What a Federal Consumption Tax Would Mean for America
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Introduction: Getting Acquainted With VAT

By Martin A. Sullivan

Until recently, most talk about a value added tax in the United States was an academic exercise. Policy experts kept telling anyone who would listen that we could boost our competitiveness if some form of a VAT was used to replace all, or at least the worst parts, of our clunky income tax. But there was no pressing need for a VAT and no political incentive to undertake the arduous task of orchestrating a major tax reform.

But times are changing. Between the 2007 and 2010 fiscal years, the national debt increased from 36 percent to 62 percent of gross national product. And matters are only getting worse. America is relentlessly moving toward the edge of a fiscal abyss. In Washington, while our leaders may talk tough, they are not taking action. To avoid upsetting voters, they are careful not to even hint at spending cuts or tax increases of the size needed to make a real dent in the problem. With no limit on the national credit card, the daily push and pull of politics continues unhindered by the impending crisis.

Our system of checks and balances and the usual political gridlock are partly to blame. Also part of the mix is our national mental block about the federal debt. The tough choices that must be made are outside the scope of current political discourse. Our ungainly political system seems incapable of processing our giant financial problem. We require great leaps forward. We are getting baby steps. Nevertheless, time marches on. Our population is aging. The expense of our healthcare is soaring. Something must give.

There are three options. None are pleasant.

The first is to do nothing. This would send the finances of the federal government into uncharted territory. Figure 1 shows the trajectory of the federal debt as a percentage of GDP if current policies remain in place. (The trajectory is steeper if the Bush-era tax cuts do not expire.)
There are two concerns with this journey into the unknown. Unchecked federal deficits gradually weaken the economy as government debt absorbs private saving and crowds out capital formation. The other problem is the possibility of a sudden loss of investor confidence in the government’s ability to manage its finances, which could dramatically increase our cost of borrowing.

The second option is a large reduction in government spending. In the abstract, this is the approach favored by many, especially those from the political right. But the popular notion of shrinking the government loses much of its appeal when the discussion moves from the general to the specific. For example, few conservative politicians are willing to endorse cuts in Social Security and Medicare spending, the most obvious targets for reducing government expenditures. The size of the spending cuts needed to level the growth in government debt is startling — about $500 billion annually. That amount far exceeds what can be achieved by eliminating waste, fraud, and pork.

Figure 2 shows the composition of projected federal spending for 2020. To level off the debt would require cuts of about 3.6 percent of GDP. In 2020 that would equal about 14 percent of all federal spending. If cuts to Social Security, Medicare, Medicaid, defense, and interest payments are taken off the table, Congress would need to cut all other spending by 60 percent. The major components of “other spending” in Figure 2 include expenditures for veterans benefits and services; law enforcement; unemployment compensation; food and nutrition assistance; IRS administration; health and human services administration; Social Security administration; education; transportation; agricultural support; international affairs; general science; and space exploration.

Each of us has our views about what should be cut first, but all can probably agree that spending cuts of that magnitude would present momentous difficulties.

1For example, the Tea Party’s “Contract From America” calls for balancing the budget without tax increases.
Projected Federal Spending in 2020

- Social Security (22%)
- Other Spending (23%)
- Net Interest (14%)
- Medicaid (8%)
- Defense (15%)
- Medicare (17%)

Source: Congressional Budget Office.
This leads to the third option — raising taxes. It’s only the extreme political and economic fallout from the first two options that drives us to seriously consider a major tax increase in the face of the strong antitax sentiment in the United States.

Among the unpleasant possibilities, a VAT must be on the short list of options. For starters, a VAT is a consumption tax. Economists of all stripes agree that if there must be a new tax, a broad-based consumption tax will do the least economic damage. Further, all the world’s other leading economies have VAT regimes.

The amount of revenue a VAT would bring in depends critically on the details of its design, but a reasonable estimate is that it would take a VAT with a rate in the neighborhood of 10 percent to stabilize our country’s debt-to-GDP ratio. This ballpark figure is only a point of reference, not a prediction or a recommendation.

It’s unlikely a VAT would ever become law in America without major spending cuts also contributing to deficit reduction. Concurrent spending cuts would lower the VAT rate needed to restore fiscal sustainability. Conversely, there is a good chance that any new VAT would fund a reduction of other taxes. That is, there could be a tax reform and deficit reduction element to the adoption of a VAT. That would raise the VAT rate necessary to achieve fiscal sustainability.

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We usually quantify the activity of a business in terms of profits or revenues. Although you will never find it on a financial statement, another measure of business activity is the concept of value added — that is, the difference between revenue from sales to customers and purchases from other businesses. Collecting a tax on that value added requires that businesses compute this difference. Individuals have no responsibility in such a tax system (for instance, no returns to file) except to pay the sales price at the cash register at the time of purchase.

To consumers, a VAT can look identical to a retail sales tax if the amount of tax is separately stated from prices. The VAT, however, can put the tax out of view if retailers are allowed to bury it in the price with no separate mention of the tax.
Like a retail sales tax, a VAT is a tax on spending. That is the key to understanding the policy debate surrounding the VAT. A tax on consumption has distinctly different economic characteristics than an income tax. Income equals spending plus savings. The difference between the two taxes is the treatment of savings. Savings are exempt under a consumption tax, but taxed under an income tax. This difference has important implications for both economic growth and for fairness.

One of the surest methods of promoting competitiveness and long-term economic growth is to increase savings. Savings provides funds for capital formation. More capital leads to higher productivity and wages. Generally speaking, under an income tax people who save more are taxed more over their lifetimes than people who save less. In contrast, a consumption tax has no bias against saving. Under a consumption tax, people’s lifetime tax burden is unaffected by their savings rate.

In addition to its potential effect on growth, the other key feature of a consumption tax is its effect on the distribution of income. In general, low-income families save little or no money. And by borrowing, some families may even spend more than they earn (negative savings). Moving up the income scale, the proportion of income devoted to savings tends to increase. So a consumption tax, measured as a percentage of household income, is larger for low-income families than for high-income families. Most consumption taxes have a single standard rate, while most income taxes have a multitiered progressive rate structure, adding to the different distributional effects.

For many politicians, redistributing the tax burden from upper- to lower-income families is unacceptable. With the intent of alleviating the burden on the poor, most VAT systems now in

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2Throughout this volume, authors adopt the widespread convention of assuming the value added tax is a consumption tax. This does not follow from its resemblance to a retail sales tax. It follows from its favorable treatment of capital purchases by businesses. Under all VATs in operation around the world, the purchases of property, plant, and equipment are deducted at the time of purchase (instead of written off over the useful life of the asset, as under an income tax). It is possible to design a VAT as an income tax by requiring businesses to depreciate capital purchases. In 1992 the Treasury Department proposed an income-based value added tax it called the comprehensive business income tax.
effect provide preferential treatments for various necessities. Those items typically include home-prepared food, medical care, and some types of clothing. Although it is widely adopted, tax experts consider this bifurcated approach a clumsy and complex solution to the fairness issue. (After all, rich people can purchase large amounts of “necessities” eligible for a reduced VAT rate.)

A preferred alternative among policy experts is to provide cash rebates to low-income households to offset the regressive aspects of the VAT. One novel approach made possible by modern technology would provide tax relief for necessities only to low-income families using “smart cards” to verify their identity.

* * *

Most VAT systems around the world are of the credit invoice variety. Under this method, businesses pay gross tax on their business receipts and get offsetting tax credits for VAT previously paid by sellers of goods and services they purchase. The main alternative to the credit invoice method is the subtraction method, which uses a company’s accounting records to calculate value added (typically, sales minus purchases) and calculates the VAT burden as a percentage of that taxable amount. Because it lends itself more easily to preferential treatment of some items, politicians generally favor the credit invoice method. For the same reason, many economists prefer the subtraction method VAT.

Besides a VAT, there are several other proposed taxes that can be viewed as broad-based consumption taxes. They include:

- The FairTax. The FairTax is a national sales tax made famous through the efforts of House Ways and Means Committee member John Linder, R-Ga. Linder first proposed FairTax legislation in 1999. His latest version (H.R. 25) has over 60 cosponsors. Companion legislation (S. 296) introduced by Sen. Saxby Chambliss, R-Ga., has four cosponsors.

- The flat tax. The flat tax is a single-rate VAT divided into two parts: a business component and a household component. The business tax would operate like a subtraction method VAT except that it would allow businesses to deduct wages paid to employees. Individuals would be taxed only on their
wage income, at a single rate, and would be allowed generous personal exemptions.

■ The X tax. Proposed by economist David Bradford more than two decades ago, the X tax is, like the flat tax, a two-part VAT. The essential difference is that the X tax would place more burden on upper-income households by imposing a progressive rate structure on wage income, while the flat tax relies on a single rate.

It’s critically important to note that each of these taxes has been proposed as a replacement to the current income tax. Most proponents of these plans would not support them as revenue-raising add-ons to the current tax system.

Of course, Congress does not need to create a new tax system to raise additional revenue. It can simply increase rates or broaden the base of existing taxes. Of those choices, base broadening seems the most likely option. The huge amounts of revenue necessary to stabilize the country’s finances can only come from cuts to some of America’s favorite tax breaks. They include the mortgage interest deduction, the deduction for state and local taxes, the exclusion to employer-provided health benefits, and various tax breaks for retirement savings. It took a monumental effort on the part of Congress and President Reagan to broaden the income tax base with the Tax Reform Act of 1986. That bill included large cuts in the individual and corporate tax rates and was revenue neutral. A revenue-raising income tax reform would encounter much greater political obstacles.

* * *

Love it or hate it, the VAT will continue to be in the thick of the policy debate as long as our country’s fiscal policies push the national debt to unprecedented levels. Unfortunately, this trend will probably continue for many years. It does, however, make a thorough reading of Tax Analysts’ VAT Reader a prudent, long-term investment of one’s time.
Exploring the Origins and Global Rise of VAT

By Kathryn James

From relatively inauspicious beginnings in the early 20th century, the VAT has been adopted by more than 140 countries and accounts for approximately 20 percent of worldwide tax revenue.\(^1\) Perhaps only the income tax provides a stronger example of 20th-century tax policy convergence. As Sijbren Cnossen wrote, "The nearly universal introduction of the value added tax should be considered the most important event in the evolution of tax structure in the last half of the twentieth century."\(^2\)

As the only developed nation without a federal VAT, the United States remains the highest-profile exception to the trend toward VAT. This exceptionalism persists in the face of a growing belief among U.S. tax policy commentators that the introduction of a VAT is either inevitable, or at least a possibility in light of burgeoning federal government debt and spending commitments. This essay examines how the global history of VAT is relevant to the U.S. debate.

**Origins**

The origins of the VAT have never been decisively settled. Attribution is variously accredited to one of two sources: the German businessman Wilhelm Von Siemens in 1918, or the American economist Thomas S. Adams in his writing between 1910 and 1921.\(^3\)

Von Siemens’s VAT concept was seen as a technical innovation that brought a key improvement to the turnover tax. VAT

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allowed for the recovery of taxes paid on business inputs and therefore avoided the cascading problems that arise with a turnover tax. While the innovation was clearly important, it hardly meant the revolutionary overthrow of the fiscal order.

Adams saw the VAT as an alternative to the business income tax.\textsuperscript{4} He was focused on federal tax policy, and since there was no national sales tax his concern was not with technical modification to an extant regime but with a major alteration of the existing federal income tax system.

The fate of the VAT in Western Europe and the U.S. has largely reflected the different motives of the tax’s innovators. Germany, along with much of Western Europe, came to embrace the VAT as a superior technical modification to sales taxes already in place, and as an adjunct to the income tax. By contrast, U.S. policymakers’ ambitious and intermittent pursuit of the VAT — often as a proposed substitute for the federal income tax — has remained fruitless.

**The Rise of VAT**

The VAT was first introduced at a national level in France in 1954. Its original coverage was limited, and France did not move to a full VAT that reached the broader retail sector until 1968. The first full VAT in Europe was enacted in Denmark in 1967, although the country did not join the European Economic Community until 1973.\textsuperscript{5}

VAT adoption progressed in two major phases. The first occurred mostly in Western Europe and Latin America during the 1960s and 1970s. The rise of the VAT in Western Europe was accelerated by a series of EEC directives requiring member states to adopt a harmonized VAT upon entry to the European Union.\textsuperscript{6}


\textsuperscript{5}Ebrill et al., supra note 1, at 4; Sullivan, supra note 3, at 15.

The second phase of VAT adoption occurred from the late 1980s with the introduction of VAT in some high-profile industrialized countries outside the EU, such as Australia, Canada, Japan, and Switzerland. This phase also witnessed the massive expansion of VAT in transitional and developing economies, most notably in Africa and Asia.

The IMF and the World Bank are identified as key influences in the rapid adoption of VAT among these countries. Less has been said about the significant role of U.S. policymakers and agencies in promoting VAT. This activity includes the pioneering, albeit unsuccessful efforts of the Shoup Mission to introduce VAT during the post-World War II U.S. occupation of Japan and the prominent role played by the U.S. Agency for International Development (USAID) in promoting VAT through the provision of funding and technical assistance to developing and transitional economies.

Ironically, U.S. tax policy experts have been at the forefront of exporting a tax reform abroad that has consistently eluded them at home.

The ‘Good’ VAT

Commentators generally agree as to what constitutes an ideal or ‘good’ VAT regime. The prescriptions entail a flat rate VAT extending through to the retail stage of the economy, levied on a broad consumption base of goods and services with minimal exclusions.

What distinguishes a VAT from the retail sales taxes common throughout the U.S. states is that the VAT is levied on each transaction in the production chain, rather than being collected...
only at the retail stage, with business being able to obtain full credit or an immediate deduction for VAT paid on inputs (including capital goods) offset against the VAT collected on outputs. As a result, the tax is intended to be borne only at final consumption. There is strong support, although not necessarily consensus, for levying VAT on a destination basis, meaning it would be payable in the jurisdiction where consumption rather than production occurs. This has the intended effect of making exports exempt or zero rated for VAT purposes.

The consensus as to what constitutes an ideal VAT is matched by a widespread acknowledgment that these prescriptions “are often met in only in the breach.”10 Today we can speak of three main varieties of VAT: the European model, the New Zealand model, and the Japanese model. Of the three major types of VAT in existence, New Zealand’s comes closest to resembling the ideal — that is, levied at a single rate on a relatively broad base. Most jurisdictions have adopted a European-style VAT marked by multiple rates and varying degrees of exemptions. In practice, no two VATs look exactly alike, with differences in rates, thresholds, exemptions, refund, and coverage. Some VATs exist subnationally or are limited to the manufacturing or wholesale level.

Like with any other tax, the revenue-generating potential of the VAT is relative to a country’s administrative capacity. The VAT produces far less revenue, far less efficiently, in countries with weak administrative capacity.11 Even when supported by high-level administrative capacity, and despite exaggerated claims to the contrary, real-world VATs are not immune from tax avoidance and evasion activities. Most of those problems involve taxpayer exploitation of the credit invoice mechanism.12

10Cnossen, supra note 2, at 400.
VAT’s Popularity

Many believe the VAT spread globally because it is the consumption tax best suited to the revenue needs of states in an increasingly globalized economy. Even those who recognize the role of key regional and international institutions in promoting VAT often attribute the motives behind the promotion to the merits of the policy instrument itself.

