect use taxes) because consumers often fail to pay them. Because states cannot currently require out-of-state businesses to do so, they provide incentives for them to agree to do so, as described below.

¹⁶⁴ See *id.*

¹⁶⁵ Pub. L. No. 86-272 (1959) (codified at 15 U.S.C. §§ 381-384). In response to federal limitations, many states have enacted a wide variety of gross receipts taxes and business activity taxes not directly based on net income, and interpreted the reach of their taxes (including nexus and corporate income tax apportionment formulas) expansively with complicated and inconsistent results that can tax a single item more than once or not at all. Report of the Task Force on Business Activity Taxes and Nexus of the ABA Section of Taxation State and Local Taxes Committee, 62 Tax Law. 935, 963-83 (Summer 2009) (hereinafter the ABA BAT Report). States generally oppose legislation that would clarify and extend Pub. L. No. 86-272 to services and intangible property transactions. See National Governors Association, *Impact of H.R. 1956, Business Activity Tax Simplification Act of 2005, on States* (Sept. 26, 2005). Faced with this situation, some multi-state businesses have reportedly given up on complying with inconsistent state tax apportionment rules, figuring it is easier to wait for an audit. ABA BAT Report 975-77.

¹⁶⁶ For a helpful discussion of this process, see John Swain and Walter Hellerstein, *The Political Economy of the Streamlined Sales and Use Tax Agreement*, 58 Nat'l Tax J. 605-19 (Sept. 2005).

An Analysis of Tax Administration Issues Raised by a Consumption Tax,
Such as a National Sales Tax or Value Added Tax

procedures. It also provides incentives for businesses to voluntarily collect local use taxes. Twenty-two states have adopted conforming changes to their sales tax laws.¹⁶⁷

A national VAT or RST could leverage and accelerate state simplification efforts.

A national RST or VAT could leverage the simplification achieved by SSUTA. To the extent Congress could use the SSUTA definitions, sourcing rules, forms, and procedures for a credit invoice method VAT or RST, it would be relatively easy for states to conform their sales and use taxes to the national RST or VAT tax base (assuming such conformity were authorized under federal law). Even if the states did not all conform, common definitions and sourcing rules could significantly reduce the marginal compliance burden associated with both state and national RSTs or VATs.¹⁶⁸

Because a federal credit invoice method VAT would be nearly identical to an RST at the retail level, simplification and conformity could be achieved with either.¹⁶⁹ For example, in Argentina, Brazil, and Canada, state or provincial sales taxes are administered alongside a national VAT.¹⁷⁰ Three Canadian provinces abolished provincial RST systems and created a harmonized sales tax, administered by the federal government, when Canada adopted a VAT.¹⁷¹

Congress could provide additional incentives for states to conform to the federal tax base. For example, it could offer to authorize states to require out-of-state mail order vendors to collect use tax.¹⁷² It could offer to collect state taxes, which could be added to

¹⁶⁷ SSUTP, *White Paper on Streamlining State Sales Taxes* (2009). Those 22 states are: Arkansas, Indiana, Iowa, Kansas, Kentucky, Michigan, Minnesota, Nebraska, Nevada, New Jersey, North Carolina, North Dakota, Ohio, Oklahoma, Rhode Island, South Dakota, Tennessee, Utah, Vermont, Washington, West Virginia, and Wyoming. *Id.* Conforming legislation has been introduced in Texas, Massachusetts, Florida, Illinois, and Hawaii. *Id.* As of 2004, Alaska, Delaware, New Hampshire, Montana and Oregon did not levy general sales taxes. See William Fox and Matthew Murray, *Sales Taxation in a Global Economy*, in *TAXING THE HARD-TO-TAX* 221, 223 (James Alm et al., eds., Elsevier 2004).

¹⁶⁸ In the event that the states adopted destination-based VATs, they would need a mechanism for collecting VAT on interstate sales in the absence of interstate border controls. See, e.g., Charles McLure, *Coordinating State Sales Taxes with a Federal VAT: Opportunities, Risks, and Challenges*, Symposium on Federal Tax Reform and the States 13 n.31 (May 15, 2005) (citing to methods called “VIVAT,” “CVAT,” and “PVAT”). One possibility would be to have the seller collect the state VAT at the rate imposed in the purchaser’s state (as states would prefer with respect to the use tax) and then allow purchasing businesses to claim a corresponding input credit. Sellers could similarly collect a use tax on sales into states that retained an RST, except that VAT-registered businesses could be exempt.

¹⁶⁹ According to one expert, “it would seem quite difficult to coordinate state sales taxes with ... the ‘naive’ version of a subtraction method VAT.” Charles McLure, *Coordinating State Sales Taxes with a Federal VAT: Opportunities, Risks, and Challenges*, Symposium on Federal Tax Reform and the States 1 n.2 (May 15, 2005).

¹⁷⁰ GAO Report 35.