As a result, the rise of the VAT is attributed to such virtues as the tax being the best method of taxing general consumption, its neutral treatment of exports, and its revenue-raising capacity — which may be a matter of concern for those opposed to enhancing government’s ability to provide public goods and services.13

These factors may explain VAT’s global rise and its appeal to policymakers. They also offer a useful political strategy for promoting the adoption of VAT in the few places where it doesn’t exist. Rather than assess the relative merits of VAT (which is done amply elsewhere in this volume), this essay highlights how reference to these putative merits alone does not provide a full account of VAT implementation worldwide. Championing the VAT’s virtues may overlook why many VAT regimes depart from ideal policy standards. These departures from “good” policy prescriptions are often the result of localized circumstances and trade-offs designed to buy necessary political support. For example, the first European VATs were not adopted as stand-alone tax structures but through the gradual amendment of existing turnover taxes. That means many of the exemptions or reduced rates in Western European VATs are based on the original turnover tax that the VAT replaced.

To explain why VAT regimes frequently depart from the ideal, it’s necessary to focus on the tax’s history as a policy idea or instrument whose acceptance has been highly political, fiercely contested, and shaped by local conditions. This calls for more exploration of how what is now a global phenomenon has been implemented domestically.

13See, for example, OECD, Consumption Tax Trends, 23 (2008); Ebrill et al., supra note 1 at xi.
The introduction of national broad-based consumption taxation in developed countries such as Australia, Canada, and Japan was met with fierce and prolonged resistance. Each site of resistance has adopted a VAT that departs in varying degrees from the ideal policy prescriptions. In Australia and elsewhere this was evidenced by the exclusion of food and some essential services from the VAT base to reduce objections to the VAT’s regressivity. In Japan it was reflected in the adoption of a low-rate, subtraction method VAT. In Canada it has resulted in a slow and protracted process of harmonizing a federal VAT with provincial sales taxes.

Focusing on the factors that have shaped domestic implementation of VAT in those three jurisdictions and elsewhere helps reveal much of what is left untested or unsaid regarding the global rise of the VAT. It’s especially useful to a U.S. audience set to either grapple with implementation or continued resistance.

Challenging the Assumptions

Few of the propositions offered to explain the VAT’s rise have been tested, let alone proven. It’s one thing to argue that the VAT’s neutral treatment of exports makes it more suited to the demands of a globalizing economy. It’s another thing to show that that feature helps win domestic political acceptance of the tax. The trade competitiveness argument did not resonate with a skeptical Canadian public.

Patterns of resistance to a U.S. federal VAT are already detectable. Every VAT-style reform proposal offered, from President Richard Nixon to George W. Bush, has met with a similar pattern of opposition: Businesses feared the perceived complexity and administrative burden of the VAT; state and local governments were concerned about the balance of federal taxing power and intrusions into the sales tax area; liberals denounced the perceived regressivity of a VAT; conservatives feared the VAT’s reputation as a money machine that would fuel government growth.14 This

clamorous opposition often drowns out appeals that are based on technical virtues such as export neutrality.

**Unveiling the Motives**

Whether intentional or otherwise, the presentation of the VAT as a mere technical innovation ignores the difficult political, economic, and moral questions that often accompany decisions to introduce the tax.

For example, in the U.S. one key question is whether a consumption tax or the income tax is the preferred revenue base. Although the answer need not be an either/or proposition, it is frequently portrayed as one by proponents of tax reform.

That the U.S. income tax base has moved so steadily to a consumption tax base complicates the question of the tax mix. The more the income tax shifts toward a consumption base, the less likely it is that the tax will offer a reliable means of preserving progressivity, and the greater the pressure will be to compensate for the VAT’s regressivity through the design of the VAT itself.

Suggestions to compensate for the VAT’s regressivity through the spending side must compete with the leviathan rhetoric that has pervaded recent U.S. VAT debate whereby the VAT’s perceived success in generating revenue has conservatives fearing that the adoption of an effective revenue raiser will fuel growth of the public sector.

**Domestic Institutions Matter**

The furor in the U.S. over healthcare reform demonstrates the difficulty of pursuing measured debate on issues that stir fiercely partisan divisions over the appropriate role of the state. The labyrinthine structure of the policymaking process, replete with veto points, presents a minefield for prospective reformers, particularly in the self-interested politics of tax reform.

Tax politics in this environment has often meant the accretion of benefits for special interests — a process that rarely attracts much public scrutiny. It also results in myriad proposals from various groups keen to advocate for tax policy in their own interest. Whereas powerful interest groups were united behind a VAT starting in the mid-1990s in Australia, U.S. business and other conservative lobbyists remain hopelessly divided on their
preferred vehicle for tax reform, proffering everything from various flat tax proposals to unlimited savings allowance taxes and VATs.\textsuperscript{15}

Unlike in several other developed jurisdictions, the absence of an extant national sales tax has denied prospective VAT reformers a powerful selling point — namely that the VAT is an overdue replacement for an inferior sales tax such as the turnover tax or wholesale sales tax. Conversely, the absence of a national sales tax inflates the ambitions of would-be tax reformers who focus on the flaws of the income tax and propose its wholesale replacement with various other models. This constitutes a much more radical shift than simply replacing a bad sales tax system with a better one.

**Conclusion**

While the rise of the VAT in the late 20th century was significant, conflating the reasons for its advancement with the putative merits of the tax largely ignores how the VAT has developed across the world. U.S policymakers who are considering a VAT as an alternate revenue source to address the country’s burgeoning debt would benefit from looking past the banner-waving to the political realities of VAT implementation elsewhere and at home.

\textsuperscript{15}See, e.g., discussion in Alan Schenk and Oliver Oldman, *Value Added Tax: A Comparative Approach* 442-448 (rev. ed. 2007).
I. Introduction

The United States is the only major country in the world without a value added tax — the consumption tax of choice of some 150 other countries. All countries that are members of the OECD have a VAT, including the partners of the United States in the North American Free Trade Agreement — Canada and Mexico. In the European Union, which comprises 27 member states, the adoption of the VAT is a prerequisite for membership because it is uniquely equipped to tax imports on par with domestically produced goods and services and to free exports from tax. The United States will have to consider the adoption of a VAT if the federal budget deficit is to be reduced, or, more specifically, if adequate financing is to be provided for the provision of universal healthcare, a key element of President Obama’s social-economic program.\(^1\)

This article examines the nature and workings of the VAT by comparing it with other broad-based consumption taxes. The article contains four sections. Following this introduction, the section discusses the different forms of consumption tax. In theory the base of the various consumption taxes is the same;

\(^1\) Early on, Charles McLure (1987), an influential scholar, advocated the adoption of the VAT to reduce the federal budget deficit. For a health VAT, see the imaginative proposal by Burman (2009).
hence, their economic impact and revenue yield should not differ. In practice, however, open economy aspects and feasibility constraints imply that there are important differences among them. The VAT emerges as the preferred choice, primarily because it is the most neutral and feasible alternative. The VAT does not affect the forms and methods of doing business or, more broadly, trade and investment, and does not discriminate between domestically produced and foreign-made products. Importantly, the VAT is not a cost to business.

These observations form the background for a discussion in the third section of how the tax is perceived by lawyers, economists, and accountants. Lawyers emphasize that the VAT is a tax on transactions — sales and purchases — made by registered businesses. This requires clear definitions of who should be taxed, on what, where, when, and to what extent. In short, unambiguous legislation is essential if the VAT is to be effectively implemented. Economists argue that the VAT is a tax on labor income and the business cash flow component of capital income. Unlike the income tax, the VAT does not include the normal or hurdle rate of return on capital in its base; that is, at the margin it does not interfere with investment. As accountants show, consumption taxes can be best understood by working through the intricacies of a profit and loss (P&L) account in determining the tax bases and liabilities. It appears there is much to learn from the insights provided by the views of the various professions.

The fourth section sums up the three major lessons learned from worldwide experience, which the United States should heed if it decides to adopt the VAT. It is important that the VAT be as broadly based as possible and that a single rate apply to all transactions. Only exports should be freed of tax.

Note that this article is a primer on VAT, not a detailed treatment of all its legal aspects, economic effects, or political implications. Readers whose appetite has been whetted should refer to Ebrill et al. (2001); Schenk and Oldman (2007); Bird and Gendron (2007); Crawford, Keen, and Smith (2010); and the many references cited in these publications.
II. Broad-Based Consumption Taxes

Much can be learned about the VAT by comparing it with other broad-based consumption taxes. Therefore, this section defines the various forms of consumption tax that can be distinguished. This is followed by an exposition of the computation of the tax base of each consumption tax, highlighting its equivalence with other consumption taxes. Subsequently, the practical and economic differences between the various taxes are noted. The VAT emerges as the consumption tax of choice, a view that finds support in the VAT’s prevalence around the world.

A. Forms of Consumption Tax

The nature of the VAT can be best understood by comparing it to the following broad-based consumption taxes, which are levied or have been proposed in the United States, the EU, or in the tax literature:

- A retail sales tax (RST) that is applied to sales of goods and services by registered businesses to consumers and unregistered entities.
- A credit-invoice method of VAT that taxes all sales by registered businesses but permits these businesses a credit (deduction) for the tax on purchases (including investment goods) invoiced by other registered businesses against the tax on sales.
- A direct subtraction method tax (also called business transfer tax (BTT) in the United States) that permits registered businesses to deduct purchases (including investment goods) from other registered businesses from sales and that taxes the difference between sales and purchases directly rather than indirectly as under the VAT.²
- An addition method tax that taxes aggregate wages as well as residual value added by registered businesses as computed from their P&L accounts.
- A flat tax, much discussed in U.S. tax literature, that allows registered businesses to deduct wages from value added as

²In this article, the acronym VAT is reserved for the credit-invoice method of consumption tax, although, in principle, the direct subtraction method tax, the addition method tax, and the flat tax also can be considered variants of value added taxation.
calculated under the direct subtraction method, but that taxes these wages at the level of individual wage earners (permitting a basic exemption). Residual value added is taxed at the business level, without an exemption — hence the name “flat tax.”

A personal expenditure tax that taxes expenditures on goods and services at the level of the taxpaying individual by subtracting savings (including loan repayments and purchases of stocks, bonds, and nonresidential real estate) from aggregate incomes (including loan receipts and proceeds from the sale of assets), both calculated on a cash flow basis.

**B. Equivalence of Consumption Taxes**

The equivalence of the various consumption taxes can be illustrated best by reference to the stylized example in Table 1, which traces the manufacture and sale of the desk at which the first draft of this article was written. Following the production and distribution cycle, we start with the lumber company P (the primary producer), who sells wood to the furniture manufacturer M, who delivers the desk to the wholesaler W, who distributes it to the furniture store R (the retailer), who in turn puts the desk at our disposal. For simplicity, it is assumed that each stage purchases the whole output of the previous stage and that P has zero inputs.

In each stage, the value of the inputs increases by the value of labor (wages) and capital (to be defined below) applied in the production or distribution of the desk. In terms of the example: \( A.2 + A.3 = A.1 \), which can also be written as: \( A.3 = A.1 - A.2 \). In other words, value added is identical to the difference between sales and purchases. Consequently, at the final (retail) stage, the sum of all values added throughout the production distribution process, and, by the same token, the sum of all the differences between sales and purchases (in either case, $2,000 in the example), equals the consumer price, exclusive of tax.

The example incorporates a number of accounting identities, which are worth repeating because they are fundamental to a

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3The example is based on Cnossen (1998).
good understanding of the VAT. Thus, the consumer price is always equal to the algebraic sum of all values added, is always equal to the sum of the differences between sales and purchases, and is always equal to the sum of wage payments and capital income. If this is borne in mind, it will readily be apparent that exactly the same total tax can be collected in either of two ways:

- In full under a retail sales tax.
- Fractionally throughout the production-distribution process by confining the tax to the value added at each stage. In turn, the fractional or multistage collection technique can be implemented in either of four ways:
  - indirectly by crediting the tax on purchases against the tax on sales under the indirect subtraction technique, called credit-invoice VAT;

| Table 1. Tax Liabilities Under Various Forms of Consumption Tax Levied at a Rate of 10 Percent (in US $) |
|---------------------------------|---|---|---|---|---|
| **Basic Information/Kind of Tax** | P  | M  | W  | R  | Total |
| A. Transactions (exclusive of tax) | | | | | |
| 1. Sales | 400 | 1,200 | 1,400 | 2,000 | - |
| 2. Purchases | 0 | 400 | 1,200 | 1,400 | - |
| 3. Value added (A.1 - A.2) | 400 | 800 | 200 | 600 | - |
| a. Wages | (380) | (750) | (190) | (560) | - |
| b. Capital income | (20) | (50) | (10) | (40) | - |
| B. Retail sales tax | | | | | |
| 4. Tax on retail sales (10% of A.1/R) | - | - | - | 200 | 200 |
| C. VAT | | | | | |
| 5. Tax on sales (10% of A.1) | 40 | 120 | 140 | 200 | 500 |
| 6. Tax on purchases (10% of A.2) | 0 | 40 | 120 | 140 | 300 |
| 7. Net tax (C.5 - C.6) | 40 | 80 | 20 | 60 | 200 |
| D. Direct subtraction method tax | | | | | |
| 8. Tax on sales minus purchases (10% of A.3) | 40 | 80 | 20 | 60 | 200 |
| E. Addition method tax | | | | | |
| 9. Tax on aggregate wages (10% of A.3.a) | 38 | 75 | 19 | 56 | 188 |
| 10. Tax on capital income (10% of A.3.b) | 2 | 5 | 1 | 4 | 12 |
| 11. Total tax | 40 | 80 | 20 | 60 | 200 |
| F. Flat tax | | | | | |
| 12. Tax on individual wages (10% of A.3.a)* | 38 | 75 | 19 | 56 | 188 |
| 13. Tax on capital income (10% of A.3.b) | 2 | 5 | 1 | 4 | 12 |
| 14. Total tax | 40 | 80 | 20 | 60 | 200 |

*aIgnoring the basic exemption applied at the individual level.

Source: Adapted from McLure (1989).
directly by subtracting purchases from sales and applying the tax rate to the difference under the direct subtraction method;

- directly by taxing aggregate labor income and capital income jointly at the business level under the addition method; or

- directly by taxing labor income and capital income separately at the individual and business level, respectively, under what is called the flat tax.

Table 1 illustrates these accounting identities. Under the basic assumption that the tax base and tax rate are identical, the total net tax collected under a retail stage tax (that is, $200, line B.4) equals the tax collected throughout the production-distribution process under the VAT (C.7), which equals the tax under the direct subtraction method tax (D.8), which equals the tax under the addition method tax (E.11), which, finally, equals the tax collected under a flat tax (F.14).

The computation of the tax liability under the personal expenditure tax is not shown in Table 1 because it is not derived from P&L accounts but from aggregate recordings of incomings and outgoings (savings) by individuals. Nevertheless, given the same base and rate, the tax liability under the personal expenditure tax should be the same as under the other consumption taxes.

C. Differences Between Consumption Taxes

Although in theory all consumption taxes are economically equivalent, in practice various important differences arise between them. Design and feasibility constraints, and open economy aspects have important implications for achieving basic, if sometimes conflicting, tax objectives, such as:

- fairness in the tax burden distribution;
- neutrality regarding producer and consumer choices;
- tax revenue allocation to the country of consumption (destination principle);
- minimization of administration and compliance costs; and
- restraining the ability of special interest groups to tinker with the tax base and rate (political robustness).

Each of these implications is examined briefly below.
1. **Fairness.** The RST, VAT, direct subtraction method tax, and the addition method tax are *in rem* taxes collected at the business level, without regard to the personal circumstances of individual consumers who are assumed to bear the tax. In this context, fairness simply means that all goods and services should be taxed alike. The flat tax and, especially, the personal expenditure tax, on the other hand, are *in personam* taxes, primarily collected at the individual level and hence equipped to incorporate basic allowances and graduated rates to achieve vertical equity goals. In fact, the personal expenditure tax, just like the income tax, can be levied fully in accordance with the ability-to-pay principle.

2. **Neutrality.** If consumption taxes are not to interfere with producer and consumer choices, the base should be defined as comprehensively as possible, while producer goods should not be taxed. As shown in real world experiences, this is possible under the VAT, but the RST has difficulty reaching services performed by small establishments (there is no tax on purchases that can be linked to the tax on sales) and in freeing dual-use goods (which can be used for business as well as personal purposes) from tax. Under the VAT, a tax credit will not be permitted unless the taxpayer proves to the satisfaction of the tax authorities that the dual-use goods have been applied for business purposes.4

There is no widespread experience with the design and administration of other *in rem* consumption taxes, but since they are accounts-based rather than transaction-based, in practice equal treatment of all goods and services may be more difficult to achieve than under the VAT.

Presumably, the flat tax and the personal expenditure tax should be judged primarily because of their effects on the work-leisure choice and the intertemporal consumption choice. All consumption taxes are neutral regarding the choice between present and future consumption, but they discriminate in favor

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4This favors the VAT on the plausible assumption that a taxpayer is less likely to cheat the tax authorities under the VAT than his suppliers under the RST. Under the RST, moreover, a taxpayer has an incentive to treat his customer no less favorably (by refusing the exemption) than his competitor might do. For a thorough comparison of VAT and RST, see Cnossen (1987 and 2002).
of leisure, which cannot be taxed. By contrast, an income tax distorts both the work-leisure choice and the intertemporal consumption choice. However, since the base of the income tax is broader than the base of a consumption tax, the rate of an income tax can be set at a relatively lower level to yield the same amount of revenue. This lower rate should mitigate distortions whose size tends to increase with the square of the tax rate. Accordingly, it is an empirical question whether an income tax or a consumption tax is, on balance, more distortionary.

3. **Destination principle.** In an open economy, the revenue of the RST, VAT, and the direct subtraction method tax is allocated to the country of consumption by applying appropriate border tax adjustments (BTAs). Exports are freed of tax, and imports are taxed on par with domestically produced goods. In practice, the VAT is better equipped to apply correct BTAs than either the RST or the direct subtraction method tax. The difficulty of freeing dual-use goods from tax under the RST means that the tax enters into export prices, while imports (whose price does not include any tax on dual-use goods) tend to be undertaxed compared with similar domestically produced goods. Under the direct subtraction method tax or BTT, furthermore, there is no presumptively correct documentary evidence (such as VAT invoices) of tax paid in previous stages of production and distribution, which hampers the application of unambiguous BTAs.⁵

In contrast, the addition method tax, the flat tax, and the personal expenditure tax would be levied on an origin basis (exports taxed, imports free of tax) or a source basis, to use income tax terminology. Generally, this means the primary impact of the tax is on producers, because consumers can buy goods at world prices without tax. In economics literature, origin taxation is more likely to violate production efficiency than destination taxation (Diamond and Mirrlees, 1971).⁶ The taxation of exports, moreover, would invite

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⁵This feature might invite objections from the trading partners of the United States, who would argue that the BTT is not a tax on products per se but rather an accounts-based tax on value added comparable to the business income tax, and hence not eligible for export rebate under the rules of the WTO.

⁶See the lucid exposition in Crawford, Keen, and Smith (2010). These authors point out that under the equivalence theorem, it is asserted that it does not matter for trade
transfer pricing issues similar to those that bedevil the corporation tax under an arm’s-length separate accounting system.

4. **Administration and compliance costs.** Compliance and tax administration costs should be largely the same under the VAT, the RST, and the direct subtraction method tax, but these costs would probably be greater under the flat tax and the personal expenditure tax, which are mainly collected at the level of individuals. Presumably, the RST, the direct subtraction method tax, and the addition method tax are more vulnerable to evasion than the VAT. Administratively, the retail level tends to be the weakest link in the production-distribution chain. The accounts-based nature of the direct subtraction method tax and the addition method tax also implies that the tax is not shown on invoices. Hence, there is less of an audit trail than under the VAT. Also, sellers and buyers do not have opposing interests in the amount of tax that is being charged. The personal expenditure tax probably is the most complicated consumption tax because it requires the registration and monitoring of wealth.

5. **Political robustness.** Politically, the VAT is the most robust consumption tax, primarily because preretail firms do not benefit from exemptions that make it impossible for them to pass the tax of their suppliers on to customers. By contrast, the subtraction method tax, the flat tax, and the personal expenditure tax, and to a lesser extent the RST, are vulnerable to erosion through political favoritism. Under the BTT, it would be tempting to exempt some “worthy” product, sector, or activity. The flat tax and the personal expenditure tax would be susceptible to the same politically motivated concessions as the individual income tax.

D. **VAT: The Preferred Choice**

The VAT emerges as the consumption tax of choice. A well-designed VAT does not distort trade and investment and is highly successful in applying appropriate BTAs. This neutrality feature is important for the proper functioning of free trade areas, and investment whether goods and services are taxed on a destination or an origin basis. Since imports are exchanged for exports, a tax on exports is equivalent to a tax on imports. In practice, however, the conditions for the equivalence theorem to hold are so restrictive that it is of little value for policy purposes.
such as NAFTA, which do not permit discriminatory taxes on imports or subsidies on exports. Beyond that, the VAT is a productive, stable, and flexible source of government revenue. Since a VAT is collected on a current basis, say, monthly, its revenue generating capacity is not affected by inflation and the effect of rate changes on revenue is immediately visible. While the VAT scores high on neutrality and feasibility grounds, as an in rem tax it cannot be levied on an ability-to-pay basis, but this should be acceptable if adjustments to the income tax and social benefit schemes can be made.

The VAT’s neutrality deserves to be emphasized. For this purpose, the basic transactions, shown in Table 1, are replicated in Table 2a. Value added — the difference between sales and purchases — is not shown, simply because businesses, unlike authors of textbooks, do not compute it. In practice, for any business, the VAT is shown on the invoices that it issues to its registered buyers and that it receives from its registered suppliers, while VAT payments to suppliers and by buyers are made accordingly, as shown in Table 2b. Generally, the VAT on all purchases made for the purpose of the business is immediately creditable against the tax on (unrelated) sales, or, if there are no sales, any excess credit is eligible for refund without undue delay. Consequently, no VAT is collected by the government on transactions between registered businesses.

But if no net tax is borne by registered businesses in relation to their own value added, why does each firm nevertheless remit some tax to the tax authorities? To understand this apparent paradox, look upstream at financial flows rather than downstream at the flow of goods and services. The answer is then, as shown in Table 2c, that the consumer pays the full tax that is collected, again in full, by the retailer, but which is remitted to the tax authorities by all registered businesses in proportion to their share in the total value added embodied in the final product. Any net tax remitted by upstream firms is simply paid to them by

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7In legal terms, as stated unequivocally in article 167 of the EU’s Council Directive 2006/112/EC of 28 November 2006 on the common system of value added tax, a taxable business’s right to a tax credit (and refund) arises at the same time that the supplier has to account for the tax: The date of both events is based on the same VAT invoice date.
their successors in the production-distribution chain. The only plausible assumption that needs to be made for this to occur is that the average length of time for remitting tax and processing any net refunds is the same as the average length of time required for settling accounts receivable and accounts payable (inclusive of VAT).

It is this feature that has made the VAT such a neutral tax from a business point of view. It ensures that the effective rate of tax does not depend on the forms or methods of doing business. The rate is the same (and equal to the legal rate) regardless of how

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8To be sure, cash flow benefits (or costs) arise under VAT (as well as an RST) if a taxable business’s collection date (the date at which the tax is collected from customers before being handed over to the tax authorities) does not coincide with the remittance date (the date after the collection date but before the latest day designated for handing over the tax). For a general treatment of cash flow benefits and costs, see Sandford, Godwin, and Hardwick (1989).
many stages a good passes through before it reaches the consumer or, for that matter, whether the value is added in earlier rather than later stages in the production distribution process. The VAT is also neutral between capital-intensive or labor-intensive modes of production, between the corporate and the noncorporate form of business, or between home-produced and foreign-made goods.

In sum, the timing of tax collections under the VAT is the same as under an RST. Under both taxes, net tax is collected only when taxable products leave the “ring” of registered firms and are sold to final users or consumers (or to small, unregistered firms). So why not impose the tax at retail only? Because retailers are less likely to default on the VAT invoiced to them by their suppliers than on the tax they would have had to pay in full to the tax authorities if, instead, an equivalent RST had been imposed. This feature makes the VAT particularly robust from a tax collection point of view that is reinforced by requiring sellers to state the VAT on invoices. This facilitates the correct and expeditious application of BTAs (the VAT shown on the exporter’s purchase invoices is simply refunded) and compliance control (cross-checking). In other words, the tax leaves a clear audit trail. The invoice method also facilitates the calculation of the tax liability: The tax shown on all purchase invoices is simply summed and subtracted from the tax shown on all sales invoices.

E. Prevalence of Consumption Taxes

Not surprisingly, the VAT is the most prevalent form of consumption tax in the world. Some 150 countries have adopted it, although in practice differences can be large. Viewed globally, the advance of the VAT is the most significant development in the field of taxation in the past 50 years. The march of VAT started in the 1960s in the EU (where the introduction of the harmonized VAT is a nonnegotiable condition for membership) and South America, and ended in the 1990s in Central and Eastern Europe and the countries that are now members of the Commonwealth of Independent States (CIS, the republics of the former Soviet Union). Australia is the latest industrialized country that has converted to VAT. India is set to introduce a dual VAT, levied separately at the state as well as the federal level. The spread of
the VAT owes much to the IMF’s Fiscal Affairs Department, where Michael Keen has been the intellectual driving force.

The RST is levied by 45 out of 50 U.S. states and the District of Columbia (plus some 9,000 local governments), as well as 3 out of 10 Canadian provinces. The U.S. RSTs are not as broad-based and neutral as most VATs are because they exclude most services from the base and widely tax investment goods. The Nordic countries and Switzerland also used to levy an RST, but these countries switched to the VAT because it is better equipped to free producer goods of tax and easier to enforce. In the past, the RST received support (generally, as a replacement for the income tax) from Sen. Richard G. Lugar, R-Ind., former House Ways and Means Committee Chair Bill Archer, former Reps. Dan Schaefer and Billy Tauzin, and the lobbying group Americans for Fair Taxation.

The direct subtraction method tax used to be levied in Belarus, apparently with little success (Bird, 1995). Further, some CIS countries used to impose a tax-credit type of VAT through producer stages, but taxed distributors on their margins. Although this does not seem to make much sense (the difference in function between producers and distributors can hardly be made relevant for tax purposes), the explanation should be sought in the way in which businesses were taxed under the old turnover tax (Summers and Sunley, 1995). In the United States, the direct subtraction method tax has been pushed by former Rep. Sam Gibbons and the lobbying group American Council for Capital Formation. The appeal of this tax lies in its resemblance to a business tax, which may enhance its acceptability to consumers.

The flat tax has been proposed by Robert Hall and Alvin Rabushka (1985, 1995). It has received much attention in the United States because its wage component resembles a progressive income tax through the application of a basic exemption. As a result, it mitigates the regressivity of a consumption tax for

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9The federal government in Canada levies a VAT, called the goods and services tax, as does the province of Quebec. The Atlantic provinces (New Brunswick, Newfoundland and Labrador, as well as, recently, Ontario and British Columbia) have piggybacked the federal VAT in the form of surtaxes. Oil-rich Alberta has neither an RST nor a GST.
lower-income groups. What the flat tax cannot do, of course, is to make the tax burden distribution more progressive for higher income groups who receive capital income. In the United States, legislation for a flat tax has been tabled by former House Majority Leader Richard K. Armey and Sens. Richard C. Shelby, R-Ala., and Arlen Specter, D-Pa.

The addition method tax is used in some countries to tax the value added by financial institutions, which is difficult to compute under a tax credit invoice VAT, because the intermediation charge that should be taxed is embedded in the interest, premium, or return, which should not be taxed. Israel, Argentina, and France have experience with the addition method tax. Italy administers a direct addition method tax, called IRAP, at the regional level. It is not a destination-based VAT, however, because the tax is not refunded at export or levied at import.

India and Sri Lanka used to levy a non-cash-flow type of personal expenditure tax in the 1950s, but abandoned it after a few years because the tax proved difficult to administer properly. Subsequently, the feasibility of the expenditure tax has greatly improved following the pioneering work of an able lawyer, William Andrews (1974), and in his wake the U.S. Department of the Treasury (1977) and the Meade Committee (1978). Andrews showed that annual taxable consumption expenditures can be computed on an aggregate cash flow basis as the difference between incomings and savings rather than by having to add up all individual expenditures made during the year. In the United States, the expenditure tax, called the Unlimited Savings Allowance (USA) tax, has been tabled by the Strengthening of America Commission under the leadership of former Sens. Sam Nunn and Pete V. Domenici, who proposed that it be combined with a direct subtraction method tax at the business level (Seidman, 1997).

III. Lawyers, Economists, and Accountants

This section discusses the views of the legal, economic, and accounting professions on the VAT. There is much to learn from the opinions, which emphasize different aspects of the tax.

A. The Rigor of Lawyers

1. VAT law design. Lawyers are indispensable in making the VAT operationally possible. Unambiguous legislation is essential
if a VAT is to be effectively implemented. Under any tax, but particularly a tax that is based on voluntary compliance, clear definitions are required of who should be taxed, on what, where, when, and to what extent. In legal jargon, terms such as “taxable person,” “taxable and exempt supplies,” “place and time of supply,” and “taxable value” should be minutely prescribed.10

Taxable persons, who must apply for registration, are liable for tax for all amounts received or receivable by them for taxable supplies made in the course of a business, trade, or similar activity. Persons, natural and legal, are considered taxable persons only if they make taxable supplies independently. This excludes employees and agents acting for and on behalf of a principal from the taxable persons category. Only taxable persons can issue VAT invoices, which entitle buyers of taxable supplies to a credit for the tax shown on the invoice. Also, they must keep prescribed records of their economic activities, which serve as the basis for verifying whether they have met their obligations.