¹⁷¹ GAO Report 39. Similarly, Australia replaced inefficient sub-national sales taxes with a federal VAT. *Id.* at 35-36. The federal government in Australia collects the VAT and distributes the revenue to Australian states and territories. *Id.* The states and territories reimburse the federal government for the costs incurred to administer it. *Id.*

¹⁷² The Sales Tax Fairness and Simplification Act (H.R. 3396 and S. 34) would do so. For a description of this and related legislation, see CRS, RL 33261, *Internet Taxation: Issues and Legislation* (July 7, 2008). By one estimate, state revenue loss for 2012 will be in the \$11.4 billion to \$12.65 billion range. See Donald Bruce and William Fox, *State and Local Sales Tax Revenue Losses from E-Commerce*, Transaction Tax Standards Association (Apr. 8, 2009), <http://www.t2sa.org/book/export/html/142>. But see Annette Nellen, *California’s Use Tax Collection Challenges and Possible Remedies*, Calif. Tax Lawyer 25, 27 (Fall 2007) (describing a number of other estimates for different years).

An Analysis of Tax Administration Issues Raised by a Consumption Tax,
Such as a National Sales Tax or Value Added Tax

federal forms.¹⁷³ It could pay a small percentage of the federal tax to conforming states.¹⁷⁴ Conformity with a broader federal tax base might allow the states to simplify their laws and lower rates. It could also facilitate joint federal and state audits and information sharing that could improve compliance, which could in turn, fund further rate reductions.

State level coordination and simplification would be easier with fewer federal preferences.

The Canadian system demonstrates that a federal VAT can coexist with provincial RSTs and VATs that are either coordinated or uncoordinated.¹⁷⁵ However, state conformity with a federal VAT or RST would be easier if the federal tax did not provide a significant number of exemptions, such as the small business exemption, which are not typically available under state RSTs.¹⁷⁶ Conformity would reduce the marginal compliance and administrative burdens associated with any new federal tax, potentially even reducing the overall compliance burdens faced by businesses currently subject to multi-state RST filing obligations, especially if coordinated filing and payment procedures were adopted.

A federal VAT could replace state RSTs.

Another way to achieve conformity might be to replace state RSTs with a federal VAT, the proceeds of which could be distributed back to the states. For example, Australia replaced inefficient sub-national sales taxes with a federal VAT.¹⁷⁷ The federal government in Australia collects the VAT and distributes the revenue to Australian states and territories.¹⁷⁸ A similar arrangement could be considered for the U.S., if it could be structured so as not to unduly impinge state sovereignty.

¹⁷³ In Canada, the national revenue agency collects the sales tax on behalf of some provinces, and one province collects both the provincial and federal VAT. For a discussion of Canada's experience in enacting a national VAT while harmonizing provincial sales taxes, see, e.g., Richard Bird, et al., *Coordinating Federal and Provincial Sales Taxes: Lessons from the Canadian Experience*, ITP Paper (Nov. 2006).

¹⁷⁴ The Fair Tax Act of 2003, H.R. 25, and similar legislation would allow the states to administer a national sales tax in exchange for one percent of total collections.

¹⁷⁵ Some Canadian provinces have coordinated sales taxes, while others have uncoordinated sales taxes, and one province has its own uncoordinated VAT. For an interesting discussion of how Canada's VAT system evolved, see Richard M. Bird and Pierre-Pascal Gendron, *Sales Taxes in Canada: The GST-HST-QST-RST "System"* (May 29, 2009), <http://ssrn.com/abstract=1413333>.

¹⁷⁶ For further discussion of this issue, see Charles McLure, *Coordinating State Sales Taxes with a Federal VAT: Opportunities, Risks, and Challenges*, Symposium on Federal Tax Reform and the States (May 15, 2005). Businesses registered for the federal VAT could be treated as having an RST exemption certificate. *Id.* They could be listed in a federal database just like the IRS's current TIN matching program which allows taxpayers to validate name/TIN combinations before filing a return. See Treas. Reg. § 31.3406(j)-1; Notice 2007-59, 2007-30 I.R.B. 135.

¹⁷⁷ GAO Report at 35-36.

¹⁷⁸ *Id.*

CONCLUSION

At combined federal and state rates below about ten percent, experts have concluded that the administrative costs and burdens associated with a federal RST may be lower than for a VAT, but that a VAT may be less costly and burdensome if higher rates are needed. Moreover, a VAT is less dependent on compliance by those businesses – often small businesses – making the final sale to consumers. If a VAT is needed, a credit invoice method VAT probably does a better job of minimizing opportunities for noncompliance than a subtraction method VAT (or an RST) because business buyers have an incentive to ensure that the seller invoices properly reflect the VAT. If the seller's tax liabilities (or credits) are correctly reflected on invoices, tax preparation could involve adding up the tax (or credit) shown on the invoices. The possibility that the IRS could easily audit these invoices may discourage underreporting.

Minimizing special VAT rates, exemptions, and preferences would also help to minimize VAT complexity, reduce compliance costs, opportunities for noncompliance, tax sheltering opportunities, and disputes about whether transactions qualify for the reduced rate or preference. In addition, a credit invoice method VAT could be simpler than a subtraction method VAT because it could be structured as a destination-based tax that would not require complex international tax rules.¹⁷⁹ It might also be easier to coordinate with state RSTs. Any progress a new federal VAT or RST could make in coordinating and simplifying state sales or income taxes without unduly impinging state sovereignty could potentially reduce complexity and burden, especially for multi-state businesses.

¹⁷⁹ As discussed above, certain subtraction method VATs could not be destination-based without violating trade rules.