The VAT is imposed on “supplies of goods and services,” meaning all economic activity unless specifically exempted. A supply of goods is defined as “the transfer of the right to dispose of tangible property as owner,” a civil law concept. Generally, tangible property includes “electricity, gas, heat, refrigeration, and the like.” Services, tangible as well as intangible, are defined in catch-all fashion as “any transaction that does not constitute a supply of goods,” including “obligations to refrain from an act or to tolerate an act or situation.” To be taxable, supplies must be made against consideration, called the “taxable value,” which includes all forms of payment received by the supplier, in cash or in kind, whenever and however paid, regardless of who pays them. Gifts are not taxable, but nonbusiness use of a supply, for example, for personal or employee consumption, is taxable if provided free of charge. Exceptionally, arm’s-length prices may be substituted for actual realized values, for example, if the parties to a transaction are the same or related.

When it has been determined that a supply of goods and services has taken place, it is important to ascertain the place and

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10For an excellent summary treatment of the legal issues, see Williams (1996).
time of the supply. The charge to VAT extends only to goods and services supplied within a particular taxing jurisdiction or imported into that jurisdiction. Supplies of goods are located where the goods are delivered, made available, or handed over, except if goods are to be assembled or installed, in which case the place of supply is the place where the goods are assembled or installed. Since services cannot be the subject of physical observation and control, some other definition of the place of supply is needed. Under the EU’s new rules (to be effective as of 2010), the place of supply for business-to-business (B2B) services is the place where the recipient of the services has his business, while business-to-consumer (B2C) services are taxed at the place of the provider of the services.11

Further, the timing of the supply is important for deciding when a VAT invoice has to be issued. This in turn determines the tax period in which the VAT is due regarding the supply. As a rule, the time of supply occurs when an invoice is issued, generally within a week of the time when goods are delivered, made available, transported, or paid for — whichever event occurs earlier. The time of supply of services occurs when the services are rendered. Generally, input tax credits follow these timing of supply rules. Apportionment rules are in place for those cases when taxable persons make exempt as well as taxable supplies, or when they make personal use of business assets. No input tax credit is allowed for a number of goods and services, which although used in the course of taxable activities are indistinguishable from goods and services bought by consumers. Examples are personal or living expenses, employee benefits, recreational equipment and facilities, and passenger vehicles.

2. The VAT as a transactions tax. As implied by this brief description of VAT rules, the legal profession is adamant about viewing the VAT as a tax on transactions by registered entities against consideration. Lawyers also maintain that the VAT is a tax on consumption expenditures rather than on, more broadly,

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11Both rules are subject to major overriding exceptions concerning services to immovable property (taxed where the property is situated); cultural and educational services, and restaurants (taxed where actually performed); transportation (taxed proportionate to distance); and vehicle rentals (taxed where provided).
consumption activities. Moreover, they assert that the VAT is a tax on current consumption — on all goods and services that leave the ring of registered entities, regardless of whether they are consumed immediately or embody a stock of services that are consumed over the lifetime of the asset (for example, residential housing, cars, household appliances, and furniture).

This contrasts with the view held by economists that, ideally, the VAT should tax all consumption activities, including self-produced items of consumption, such as meals, because this would ensure equal treatment with other products bought in the marketplace. Lawyers would not consider this a taxable event, although they would tax, say, vegetables withdrawn from business stock for personal use by the greengrocer as a taxable self-supply on the argument that the vegetables are produced in a business context, not in a personal capacity. Accordingly the greengrocer’s homegrown carrots used for personal consumption (and not sold to customers) would not be subject to VAT. Economists would like to tax both events.

Economists also maintain that the VAT is a tax on flows rather than stocks. Ideally, the homeowner should be taxed periodically on the rental value of his property, just as the tenant should be taxed on the rent invoiced by the landlord. However, lawyers would argue that residential property should be taxed when the house is transferred from the taxable builder to the exempt owner-occupier. This follows from the legislator’s view that owner-occupiers should not be registered for VAT purposes. Lawyers point out that the in rem nature of the VAT does not support the position that durable consumer goods should be treated differently from nondurable goods. As a transactions-based tax, VAT should be imposed when the title to a durable consumer good passes on to the exempt consumer.12

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12Both views result in the same tax liability when the VAT on the value of newly created residential property is viewed, as it should be, as the tax on the present discounted value of the future dwelling services of the property. This implies, of course, that increases or decreases in the value of the dwelling services, reflected in changes in the value of the property, are not included in the tax base. For a more detailed treatment of the differences between an economist’s and a lawyer’s view of VAT (illustrated by the treatment of real estate), see Cnossen (1996).
Finally, the tendency of lawyers to accept the legislator’s product as given means that they tend to pay notably less attention to the distortions caused by the VAT than do economists. These distortions, which are a cost to society over and above the revenue yield of the VAT, result mainly from exemptions and, to a lesser extent, from rate differentiations. Exemptions distort input choices (for example, outsourcing) and harm exports. Rate differentiations interfere with consumer preferences and hence producer choices.

B. The Insight of Economists

Economists are good at analyzing the nature of a consumption tax. This can be done on the basis of a simple equation showing the identity between the sources (wages and capital income) and the uses of income (consumption and savings) in a household budget or a country’s national accounts. The following identity shows the relationship between the two sides of the budget for a closed economy and abstracting from government operations:

\[ Y = W + R = C + S \]

or

\[ C = Y - S = W + R - I \]

where \( Y \) is total income composed of labor income \( W \) and capital income \( R \), \( C \) is consumption, and \( S \) is savings (which equals \( I \), that is, investment). \( R \) is the sum of the risk-free or normal return on capital (in other words, its opportunity cost), entrepreneurial rewards for risk-taking (which can also be considered as labor income), and economic rents. In sum, \( R \) represents business profits, conventionally computed. The opportunity cost of capital is also called the hurdle rate of return. At the margin, it equals the rate of return on a riskless project. Accordingly, it can be likened to the inflation-adjusted, risk-free world rate of interest. A business will go on investing up to the point at which the expected rate of return on the project just equals the discount rate, which is the opportunity cost of capital.

\[ \text{Equation (1): } Y = W + R = C + S \]

\[ \text{or} \]

\[ \text{Equation (2): } C = Y - S = W + R - I \]

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For a useful treatment, see Auerbach (1997).
Each of the three terms in identity (2) can serve as the base for a particular consumption tax. Basically, the RST has C as its base. The RST is paid by consumers to businesses selling at retail, who remit the tax to the government. Similarly, the personal expenditure tax can be identified with a tax on Y - S levied at the individual level. It resembles the current tax on wage income, which permits a deduction for pension contributions, but taxes the contributions plus accumulated capital income on later payout, while the income net of the pension contribution is currently consumed.

The term W + R - I, representing value added, forms the base for the other forms of consumption tax. It is readily apparent that at the business level this value added is equivalent to the difference between sales and purchases in the P&L account, but calculated on a cash flow basis. In other words, investments (including inventories) are expensed immediately; the tax is fully creditable against the tax on sales, to use VAT terminology. This contrasts with the income tax’s matching principle under which the cost of investments is expensed over their economic life; hence, the normal return on capital is taxed.

As stated above, value added is taxed directly under a direct subtraction method tax, while it is taxed indirectly under a VAT. Under the flat tax, wages (W) are also deducted from value added (as calculated under the direct subtraction method) and subsequently taxed at the level of individual earners. The remaining tax base, that is, R - I (appropriately called business cash flow rather than capital income), is taxed at the business level. An important question under the flat tax is what to do with pension contributions: tax them as wages and exempt payouts (prepayment method) or exclude them from wage income and tax later payouts along with the capital income accumulated in pension funds (standard method). The flat tax, as proposed in the United States, follows the standard method. In principle, the present

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14Cash flow accounting should not be confused with cash basis accounting. In contrast to cash basis accounting, cash flow accounting is accrual based.
discounted value of the tax liability under this standard method equals the tax liability under the prepayment method.\textsuperscript{15}

The taxation of business cash flow distinguishes a consumption tax from a wage tax, which taxes \( W \) only. The two are equal if \( R - I \) is zero, which it is in a fully competitive market in which there are no economic rents to be earned. These rents can be associated with, for instance, headstarts, such as a favorable location, a well-known brand name, or a new technique or product. Further, investment \((I)\) may be taken to represent the present value of the services rendered by new business assets discounted at the normal rate of return on capital. Therefore, \( R - I \) represents the inframarginal return on old business assets. On the introduction (or increase) of a consumption tax, this tax is capitalized in the form of a lower value of the old assets suffered by the owners. For this reason, economists often refer to the VAT as a tax on wages plus old capital.

This discussion shows that the only difference between a consumption tax and an income tax concerns the tax treatment of the normal risk-free return on capital, which is exempt under a consumption tax but taxed under an income tax. It follows that a VAT can be converted into an income tax by disallowing an immediate credit for the tax on investment goods against the tax on sales, but permitting this credit to be spread over the economic life of investment goods. By the same token, an income tax can be converted into a VAT by taxing wages plus business profits after permitting an immediate write-off for investment goods and clawing back any deduction for interest.\textsuperscript{16}

Although their insights are most illuminating in understanding the nature of the VAT, economists tend to be dismissive of the legal requirements for a good tax, which are essential for tax certainty. VAT practice, which has to be rooted in civil and commercial usage, is often more obstinate than economists realize or are willing to admit.

\textsuperscript{15}For the equivalence and the conditions under which it holds, see U.S. Department of the Treasury (1977).

\textsuperscript{16}For an interesting legal analysis showing the link between an income tax and a consumption tax, see Slemrod (1997).
C. The Precision of Accountants

Accountants rightly believe that the VAT and other consumption taxes are best understood by working through the computations that are required to ascertain their bases and liabilities from the P&L accounts of taxable business firms. Moreover, this makes it possible to compare the consumption tax base directly with the base of the business income tax, which is also derived from the P&L account.

1. VAT and the P&L account. The P&L account is the central summary statement of a business firm’s activities. Consider the stylized example in Table 3, which shows the P&L account of a U.S. trading firm (rearranged to aid the understanding of the subsequent computations) as well as the items that enter into the VAT base and the corresponding gross and net tax liabilities.

The business sells goods and services that it produces by adding the value of the services of its labor and capital (understood as business cash flow, as defined above) to its purchases from other firms. The left side of the table, under A, shows the firm’s purchases of goods and services, including a piece of machinery, which is depreciated over four years. Also, opening and closing inventories are shown; $200 has been added to inventory in the reporting period. The right side of the table, under B, shows the firm’s sales of goods and services. Further, C, factor rewards, gives details of the value added by the firm’s labor and capital in the form of wages, depreciation, interest paid, and net profits earned. Also, the firm has some stocks and bonds on which it earns investment income, which is shown under D.

The VAT computations are shown in the top of the table under A and B. VAT is charged at a rate of 10 percent on sales of goods and services, and a credit is permitted for the VAT on purchases. Accordingly, the net VAT liability is $80 (line F).

Clearly, the entries for purchases in the conventional P&L account cannot be used directly to ascertain taxable value added. The reason is obvious. Although the P&L account and the VAT both record the transactions on an accrual basis, the VAT is also levied on a cash flow basis of accounting. Thus, no correction needs to be made for the change in the value of inventory, which must be made in the P&L account to match sales and purchases.
<table>
<thead>
<tr>
<th>Costs</th>
<th>P&amp;L Account</th>
<th>VAT</th>
<th>Proceeds</th>
<th>P&amp;L Account</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>P&amp;L</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Base</td>
<td>Tax</td>
<td>Base</td>
</tr>
<tr>
<td>A. Purchases</td>
<td>800</td>
<td>1,100</td>
<td>110</td>
<td>B. Sales</td>
</tr>
<tr>
<td>Goods</td>
<td>950</td>
<td>950</td>
<td>95</td>
<td>Goods</td>
</tr>
<tr>
<td>Services</td>
<td>50</td>
<td>50</td>
<td>5</td>
<td>Services</td>
</tr>
<tr>
<td>Inventory</td>
<td>-200</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Machinery</td>
<td>-</td>
<td>100</td>
<td>10</td>
<td>-</td>
</tr>
<tr>
<td>C. Factor rewards</td>
<td>1,300</td>
<td>-</td>
<td>-</td>
<td>D. Investment income</td>
</tr>
<tr>
<td>Wages</td>
<td>450</td>
<td>-</td>
<td>-</td>
<td>Dividends</td>
</tr>
<tr>
<td>Depreciation</td>
<td>25</td>
<td>-</td>
<td>-</td>
<td>Interest</td>
</tr>
<tr>
<td>Interest paid</td>
<td>35</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Net profits</td>
<td>790</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>E. Totals (A + C; B + D)</td>
<td>2,100</td>
<td>-</td>
<td>-</td>
<td>2,100</td>
</tr>
<tr>
<td>F. VAT base and tax (B - A)</td>
<td>800</td>
<td>80</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
in the reporting period for business income or commercial purposes. Further, the cash flow basis of accounting implies that the tax on the purchase of machinery is credited immediately against the VAT on sales.

Note that the VAT does not enter the P&L account; it is not a cost to business. VAT would be included in the value of purchases shown in the P&L account if the purchases were exempt, yet VAT had been levied on the inputs used in producing the purchases. Of course, VAT may appear on the balance sheet under accounts payable or receivable.

2. Comparing consumption taxes. The figures in the P&L account (Table 3) can also be used to compute the tax liabilities of other consumption taxes (and the business income tax), except the personal expenditure tax. For this purpose, the figures are regrouped in Table 4. Cash flow accounting is applied to inventory and machine purchases, but the matching principle is applied to the calculation of the base and the liability of the conventional business income tax. The top of the table shows the tax base calculations, the bottom the computation of the tax liabilities.

The calculation of value added under the VAT, the direct subtraction method tax and the flat tax can be performed without much ado, but the calculation is less straightforward under the addition method tax. Wages are shown on a cash flow basis, but rents (inframarginal profits) must be ascertained by starting with taxable profits for business income tax purposes (that is, $790, line 13), subtracting investment income (line 11; this is not value added by the firm), the purchase of machinery (line 9) and the addition to inventory (line 8), and by adding interest paid (line 7) and depreciation (line 6). Accordingly, rents total $350, which is added to wages (that is, $450) to obtain taxable value added of $800 (line 12).

The calculation of the RST is not shown in Table 4. It would be imposed on sales ($1,900) in Table 3 at a rate of 10 percent, and the tax liability would be $190. This amount is the same as the sum of the net VAT liability in Table 4 (that is, $80 ($190 VAT on sales minus $110 VAT on purchases)) plus the VAT on purchases (that is, $110), which, under VAT, is paid by the firm to its suppliers, who then remit this amount to the government in proportion to their own value added.
### Table 4. Computation of Consumption Tax and Business Income Tax Liabilities
(In US $, excluding 10 percent tax)

<table>
<thead>
<tr>
<th>P&amp;L Account</th>
<th>Consumption Taxes</th>
<th>Business Income Taxes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1,900</td>
<td>1,900</td>
</tr>
<tr>
<td>1. Sales</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Purchases</td>
<td>-1,100</td>
<td>-1,100</td>
</tr>
<tr>
<td>3. Value added/gross profits</td>
<td>=800</td>
<td>=800</td>
</tr>
<tr>
<td>4. Wages</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Rents/cash-flow</td>
<td>=350</td>
<td></td>
</tr>
<tr>
<td>6. Depreciation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Interest paid</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Inventory change</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Purchase of machinery</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Operating profits</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Investment income</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. Taxable value added</td>
<td>800</td>
<td></td>
</tr>
<tr>
<td>13. Taxable profits/cash-flow</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Tax bases

| 1. Sales                     | 1,900 |
| 2. Purchases                 | -1,100|
| 3. Value added/gross profits | =800  |
| 4. Wages                     | -450  |
| 5. Rents/cash-flow           | =350  |
| 6. Depreciation              | +25   |
| 7. Interest paid             | +35   |
| 8. Inventory change          | -200  |
| 9. Purchase of machinery     | -100  |
| 10. Operating profits        | +590  |
| 11. Investment income        | +200  |
| 12. Taxable value added      | 800   |
| 13. Taxable profits/cash-flow| =790  |

#### Tax liabilities

| A. VAT                       | 80 |
| a. VAT on sales (10% of 1)   | 190|
| b. VAT on purchases (10% of 2)| -110|
| B. Direct subtraction method tax (10% of 3) | 80 |
| C. Flat tax                  | 80 |
| a. Tax on wages (10% of 4)   | 45 |
| b. Tax on rents (10% of 5)   | 35 |
| D. Addition method tax (10% of 13) | 80 |
| E. Business income tax (10% of 13) | 79 |
| F. Cash-flow business tax (10% of 13) | 35 |
The calculations in Table 4, like the earlier accounting identities, establish that the four *in rem* consumption taxes and the flat tax are economically identical given the same base and rate. And, as noted above, this holds true for the personal expenditure tax.

3. **Business income taxes.** For comparison purposes, Table 4 also shows the computation of the tax liabilities of two kinds of business income tax:

- a conventional business income tax, under which purchases are related to sales in the same reporting period (matching principle) and machinery is depreciated over a four-year period; and
- a cash flow business income tax, which allows the immediate expensing of inventory additions and machinery, but which does not allow a deduction for interest.\(^17\)

The application of the matching principle implies that a conventional business income tax includes the normal return on capital as well as rents (inframarginal profits) in its base. By contrast, a cash flow business income tax excludes the opportunity cost of capital from its base by allowing immediate expensing. In other words, its tax base consists of inframarginal profits. Not surprisingly, the base of a cash flow business income tax is the same as the item “rents” in the base of the flat tax (that is, $350). Accordingly, the return on marginal investments, the hurdle rate of return, is not affected by a consumption tax. Other things being equal, this should promote saving and investment compared with an income tax.

Finally, the calculation of the various consumption and business income tax liabilities from the P&L account clearly indicates that all of these taxes are basically identical for tax compliance purposes. The VAT, like the business income tax, is an account-controlled tax. Accordingly, there is little difference between a VAT audit and a business income tax audit. This implies that

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\(^{17}\)Note that the cash flow variant is equivalent to a corporation income tax, conventionally computed, which permits a deduction from profits of the normal return on equity (equal to the inflation adjusted world rate of interest) and does not tax this return at the shareholder level (or the deductible interest on debt at the debtholder level). This variant is known as the allowance for corporate equity (Institute for Fiscal Studies, 1991).
these taxes should be administered by the same tax organization; return and payment processing activities could be placed in a separate department, but VAT audits should be performed jointly with income tax audits. Also, tax enforcement procedures should be closely linked to similar procedures for income tax purposes.

IV. Lessons From Worldwide Experience

This article has shown that a discussion of various alternative consumption taxes sheds light on the nature of VAT. Economically, the VAT is equivalent to an RST, even regarding the timing of tax collections. VAT is the preferred form of consumption tax, however, because it is collected piecemeal throughout the production distribution process, does not interfere with the forms and methods of doing business, unambiguously relieves exports of tax, is politically robust, is least vulnerable to evasion and avoidance, and is relatively easy to understand for the business community. By not taxing the normal return on capital, VAT does not affect the hurdle rate of return on investment.

With VAT, the eye should be on the ball, and the ball is revenue. As an in rem tax, VAT cannot be used to achieve vertical equity goals. Its main objective is to raise revenue as neutrally as possible. This requires the broadest possible base and a single rate. In this respect, the European VATs leave much to be desired (Cnossen, 2003). The EU pioneered the VAT and mistakenly tried to align its burden distribution as closely as possible to the old turnover taxes, although all member states had other more sophisticated instruments in place, such as income taxes and social benefit schemes, to manipulate the overall tax and government expenditure distribution patterns.

If the United States were to adopt a VAT, it is crucial to get it right from the start (Keen, 2009). Deviations from the undisputable requirements of a modern VAT are nearly impossible to undo once the tax has been introduced. Basically, the following lessons can be learned from the experience in new VAT countries, such as New Zealand, Singapore, and South Africa, and, to a lesser extent, Australia and Canada (which have unnecessarily muddled up the VAT rate structure):

■ Limit exemptions to those dictated by strict administrative cost benefit considerations. Exemptions violate the logic and
functionality of the VAT. They distort input choices and harm exports. Accordingly, most health, education, cultural, and financial services should be brought into the VAT base. Exemptions should be confined to elementary education and the sale of used residential housing.

- Levy the VAT at a single rate and do not impose a zero rate on so-called basic necessities, such as groceries. A zero rate on food is not a well-targeted instrument to alleviate the VAT burden on the poor. In absolute terms, the benefit of a zero rate accrues mainly to middle and high-income consumers who buy more expensive varieties of food, eat out more often, and throw food away more easily. Consequently, the concessionary treatment of food tends to give twice as much relief to high-income groups than to low-income groups, an odd way of alleviating the plight of the poor. The zero rate should be confined to exports.

- Provide for a high threshold of at least US $100,000 (and probably higher), so that small businesses and farmers do not have to register and pay VAT, saving on administration and compliance costs. Of course, small entities would still pay VAT on inputs purchased from taxable businesses, implying that only a part of the potential revenue would be forgone. At the same time, optional registration should be provided for small businesses, so they can pass the tax on inputs on to their customers, if desired. A high threshold would minimize the operational overlap between a federal VAT and the RSTs of the states.

Whether the United States should introduce a VAT is a question that is not for this author to answer. But if it does and

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18 For these and other reasons why an industrialized country should levy the VAT at a single rate, see Cnossen (1999).

19 Based on an earlier publication (Cnossen, 1994), Cnossen (2002) calculated that a US $100,000 exemption would reduce the number of potential registrants (25 million at that time) to approximately 9 million (including 5 million voluntary registrants) — less than the registrants under a national RST. The exempt registrants would account for 2.6 percent of aggregate gross receipts. In other words, if their value added would be one-third of gross receipts and the VAT rate would be 10 percent, the revenue forgone would be less than 0.1 percent of gross receipts.
heeds the lessons summed up above, it would have one of the most modern VATs in the world.

References


Prior U.S. Flirtations With VAT

By Alan Schenk

Alan Schenk is a professor of law at Wayne State University Law School in Detroit.

VAT is the fastest-spreading tax system in history. In the United States, however, VAT has become the most studied tax system that has never been seriously considered by Congress.¹ I became involved with VAT in 1968 when a Treasury official told me the hottest political issue for the next five years might be the VAT. Since then the VAT has been the subject of studies by presidential panels, government agencies and commissions, and the Joint Committee on Taxation. It has also been the focus of numerous reports by nongovernmental organizations.²

The tax literature over the past 40 years includes many proposals for tax reform that would shift our federal tax system from one heavily dependent on income taxes to one more reliant on consumption taxes. None of them has come to fruition. If that makes it appear that there’s little likelihood that the United States will ever seriously debate a VAT, consider that it took Japan about 40 years from when the government first enacted a preliminary version of the tax in 1950 (which was repealed in 1954) until a modern VAT became effective in 1989.

A broad-based tax on consumption is usually proposed for one of three reasons: to finance fundamental tax reform (that is, to use VAT revenue to reduce or repeal existing federal taxes), to raise additional revenue to reduce the federal budget deficit, or to finance specific entitlement programs (such as national healthcare). Most discussions about VAT in America have been linked


to the first of these propositions: fundamental tax reform. Past proposals for a broad-based consumption tax usually took one of the following forms:

- The credit invoice VAT or sales subtraction VAT;
- The retail sales tax (RST);
- The consumed-income tax; or
- The flat tax.

Differences between the two types of VAT are explained briefly in this essay and covered in more depth elsewhere in this publication. The RST resembles the various sales taxes imposed by 45 of the 50 U.S. states and the District of Columbia. The consumed-income tax, unlike the first two models, is an individualized tax. Each individual taxpaying unit is taxed on its annual income less contributions to personal savings. This can be conceptualized as a tax on consumption (income = consumption plus savings). The flat tax is typically patterned after a model devised by Robert Hall and Alvin Rabushka. Each of these models is discussed below.

Congressional Hearings and Administration Panels

There have been congressional proposals for a national sales tax to finance our country’s wars. They include a proposal in 1862 to finance the Civil War and a proposal in 1942 to finance World War II. The Treasury Department opposed the 1942 sales tax proposal. Neither proposal was enacted.

Soon after President Nixon took office in 1969, it was widely reported that his administration was considering a federal VAT with the revenue to be shared with state and local governments to reduce their reliance on property taxes and to fund education spending. Reportedly the plan was delayed in part because American tax professionals (lawyers and accountants) were unfamiliar with the VAT. In 1969 Nixon established a task force on business taxation to look at business tax policy. Most of the task force concluded that a VAT shouldn’t be adopted as a substitute, in whole or in part, for the existing federal tax structure. Two dissenter on the task force recommended that a VAT be introduced. However, they differed on whether it should be a partial or total substitute for the corporate income tax.
In 1971 the American Bar Association established a special subcommittee to study VAT so that the Section of Taxation could respond to a proposal for a federal VAT and assist Treasury and Congress in formulating a VAT design. The American Institute of Certified Public Accountants established a comparable committee on VAT.

While there were congressional hearings on Nixon’s New Economic Policy, which included tax benefits for exporters, there was no action on a VAT. In 1972 Nixon asked the Advisory Commission on Intergovernmental Relations to consider the replacement of residential school property taxes with a federal VAT. The advisory commission concluded that a “massive new Federal program designed specifically to bring about property tax relief is neither necessary nor desirable.”

In January 1977, only days before the changeover from President Ford to President Carter, Treasury Secretary William E. Simon issued “Blueprints for Basic Tax Reform.” This document discussed the possible use of a cash flow, consumption-based tax to replace taxes on income of households, individuals, trusts, and corporations. This kind of tax on consumption, while proposed again by members of Congress, did not receive committee action.

In 1984, in preparation for the overhaul of the income tax that would follow two years later, Treasury presented a three-volume report to President Reagan entitled “Tax Reform for Fairness, Simplicity, and Economic Growth.” The third volume of the report covered VAT. Treasury did not recommend what it assumed would be a European-style credit invoice VAT, in part because of the anticipated costs of administering the new tax, and because VAT revenue would only reduce, not repeal, the existing income tax.

In 1995 House Ways and Means Committee Chair Bill Archer held hearings on replacing the federal income tax with a broad-based consumption tax. Archer said, “I am committed to tearing the income tax out by its roots. If we don’t tear it out by the roots,

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I am afraid it will grow back just as tangled as it is now.”4 In 1996 the congressional Kemp Commission took a similar position by recommending that the tax code be eliminated and replaced with one that was “simpler and fairer.”

The President’s Advisory Panel on Tax Reform, formed in 2005 during the administration of President George W. Bush, was asked to “make the tax code simpler, fairer, and more conducive to economic growth.”5 The panel considered a credit invoice VAT and a partial replacement VAT6 coupled with significant reductions in individual and corporate income tax rates, but after failing to obtain unanimous support from panel members, chose not to recommend this tax. It did, however, suggest further study of it.

The panel instead recommended the growth and investment tax (GIT) plan that did not include a federal VAT or sales tax. If the GIT were adopted, it would move the federal tax system closer to a consumption base. The GIT includes a progressive tax on labor income and a single rate cash flow tax on business activity. Under the cash flow tax, a business reports sales and deducts both purchases from other businesses and compensation paid to workers. Capital purchases and inventory are expensed. The resulting simplification occurs because a business does not account for inventory and depreciation.

For years there has been a debate over whether the U.S. income tax system should be converted from its current worldwide basis to a territorial basis. The current system taxes a U.S. company on its worldwide income using a foreign tax credit to relieve double taxation of foreign-source earnings. The GIT featured a destination-based territorial approach. If the GIT were border adjustable, it would not tax exports and deny deductions for imports. The panel acknowledged that it was uncertain whether

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5The President’s Advisory Panel on Federal Tax Reform, “Simple, Fair, and Pro-Growth: Proposals to Fix America’s Tax System,” Nov. 2005. The president limited considerations to income taxes, and plans had to be revenue neutral.
6The VAT included a $100,000 small-business exemption that was estimated to reduce the number of registered businesses to about 9 million. Id. at 199.
the GIT would be border adjustable.\footnote{The panel recommended a five-year transition to a GIT because of the necessary movement to the expensing of capital goods and inventory, the movement to a territorial system from a global system, and other factors. \textit{Id.} at 172-175.} The GIT is difficult to classify as a VAT, even though it contains some features of different forms of taxes on consumption: a sales-subtraction VAT, the USA tax, and a flat tax.

As President Obama and Congress were debating the terms of and funding for a national healthcare plan, the Senate Finance Committee held a roundtable on financing healthcare reform. A witness at that hearing, Leonard Burman, recommended a VAT to pay for the plan. He estimated that a phased-in 10 percent VAT could fund healthcare for everyone not currently covered by government-provided health insurance. Burman added that the VAT, combined with a refundable tax credit for lower-income households, would be progressive.\footnote{Statement of Leonard E. Burman before the Senate Finance Committee, May 12, 2009.}

Obama recently established a task force chaired by the head of his Economic Recovery Advisory Board, Paul Volcker, to examine ways to close the federal deficit. The task force was asked to report by December 2010 on reform options relating to simplification and enforcement of the federal tax system and reform of the corporate income tax (that is, reducing “corporate welfare”) without violating the president’s pledge not to raise taxes on families making less than $250,000.

\section*{Forms of Consumption Taxation}

Starting in the late 1970s, proposals began being offered for a VAT, RST, and flat tax. There have also been proposals for an unlimited savings allowance (USA) tax and a two-part VAT that would separate wages from the other economic components of the tax base to introduce progressivity into the system. There have also been proposals to finance a national healthcare program\footnote{See, for example, H.R. 15, National Health Insurance Act, 109th Cong., 1st Sess (Jan. 4, 2005).} (such as the bill introduced by Rep. John D. Dingell, D-Mich.) or to both finance national healthcare and pay down the
national debt\(^{10}\) (such as the bill introduced by Sen. Ernest Hollings). Some RST proposals have been linked with shutting down the IRS and requiring the state governments to administer the tax.

**Credit Invoice VAT**

The VAT in use in Europe and most of the world is a credit invoice VAT that uses a tax-against-tax (output tax less input tax credits) method for business to calculate its periodic tax liability. The tax authority relies on invoices for audit purposes. The invoices are used to verify the sales reportable by VAT-registered sellers and to verify the claimed input credits by registered purchases.

The VAT can be considered two taxes: a tax on imports collected mainly at the border by customs officials and a tax on domestic supplies administered by the tax administration. The tax on imports of goods, paid at the border, is recovered by a VAT-registered business as an input tax credit. The tax typically is separately stated on sales invoices, although it is buried in retail prices in many countries.

The following example assumes that a 10 percent VAT is imposed on tax-exclusive prices. Taxable sales are $100,000, taxable purchases are $30,000, and taxable imports are $7,000.

<table>
<thead>
<tr>
<th>Output Tax</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Tax on taxable sales:</td>
<td>$100,000 x 10 percent = $10,000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Input Tax Credits</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Tax on domestic purchases:</td>
<td>$30,000 x 10 percent = ($3,000)</td>
</tr>
<tr>
<td>Tax on imports:</td>
<td>$7,000 x 10 percent = ($700)</td>
</tr>
<tr>
<td>Net tax liability for the period:</td>
<td>$6,300</td>
</tr>
</tbody>
</table>

In 1979 and again in 1980, House Ways and Means Committee Chair Al Ullman proposed a European-style invoice VAT to

\(^{10}\)See, for example, S. 1376, Deficit and Debt Reduction and Social Security Solvency Act of 1999, 106th Cong., 1st Sess. (July 15, 1999). The Hollings bill was based on a VAT drafted by the American Bar Association Section of Taxation Committee on Value Added Tax. A. Schenk, reporter, “Value Added Tax: A Model Statute and Commentary, A Report of the Committee on Value Added Tax of the American Bar Association Section of Taxation” (1989).
finance an overhaul of the federal tax system, including significant reductions in federal income and payroll taxes. He was from Oregon, one of only five states that has no RST. In 1980 Ullman was up for reelection in what was assumed to be a safe seat, and he lost.

The political lore is that Ullman lost his seat because of his VAT proposal. Since then, presidential administrations and many members of Congress have been reluctant to propose a VAT. But there were other reasons why Ullman lost the race. His only residence in Oregon was a hotel room, a fact exploited by his opponent. Also, because of a war injury, Ullman was unable to campaign as actively as was necessary.

The Ullman VAT and several other VAT proposals over the past 30 years were based on the credit invoice method. They included the VATs proposed by Dingell and Hollings. Prof. Michael Graetz’s Competitive Tax Plan\(^\text{11}\) includes a credit invoice VAT, with a standard rate ranging between 10 and 14 percent, to fund substantial reductions in the corporate tax and replace the individual income tax on household income below a target of $100,000 per year. Under Graetz’s plan, the existing earned income tax credits and refundable child credits would be replaced by payroll adjustments or a “smart card” designed to provide immediate VAT relief (rather than current year-end relief) to low- and moderate-income workers.\(^\text{12}\) A small-business exemption would remove about two-thirds of all businesses from the VAT rolls. To provide transparency, the VAT would be separately stated on sales invoices. (See also p. 112 for additional comments from Prof. Graetz.)

A separately stated credit invoice VAT may be more challenging for the tax authorities to administer — and for businesses to comply with — alongside state and local retail sales taxes, although Canada seems to have done it successfully with its goods and services tax.

\(^{11}\)M. Graetz, 100 Million Unnecessary Returns (2008).
\(^{12}\)Id. at 203.
Subtraction Method VAT

The subtraction method VAT is calculated in a different, nontransactional manner. That tax is expected to be buried in prices, and data to prepare VAT returns will be taken from the VAT-registered business’s accounting records. Ideally, the tax base is the difference between taxable sales and taxable purchases. The resulting base then is multiplied by the tax rate to arrive at the tax liability for the tax period. Using the above example, but using tax-inclusive amounts and a 9.0909 percent rate, the tax for the period is the same $6,300, calculated as follows:

<table>
<thead>
<tr>
<th>Taxable Sales:</th>
<th>$110,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Taxable Purchases:</td>
<td>($33,000)</td>
</tr>
<tr>
<td>Taxable Imports:</td>
<td>($7,700)</td>
</tr>
<tr>
<td>Tax Base:</td>
<td>$69,300</td>
</tr>
<tr>
<td>VAT Liability at 9.0909 percent rate:</td>
<td>$6,300</td>
</tr>
</tbody>
</table>

There are some inherent differences between the credit invoice and subtraction methods. With a subtraction VAT that is buried in prices, it is difficult for Congress to impose multiple rates. A single rate VAT simplifies the tax considerably. The final consumer does not see the tax paid on purchases. It may be easier to operate this kind of VAT alongside state and local RSTs. A disadvantage of the subtraction method is that the precise amount of tax, if not separately stated on invoices, cannot be calculated for purposes of border tax adjustments.

Several bills proposing a subtraction method VAT have been introduced in Congress over the years. Rep. Sam Gibbons proposed such a tax — at a rate of 20 percent — to replace about 90 percent of federal taxes then on the books. Under his proposal, which was based on 1996 estimates, individual income tax would have been imposed only on incomes above approximately $75,000, and low-income households (below $30,000) would have received tax rebates to offset the VAT paid on purchases.

In form, a subtraction method VAT resembles a corporate income tax; sales are reported, and deductions for certain purchases are allowed. With this method of calculating the tax base, which resembles an income tax calculation, Congress may be tempted to alter the tax base with special deductions. If it does,
The resulting VAT could become as complex as the current income tax that many lawmakers would like to replace.

Economist Bill Helming has proposed a national consumption tax plan that would impose two separate consumption-based taxes (a subtraction method VAT and an RST) to replace federal duties and federal income, estate and gift, excise, and employment taxes. According to Helming, if the VAT and RST rates were each increased by less than 4 percent over rates otherwise needed to replace the repealed taxes, the two new federal taxes could replace all state and local taxes as well.13

Consumption-Based Income Tax

One of the most elaborate proposals to shift from an income-based federal tax system to a consumption-based system was the USA Tax Act of 1995, proposed by Sens. Sam Nunn and Pete Domenici.14 Rep. Phil English introduced a similar simplified USA tax in 2003. Both proposals would have replaced the individual and corporate income taxes. The English bill would have repealed the estate and gift taxes as well.

The plans would have achieved a consumption base for the individual income tax by granting unlimited deductions for new savings. They also would have given individuals a refundable income tax credit for payroll taxes paid. Progressivity would have been provided under the individual income tax component through a family allowance that takes account of family size. The business portion of the USA tax, which also would be imposed on imports, was a cash flow subtraction method VAT. Businesses would have received a credit against the VAT for payroll tax paid.

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14S. 722, USA Tax Act of 1995, 104th Cong., 1st Sess. (Apr. 25, 1995). This proposal was based on the USA tax system paper prepared for Alliance USA and was reprinted in a special supplement to Tax Notes, Mar. 10, 1995.
Flat Tax

The flat tax was promoted by Hall and Rabushka in their 1995 book of the same name\(^1\) and was later proposed by members of Congress and candidates for the Republican presidential nomination.

The flat tax is not a VAT, but has VAT-like attributes. It splits a subtraction method VAT into two parts. The business portion is a cash flow tax that taxes receipts from sales of goods and services (and interest income) and deducts payments to suppliers.\(^2\) Unlike other subtraction method VATs, the flat tax permits businesses to reduce their tax base by wages, salaries, and pensions paid to employees. Like under other VAT regimes, businesses would expense capital costs and inventory purchases.

Under the individual tax portion of the flat tax, households report their wages, salary, and pension income received, subject to a family allowance designed to introduce some progressivity into the flat tax. Each portion of the tax may be imposed at a single tax rate. The flat tax should not be confused — as it often is — with a single rate tax imposed on an income tax base, like the existing U.S. individual or corporate income tax.

Sens. Richard C. Shelby, R-Ala., and Arlen Specter, D-Pa., have proposed flat rate taxes imposed on a consumption base. Shelby’s flat tax would replace the income taxes and the estate and gift taxes. His two-part tax includes a flat rate individual tax on wages but not Social Security receipts. Taxpayers subject to the individual tax would obtain deductions based on their status (such as single or married) and the number of their dependents. Also, a separate cash flow tax would be imposed on business activity. The Specter proposal was similar.

In 2003 Rep. Nick Smith introduced his Tax Simplification Act, which would have replaced the Internal Revenue Code with a flat tax. Under the business portion of the tax, if a business’s deductions exceed taxable receipts from business activities, the business must carry over the excess, converted to a tax credit

\(^{2}\) Id. at 55-56.
equivalent, and it is entitled to interest on the amount carried over. The business would not be entitled to a tax refund.

Rep. Phil Crane proposed a flat rate individual income tax imposed on direct or indirect compensation for services (employee compensation and self-employment income) above a threshold exemption. Crane’s tax would have replaced the corporate and individual income tax and the estate and gift taxes. Steve Forbes, a Republican presidential contender in 1996 and 2000, proposed a flat tax with businesses and individuals taxed at the same rate. Individuals would receive deductions for themselves and their dependents.

In 2005 Rep. Michael C. Burgess, R-Texas, introduced the Freedom Flat Tax Act, which would have allowed taxpayers to make an irrevocable election to use a Hall-Rabushka-type flat tax rather than the regular income tax system. Individuals could elect to be taxed under the flat tax rather than the progressive individual income tax. Under the flat tax option, individuals would be taxed only on U.S.-source cash wages, taxable retirement distributions received, and unemployment compensation. From those receipts, the taxpayer could take a standard deduction (based on filing status) and deductions for dependents. Persons engaged in business activity could elect to be taxed on business taxable income at a flat rate. The business tax is an origin principle tax that is imposed on U.S.-source gross active income — domestic and export sales. The business can deduct the cost of purchases, wages, and deductible retirement contributions for employees.

National RST

In 2003 Rep. John Linder, R-Ga., introduced his Fair Tax proposal, which is basically a national RST. He reintroduced the bill in 2005, and Sen. Saxby Chambliss, R-Ga., also proposed a national RST to be administered primarily at the state level. The 23 percent tax-inclusive RST (30 percent if tax exclusive) would replace the individual and corporate income taxes, the payroll and self-employment taxes, and the estate and gift taxes. Monthly sales tax rebates would be paid to low-income households. Their Fair Tax acts envision the abolition of the IRS. States could elect to collect the tax and would be paid a fee for it.
Rep. Billy Tauzin proposed a similar national RST to replace the income taxes, the estate and gift taxes, and some excise taxes, with a rebate to low-income households and a fee paid to businesses that are required to collect the tax. A qualifying state (administering state) could retain 1 percent of the tax it collected and remitted to the federal government. According to one report, Tauzin’s proposed 23 percent rate would result in a revenue loss of more than $7 trillion over the next decade. Assuming no tax avoidance or evasion, according to that report, a more realistic rate would have to be 31 percent (44 percent if tax exclusive). The cochairs of the President’s Advisory Panel on Federal Tax Reform questioned the viability of a national RST at any rate above 20 percent.

Conclusion

The studies and proposals can be expected to continue without serious congressional action until, as many have said, there is presidential leadership in supporting the adoption of a VAT. The rising deficit and national debt may ultimately put pressure on a president and Congress to seek more federal revenue. As many studies have suggested, if that day comes, the choice is between increasing existing taxes (most likely income taxes) or enacting a broad-based federal tax on consumption, like the VAT.

A VAT for the United States:
Part of the Solution

By William G. Gale and Benjamin H. Harris

The United States faces a large medium-term federal budget deficit and an unsustainable long-term fiscal gap. Left unattended, these shortfalls will hobble and eventually cripple the economy. The only plausible way to close the gap is through a combination of spending cuts and tax increases. This paper discusses why a federal VAT should be part of a constructive solution to the fiscal problem.

Under a VAT, businesses pay taxes on the difference between their total sales to other businesses and households and their purchases of inputs from other businesses. That difference represents the value added by the firm to the product or service in question. The sum of value added at each stage of production is the retail sales price, so in theory the VAT simply replicates the tax patterns created by a retail sales tax and is therefore a tax on aggregate consumption. In practice, the key distinction is that VATs are collected at each stage of production, whereas retail sales taxes are collected only at the point of final sale. As a result,

1The tax can be administered in different ways. For example, under the credit invoice method, firms receive tax credits for the taxes they have paid on their purchases from other firms. Under the subtraction method, firms can fully deduct all their payments to other firms. For discussion of these and other options, see Bickley (2006) and Cnossen (2009).
the VAT is easier to enforce, and its administrative structure is widely regarded as superior to that of the retail sales tax.

Although it would be new to the United States, the VAT is in place in about 150 countries worldwide and in every OECD country other than the United States. Experience suggests that the VAT can raise substantial revenue and is administrable and minimally harmful to economic growth. It also has potential advantages: A properly designed VAT might help the states deal with their own fiscal problems, and a preannounced, phased-in VAT could accelerate the pace of economic recovery.

Several concerns that have been raised about the VAT can be easily addressed. Although the VAT is regressive relative to current income, the regressivity can be offset in several ways. Although the VAT is not readily transparent in many countries, it would be easy to make it completely transparent to businesses and households by reporting VAT payments on receipts just like sales taxes are reported today. Although the VAT has led to an increase in revenues and spending in some countries, higher revenues are precisely why the VAT is needed in the United States, and efforts to limit spending should be part of an effort to enact a VAT. Making the VAT transparent should also reduce the extent to which a VAT would fuel an increase in government spending, a concern that is sometimes overstated by critics in the first place. While the VAT may lead to a one-time increase in prices, it is not the case empirically that VAT inevitably, or even usually, leads to continuing inflation.

None of this implies that the VAT would unilaterally solve the country’s fiscal problems; nor would it be painless. Nevertheless, the VAT is a relatively attractive choice, given the need to close the fiscal gap and the other options for doing so.

The sections below address each of these issues. We also summarize the Canadian VAT experience, which shows how many of the concerns can be addressed in practice. The final section summarizes our specific recommendations regarding the VAT.
Revenue

In the current fiscal context, a key attraction of the VAT is its ability to generate significant amounts of revenue. Among non-U.S. OECD members in 2006, the VAT raised almost 7 percent of GDP in revenue and accounted for almost 19 percent of revenue raised at all levels of government.

As with any other tax, revenue from a VAT depends on the rate structure and the base. The standard VAT rate, the rate charged on most goods and services, has remained relatively steady in recent years in non-U.S. OECD countries. In 2007 the standard rate ranged from a low of 5 percent in Japan to a high of 25 percent in Denmark, Iceland, Norway, and Sweden. The average rate was 18 percent (OECD 2008).

The VAT yield ratio measures VAT revenues as a share of GDP divided by the standard VAT rate. A ratio of 0.3, for example, implies that a 10 percent VAT raises 3 percent of GDP in revenues. Note that the yield ratio does not include the net costs of policies intended to compensate low-income households for VAT payments, nor does it include the offsetting effects that the VAT may have on other revenue sources. The yield ratio simply measures how much revenue is actually gained from the VAT itself.

In 2006 in non-U.S. OECD countries, the yield ratio ranged from a low of 0.28 in Mexico to a high of 0.69 in New Zealand. Most countries fell within a range of 0.3 to 0.4 (OECD 2008). The yield ratio depends critically on the extent to which the VAT tax base is kept broad rather than eroded by preferential rates or exemptions on some goods or services. In practice, most OECD countries apply preferential rates to some items. Of the 29 OECD countries with a VAT in 2007, 17 zero rated some goods (meaning that VAT is not charged on the retail sale of the good, but credits are awarded on the VAT paid on the inputs), and 21 applied at least one non-zero reduced rate to a subsector of goods. Only Japan and the Slovak Republic have no preferential rates (OECD 2008).

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\(^2\)If the standard VAT rate applies to all items subject to VAT, the yield ratio provides an estimate of the share of GDP that is covered by the VAT.
Toder and Rosenberg (2010) estimate that the United States could raise gross revenue of $355 billion in 2012 through a 5 percent VAT applied to a broad base that would include all consumption except for spending on education, Medicaid and Medicare, charitable organizations, and state and local government. This would represent about 2.3 percent of GDP and produce a yield ratio of 0.45 (Table 1).

However, as discussed further below, governments often provide either subsidies or exemptions in the VAT. One way to do so is to narrow the base, excluding some preferred items. For example, exempting rent, new home purchases, food consumed at home, and private health expenditures from the VAT would reduce revenue by 38 percent, cutting the yield ratio to 0.28.

A different way to provide subsidies is to give each household a cash payment. Using the broad base, the provision of a cash payment of $437 per adult and $218 per child would, according to Toder and Rosenberg (2010), cost $97.7 billion. Under this option, the official revenue collected by the VAT would remain at $355.5 billion, and the measure of the yield ratio — given by VAT revenues and the standard rate of 5 percent — would remain at 0.45. But what might be called the effective revenue — that is, the revenue gain from the VAT net of the costs of making the compensatory cash payments — would fall to $257.8 billion, or 1.64 percent of GDP, giving an effective yield ratio of 0.33.

<table>
<thead>
<tr>
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<th>Broad Base</th>
<th>Narrow Base</th>
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<tr>
<td>Billions of Dollars</td>
<td>% of GDP</td>
<td>Yield Ratio</td>
</tr>
<tr>
<td>Gross Revenue</td>
<td>355.5</td>
<td>2.26</td>
</tr>
<tr>
<td>Cost of Demogrants</td>
<td>97.7</td>
<td>0.62</td>
</tr>
<tr>
<td>Revenue Net of Demogrants*</td>
<td>257.8</td>
<td>1.64</td>
</tr>
<tr>
<td>Adjustment of other taxes</td>
<td>96.9</td>
<td>0.62</td>
</tr>
<tr>
<td>Revenue net of other taxes</td>
<td>160.9</td>
<td>1.02</td>
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*The demogrants are set at $437 per adult and $218 per child. These levels were chosen so that the revenue net of other taxes was the same for the broad-based VAT with demogrants and the narrow-based VAT without demogrants.
Imposing the VAT would reduce net business income, which would in turn reduce other revenues. Toder and Rosenberg estimate that declines in other tax receipts would offset about 27 percent of gross VAT revenues. This would reduce effective revenues — after netting out the costs of cash payments and the loss in other revenues — to 1.02 percent of GDP for either base, resulting in an effective yield ratio of 0.2.

These figures imply, after allowing for offsetting adjustments in other taxes and the costs of either cash payments or narrowing the base as described above, that a 10 percent VAT would raise just over 2 percent of GDP in revenues.

Efficiency and Growth

A broad-based VAT that is levied uniformly on all goods and services would not distort relative prices among consumption goods. Similarly, a VAT with a constant tax rate over time would not distort household saving choices. Nor would a VAT distort a business’s choices regarding new investments, financing instruments, or organizational form. Relative to higher income tax rates — which would distort all of the choices noted above — the VAT has much to offer in the way of incentives. Like the income or payroll tax, however, the VAT would distort household choices between work and leisure.

The VAT is border adjustable, meaning it would exempt exports and tax imports. While this is sometimes touted as providing economic benefits, it is actually a neutral treatment of those items.

A substantial body of literature based on economic theory and simulation models documents the potential efficiency gains from substituting a broad-based consumption tax for an income tax (Altig et al. 2001, Auerbach 1996, Fullerton and Rogers 1996). These gains arise from a combination of broadening the tax base, eliminating distortions in saving behavior, and imposing a one-time tax on existing wealth.

The tax on existing wealth merits more discussion. As a tax on consumption, the VAT can be regarded as a tax on the wealth and income that households use to finance current and future consumption: wealth that exists at the time of the transition to the VAT, future wages, and extra-normal returns to capital (Hubbard
and Gentry 1997). The tax on existing wealth is a lump sum tax, since the wealth has already been accumulated. Lump sum taxes are preferable to other forms of taxation on efficiency grounds, since they do not distort economic choices. In fact, the lump sum tax on existing wealth is a major component of the efficiency gains because of the creation of a consumption tax.

The efficiency and growth effects due to an add-on VAT would include losses from the increased distortion of work/leisure choices and the substantial gains noted above from the one-time tax on existing wealth and from deficit reduction. While short-term fiscal stimulus can boost an otherwise slack economy, as it has over the past year and a half, large and persistent deficits will have deleterious effects that can materialize gradually or suddenly. The sudden scenario has been emphasized in the past (Ball and Mankiw 1995, Rubin et al. 2004) under considerably better fiscal conditions than exist today, and it has been highlighted recently by Burman et al. (2010). Under this scenario, investors’ fears about future deficits can reach a tipping point and trigger a financial crisis with potentially calamitous effects. Some analysts cite this potential sudden impact as the most important reason to avoid substantial ongoing budget deficits.

But even in the absence of a crisis, sustained deficits have deleterious effects, as they translate into lower national savings, higher interest rates, and increased indebtedness to foreign investors, all of which serve to reduce future national income. Gale and Orszag (2004a) estimate that a 1 percent of GDP increase in the deficit will raise interest rates by 25 to 35 basis points.

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3 In a risk-free world, the normal return to capital is just the risk-free rate of return. Earning the risk-free rate of return on saving does not raise the present value of consumption a household can obtain; it simply affects the timing of the consumption. Allowing for risk changes the normal return to a risk-adjusted return, but also changes the rate at which consumption is discounted, so the result continues to be that earning the normal return (adjusted for the risk) on capital does not affect the present value (adjusted for risk) of consumption available to the household. In contrast, returns due to rents affect the present value of consumption available to households and therefore would be subject to a consumption tax.

4 Altig et al. (2001) show that in the conversion to a flat tax, the taxation of old capital accounts for more than 60 percent of the induced economic growth effect in the first five years, with more than half the growth in the first decade, and about 40 percent of the induced growth even after 50 years.
points and reduce national saving by 0.5 to 0.8 percentage points of GDP. Engen and Hubbard (2004) obtain similar results regarding interest rates.

Thus, relative to a balanced budget, a deficit equal to 6 percent of GDP would raise interest rates by at least 150 basis points and reduce the national saving rate by at least 3 percent of GDP. The IMF (2010) estimates that in advanced economies, an increase of 10 percentage points in the initial debt/GDP ratio reduces future GDP growth rates by 0.15 percentage points. Hence, the projected increase in the debt/GDP ratio from about 40 percent earlier in the decade to 90 percent by 2020 (Auerbach and Gale 2010) would be expected to reduce the growth rate by a whopping 0.75 percentage points. By cutting deficits, the VAT would help spur economic growth.

**Distributional Effects and Offsetting Policies**

In theory, the distributional burden of the VAT depends crucially on how household resources are measured. Typical distributional analyses are made with respect to current income. The VAT is regressive if households are classified by, and the tax burden is measured as a share of, current income. Because the VAT is a proportional tax on consumption, and because lower-income households tend to spend a larger proportion of their income than higher-income households, the VAT imposes higher burdens, as a share of current income, on lower-income households.

However, several other perspectives are possible. The VAT is a proportional tax if households are classified by current consumption, since all households are taxed at the same rate on the amount they consume. Likewise, to the extent that current consumption mirrors average lifetime income, the VAT is also proportional regarding lifetime income.

Empirical research broadly confirms those notions (Caspersen and Metcalf 1994, Metcalf 1994, Toder and Rosenberg 2010). However, empirical analysis is complicated by the fact that alternative methods of distributing the burden of a consumption tax — such as distributing the burden to consumption versus wages and capital less investment — can produce drastically different estimates of progressivity, even though they are equivalent in theory (Burman et al. 2005).
As mentioned earlier, the VAT would impose a one-time burden on existing wealth, a feature that is desirable on efficiency grounds but is more controversial with regard to fairness. We believe a one-time tax on wealth would be fair, and in fact quite progressive. There is concern that imposing a VAT would hurt the elderly, a group that has high consumption relative to its income. However, since Social Security and Medicare benefits are effectively indexed for inflation, low-income elderly households would be largely insulated from any VAT-induced increases in the price of consumer goods or healthcare services. High-income elderly households, who receive much lower shares of their income in the form of indexed government benefits, would need to pay more in taxes but could afford to do so.

Concerns about the regressivity of the VAT are complex, but they should not obstruct the creation of a VAT for two reasons. First, while we accept the validity of distributional considerations, what matters is the progressivity of the overall tax and transfer system, not the distribution of any individual component of that system. Clearly, the VAT can be one component of a progressive system.

Second, it is straightforward to introduce policies that can offset the impact of the VAT on low-income households. The most efficient way to do this is simply to provide households either refundable income tax credits or outright payments. For example, if the VAT rate were 10 percent, a $3,000 demogrant would equal VAT paid on the first $30,000 of a household’s consumption. Households that spent exactly $30,000 on consumption would pay no net tax. Those that spent less on consumption would receive a net subsidy. Those that spent more on consumption would, on net, pay a 10 percent VAT only on their purchases above $30,000. Toder and Rosenberg (2010) estimate that a VAT coupled with a fixed payment to families is generally progressive, even regarding current income.

In contrast, many OECD governments and state governments offer preferential or zero rates on items like healthcare or food to

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5Johnson et al. (2004) show that for households in the bottom quintile and second quintile of the income distribution for the elderly, 80 percent and 68 percent, respectively, of their financial (i.e., non-Medicare) income comes from Social Security.
increase progressivity. That approach is largely ineffective because the products in question are consumed in greater quantities by middle-income and wealthy taxpayers than by low-income households. It also creates complexity and invites tax avoidance as consumers chose between tax-preferred and fully taxable goods and policymakers struggle to characterize goods. For example, if clothing were exempt from the VAT, Halloween costumes classified as clothing would be exempt while costumes classified as toys would not.

Administrative Issues

A broad-based VAT would cost less to administer than the current income tax. For example, in the United Kingdom the administrative costs of the VAT were less than half of those of the income tax, measured as a share of revenue. Similarly, the New Zealand revenue department was required to intervene in just 3 percent of VAT returns, compared with 25 percent of income tax returns (GAO 2008).

The VAT has compliance advantages over a retail sales tax, which is intended to collect all revenue at the point of sale from a business to a household. Since revenue collection for the VAT is spread across stages of production, with producers receiving a credit against taxes paid as an incentive for compliance, the VAT in practice is less likely to be evaded.7

Theory and evidence suggest that the compliance burden would likely fall more heavily, as a percentage of sales, on smaller businesses. Most countries address those concerns by exempting small businesses from collecting the VAT. In 2007, 24 of the 29 OECD countries with a VAT exempted businesses with gross receipts beneath specified thresholds, varying from $2,159 to $93,558 (OECD 2008).

6The Congressional Budget Office (1992, p. xv) finds that “excluding necessities such as food, housing, utilities, and health care would lessen the VAT’s regressivity only slightly.” Toder and Rosenberg (2010) find that excluding housing, food consumed at home, and private health expenditures from the consumption tax base can increase progressivity, but not as much as a per-person payment would.

7Gale (2005) discusses administrative complications with a retail sales tax and the changes in tax rate resulting from an erosion of the tax base due to evasion.
Finally, to the extent that administrative costs are fixed with respect to the VAT standard rate, the presence of those costs suggests that the VAT should be set at a relatively higher rate rather than a lower one.

The States

Some analysts fear a national VAT would impinge on states’ ability to administer their own sales taxes. In our view, a national VAT could help states significantly. State retail sales taxes are poorly designed; they exempt many goods and most services and collect more than 40 percent of their revenue from business purchases, which should be exempt.8

Converting their sales taxes to VATs and piggybacking on a broad-based federal VAT would offer states several advantages. First, they could raise substantial amounts of revenue in a less distortionary manner than under current sales taxes. Second, administrative costs, which now exceed 3 percent of state sales tax revenue (PricewaterhouseCoopers 2006), would decline. Many states link their income tax to the federal income tax base, with obvious administrative and compliance advantages. Similar savings would accrue from linking federal and state VAT bases. Third, a national VAT would allow states and the federal government to tax previously difficult-to-tax transactions, such as interstate mail order and Internet sales. If the U.S. experience followed Canada’s, the federal government could collect revenue on behalf of states and relieve them of the cost of administering consumption taxes altogether (Duncan and Sedon 2010).

In 2009 state and local sales tax revenue equaled 2 percent of GDP (authors’ calculations based on U.S. Census Bureau 2010). If the federal VAT had the broad base and demogrants described in Table 1, and the states and localities piggybacked on that structure, an average subnational VAT of about 6 percent would raise the same revenue as existing state and local sales taxes.9

8See McLure (2002) for a description of the “nutty” world of state sales taxes. See Mazerov (2009) for an estimate that most states could increase sales tax revenue by 20 to 40 percent if “feasibly taxed” services were added to the sales tax base. See Durner and Bui (2010) for the share of sales taxes paid by businesses.

9This estimate is based on the yield ratio of 0.33 listed in Table 1. An alert reader may question why a federal VAT would require a 10 percent rate to raise 2 percent of GDP; (Footnote continued on next page.)
Alternatively, states could maintain their sales taxes or create their own VAT bases. Following the implementation of a federal VAT in Canada, most provinces maintained their existing tax codes for several years. Some provinces have yet to fully harmonize with the federal VAT, while Quebec administers its own VAT (Duncan and Sedon 2010).

**VAT as Stimulus**

Although a major tax increase wouldn’t be a good idea while the economy is still recovering slowly from recession, the announcement of a future VAT could be stimulative in the current period. Announcing that the price of consumption goods will be raised in the future or gradually over time via a phased-in VAT would encourage people to spend more now, when the economy needs the stimulus. That effect may not be very big, but it is still beneficial.

**Fuel for Big Government?**

The VAT has been called a “money machine” because of its ability to raise substantial amounts of revenue. That is a helpful feature if the revenues are used to close deficits, but it poses a problem if the boost in revenue simply fuels further unsustainable growth in federal spending.

Some analysts reject any source of extra revenue, including a VAT, on the grounds that less government revenue leads to smaller government. In general, this “starve the beast” theory does not apply to most taxes, nor does it reflect recent experience.10 Romer and Romer (2009) find that tax cuts designed to spur long-run growth do not lead to lower government spending and that if anything, tax cuts lead to higher spending. This finding is consistent with that of Gale and Orszag (2004b), who argue that the experience of the last 30 years is more consistent

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while a state and local VAT would require only a 6 percent rate to raise the same revenue. The answer is that the federal VAT would be an add-on tax with partially offsetting reductions in other revenue sources, as described above. In contrast, the state and local VAT discussed here would substitute for existing sales taxes and therefore would not create such offsets.

10Bartlett (2007) outlines the development of the “starve the beast” theory and shows how it failed to apply during the George W. Bush administration.
with a “coordinated fiscal discipline” view, in which tax cuts were coupled with increased spending (as in the 1980s and 2000s) and tax increases were coupled with contemporaneous spending reductions (as in the 1990s). Given the widely recognized need for both spending cuts and revenue increases to balance the budget, it is likely that any new revenue stream would be accompanied by reductions in spending.

Some observers argue that the VAT is such an efficient and invisible tax that it has been and would be used to fuel government spending increases through a gradually increasing rate. Bartlett (2010a, 2010b) addresses this claim by noting that increased VAT rates in OECD countries were common among early adopters, who operated a VAT in the high-inflation environments in the 1970s, but that they were far less common among countries that adopted a VAT after 1975. Of the 17 countries that instituted a VAT during the post-1975 period of relative price stability, four have not changed their VAT rate and four have decreased it; the average rate increase across all late adopters of the VAT is less than 1 percentage point. The average VAT in OECD countries has been roughly constant since 1984 at or just below 18 percent.

**Transparency**

A related concern about spending growth is the notion that the VAT is hidden in overall prices. As a result, the argument goes, taxpayers won’t notice the VAT the way they do income, sales, or payroll taxes, enabling Congress to increase the VAT rate without much taxpayer resistance.

This is easily addressed. The VAT doesn’t have to be invisible. For example, Canada simply requires that businesses print the amount of VAT paid on a receipt with every consumer purchase. This is essentially identical to the standard U.S. practice of printing sales taxes paid on each receipt.\(^{11}\)

\(^{11}\)The growing literature on tax visibility offers mixed results. Mulligan et al. (2010) find that the proportion of payroll taxes paid by employees has no significant effect on the size of the public pension program. Finkelstein (2009) finds that the adoption of electronic toll collection results in higher tax rates and reduced short-run elasticity of driving with respect to toll rates.Similarly, Chetty et al. (2010) find that posting tax-inclusive prices reduces demand for some goods.
Another way to make the VAT transparent is to link VAT rates and revenues with spending on particular goods. Aaron (1991) and Burman (2009) propose a VAT related to health spending. Under such a system, the additional health insurance coverage would help offset the regressivity of a VAT and make the costs of both the VAT and government spending more transparent.

**Inflation**

The creation of an add-on VAT will create pressure on prices. (If instead the VAT were replacing a sales tax, there would be no pressure or need to adjust the price level.) In our view, the Fed should accommodate the one-time price rise inherent in the creation of an add-on VAT. Not doing so would create significant and unnecessary adjustment costs in terms of lost jobs and wages.

But there is no theoretical or empirical reason to expect that the VAT would cause continuing inflation. Indeed, the presence of an additional revenue source would reduce the likelihood of the Fed having to monetize the debt. Research has found only a weak relationship between the VAT and continually increasing prices. In a survey of 35 countries that introduced the VAT, Tait (1991) found that 63 percent exhibited no increase in the consumer price index (perhaps because they were replacing existing sales taxes) and 20 percent had a one-time price rise. Among the remaining 17 percent, the introduction of the VAT coincided with ongoing acceleration in consumer prices, but Tait believes it is unlikely that the VAT caused the acceleration.

**The Canadian VAT**

In 1991 Canada implemented a 7 percent VAT at the national level to replace a tax on sales by manufacturers. Many of the concerns associated with a VAT in the United States can be assuaged by examining the Canadian experience.12

Canada addressed distributional concerns by applying a zero rate to some necessities and adding a refundable tax credit in the

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12This section is based on Sullivan (2010). Bird and Gendron (2009) and Duncan and Sedon (2010) analyze the challenges of coordinating subnational consumption taxes with a national VAT.
income tax. As noted above, we prefer the latter method. The Canadian VAT is completely transparent — it is listed separately on receipts just like sales taxes are in the United States.

Perhaps because of the transparency, the Canadian VAT has not led to significant growth of government spending. Federal spending in Canada in fact gradually declined from 22.6 percent of GDP in 1991 — when the VAT was implemented — to 14.9 percent in 2009. The standard VAT rate declined over time to 6 percent in 2006 and 5 percent in 2008. Federal tax revenue in Canada fell from 17.6 percent of GDP in 1991 to 16.3 percent of GDP in 2007 (and fell further to 14.6 percent during the 2009 recession). In terms of both revenues and expenditures, the size of the Canadian federal government has shrunk significantly since the VAT was introduced. Since 1991, inflation and economic growth rates in Canada have been similar to those in the United States.

Coordinating provincial sales taxes with the VAT has proven to be challenging, but manageable. After the VAT was introduced, provinces began to coordinate their sales taxes with the federal VAT. By July 2010, 5 of the 10 provinces will have “harmonized” VATs, making their provincial tax bases essentially identical to the federal base. In these cases, the federal government administers the provincial tax on behalf of the province, and the provincial governments set their own VAT rate. Quebec administers its own VAT; three provinces will administer their own retail sales taxes. One province and the three territories have no consumption tax. The U.S. could similarly accommodate a variety of state choices regarding consumption taxes.

An American VAT

The structure of an American VAT should include a very broad base; rebates or income tax credits (rather than product exemptions) to achieve progressivity; efforts to increase transparency (for example, having VAT listed separately on receipts); and explicit links to spending discipline.

While we are not wedded to a particular rate, we note that a 10 percent VAT with a broad base could raise about 2 percent of
GDP in revenues, even after netting out the offsetting adjustments in other taxes and the costs of compensating households for VAT payments on a reasonable level of consumption.

Other than the resources used to provide the rebate, VAT revenues should be used largely, if not completely, for deficit reduction. Although tax and spending reform require continued attention from policymakers, closing the fiscal gap is a top priority. To the extent that VAT revenues are used for other purposes, there will be fewer options left for balancing the federal budget.

We believe the states would benefit from dropping their sales taxes and rapidly harmonizing with a federal VAT. If all states harmonized, and if the federal VAT rate were 10 percent, the resulting combined VAT rate — including the state and federal rate — would be on the order of 15 to 17 percent. That would still be below the OECD average, but sufficient to close much of the long-term fiscal gap and replace or improve state-level sales taxes. It would also send a strong signal to consumers that public policymakers are seeking to reduce consumption and increase saving.

Given current economic challenges, the timing of a VAT is important. Instituting a significant tax on consumption during a recession would be counterproductive. The optimal time to implement a VAT is after the economy has returned to full employment.

A VAT is not the only tax or spending policy that can help solve the fiscal problem, nor will it solve the problem by itself. Nevertheless, to oppose the VAT is to argue either that: (1) there is no fiscal gap, (2) ignoring the fiscal gap is better than imposing a VAT, or (3) there are better ways than the VAT to make policy sustainable. However, no one disputes the existence of a fiscal gap, and the economic costs of fiscal unsustainability are enormous. As to the notion that there are better ways to put fiscal policy on a sustainable path, we would be excited to learn about them. In the meantime, policymakers should not let a hypothetical ideal policy get in the way of the time-tested, more-than-adequate VAT.
Reference List


The Conservative Case for a VAT

By Bruce Bartlett


The VAT is probably the ideal tax from a conservative point of view. As a broad-based tax on consumption, it creates less economic distortion per dollar of revenue than any other tax — certainly much less than the income tax. If conservatives are successful in defeating a VAT, the alternative inevitably will be significantly higher income tax rates, which will do far more damage to the economy than a VAT raising the same revenue.

The conservative preference for consumption taxes over income taxes has a long history dating back at least to Thomas Hobbes. In Leviathan (1651), he argued that consumption was what people took out of society, while saving added to society’s wealth. Therefore consumption was the best base for taxation, while saving should be exempt. That view has been endorsed by every conservative tax theorist from David Hume and Alexander Hamilton in the 18th century, to John Stuart Mill and Alfred Marshall in the 19th century, to Irving Fisher and Nicholas Kaldor in the 20th century, and to Martin Feldstein and many others today.

Hamilton also emphasized that taxing consumption was the method of taxation most consistent with freedom because people could more easily reduce their consumption than their income. As he wrote:

It is a signal advantage of taxes on articles of consumption, that they contain in their own nature a security against excess. They prescribe their own limit; which cannot be exceeded without defeating the end proposed, that is, an extension of the revenue. When applied to this object, the saying is as just as it is witty, that, “in political arithmetic, two and two do not always make four.” If duties are too high, they lessen the consumption; the collection is eluded; and the product to the treasury is not so great as when they are confined within proper and moderate bounds. This forms a complete barrier against any material oppression of the citizens by taxes of this class, and is itself a natural limitation of the power of imposing them.3

In the 1970s there was talk of a VAT for the United States. President Nixon was sympathetic to the idea.4 But eventually conservatives decided that the VAT’s greatest virtue — its efficiency (that is, its ability to raise revenue at a low deadweight cost) — was actually a defect. Their fear is that a VAT would raise too much revenue, too easily.5 Better to raise taxes as painfully

3Hamilton’s witty saying originated with Jonathan Swift, who also influenced a long line of tax theorists. See Bruce Bartlett, “Jonathan Swift: Father of Supply-Side Economics?” History of Political Economy (Fall 1992), pp. 745-748.
4 Privately, Nixon often expressed support for a VAT, but always rejected the idea on political grounds. See Nigel Bowles, Nixon’s Business (College Station, TX: Texas A&M University Press, 2005), pp. 47, 62, 67. On January 20, 1972, he wrote a letter to the Advisory Commission on Intergovernmental Relations asking it to study the possibility of replacing the local property tax with a federal VAT. The commission reported that a VAT was unnecessary to reduce local property taxes or improve equalization of school finance. See ACIR, “The Expenditure Tax: Concept, Administration and Possible Applications,” Report No. M-84 (March 1974).
and inefficiently as possible, they concluded, to limit the government’s tax take. At a press conference on February 21, 1985, President Reagan cemented conservative opposition to the VAT, saying the tax “gives government a chance to grow in stature and size.”

I myself long opposed the VAT on money-machine grounds. I changed my mind when I realized that there was no longer any realistic hope of controlling entitlement spending before the deluge hits when the baby boomers retire. The U.S. now needs a money machine.

Although some liberals have periodically been attracted by the VAT’s revenue potential, none have made a serious effort to enact one since House Ways and Means Committee Chair Al Ullman floated the idea in 1979 and was voted out of office the following year. The loss was widely attributed to his support for VAT. Ullman’s name has since been invoked as proof that a VAT is politically suicidal. As Sen. Byron L. Dorgan, D-N.D., said, “The last guy to push a VAT isn’t working here anymore.”

Politicians are also mindful that foreign leaders who impose VATs often suffer electoral defeat as a consequence. After enacting a VAT in Japan in 1986, Prime Minister Yasuhiro Nakasone was defeated the following year largely because of it. Canadian Prime Minister Brian Mulroney imposed a VAT in 1991, and it was considered a major factor in his 1993 defeat. Although Australian Prime Minister John Howard survived enactment of a VAT in 1998, his party suffered major losses as a consequence.

However, several things have changed that could now make a U.S. VAT viable. First is the magnitude of the fiscal crisis that will have to be addressed soon. Spending for Social Security and

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Medicare alone will require a tax increase equivalent to 81 percent of current individual income tax revenue in today’s dollars over coming decades, according to the 2009 trustees’ reports of those systems.\textsuperscript{9}

The recent explosion of stimulus spending has obviously made the problem worse. We are already seeing countries like the United Kingdom having trouble selling bonds and being warned of downgrades by credit-rating agencies. Greece’s fiscal problems nearly caused the European Union to implode in early 2010. The United States is not immune from such problems, which could cause inflation and interest rates to skyrocket, at which point a large tax increase will be inevitable. The only question would be how taxes will be raised.

A VAT would also address a common conservative concern about the growing percentage of the population that pays no federal income taxes. In 2010, 48 percent of all returns had no federal income tax liability, according to the Joint Committee on Taxation.\textsuperscript{10} A VAT would be a way of getting all Americans to pay for the federal government’s general operations. It’s unrealistic to think that income taxes will be imposed on such people once they have become exempt.

As economist Larry Summers once explained, the U.S. has no VAT because liberals think it’s regressive and conservatives think it’s a money machine. We’ll get a VAT, Summers said, when they reverse their positions.\textsuperscript{11}

After Republicans — allegedly the party of fiscal responsibility — rammed Medicare Part D into law in 2003, I concluded that our looming fiscal problem was so enormous that higher taxes were unavoidable. And that was long before the recent financial crisis made matters far worse. I believed the tax increase would

\textsuperscript{9}In other words, the effective federal income tax rate would have to almost double. See Bruce Bartlett, “The 81% Tax Increase,” \textit{Forbes} (May 15, 2009), available at http://www.forbes.com/2009/05/14/taxes-social-security-opinions-columnists-medicare.html.

\textsuperscript{10}Joint Committee on Taxation, “Present Law and Background Data Related to the Individual Income and Social Insurance Taxes as in Effect for 2010 and 2011,” JCX-1-10 (Jan. 13, 2010), p. 23.

be so great that it would seriously cripple the economy if it were accomplished through higher rates on an already dysfunctional income tax system. I reluctantly concluded that a VAT would be the best way to raise the revenue.

When I first made this suggestion in a *Los Angeles Times* article in 2004, I was building on a large body of tax analysis showing that the VAT is the best known way of raising revenue.\(^\text{12}\) When I say “best,” I mean it raises large revenues from low rates and has minimal disincentive effects. In economist-speak, it has a very small deadweight or welfare cost.

Looking at the experience of other countries, I estimate that a U.S. VAT could realistically tax about a third of the gross domestic product, which would raise close to $50 billion per percentage point.\(^\text{13}\) If we adopted Europe’s average VAT rate of 20 percent, we could raise $1 trillion per year in 2009 dollars. Even if all this revenue were used to fund tax reform in a revenue-neutral manner, it would be worth doing. There are any number of glaring problems with the tax code, such as the alternative minimum tax, that will require significant revenue to fix permanently.

Back in the early 1980s, practically every leading conservative economist supported a VAT for the United States. Norman Ture, a godfather of supply-side economics, and Murray Weidenbaum, chair of the Council of Economic Advisers under Reagan, wrote many articles, books, and papers supporting the VAT. The conservative American Enterprise Institute published a book in 1987 saying that the VAT was the key to deficit reduction.\(^\text{14}\)

Perhaps the strongest evidence that the VAT was considered the conservative tax reform is that it is the foundation of the flat tax, which is still supported by practically every conservative tax


\(^{13}\)The data in Table 1 show that other countries tax about half of consumption, which is about two-thirds of GDP.

The flat tax, originally devised by Hoover Institution scholars Robert Hall and Alvin Rabushka, is a subtraction method VAT with one twist: Businesses are permitted to deduct cash wages paid from the base on which they calculate the VAT. Workers pay the same rate on their wages less only a personal exemption. The purpose of this adjustment is to create transparency so that people see the tax they are paying and to redress its regressivity.

In 1992, when then-California Gov. Jerry Brown proposed a VAT plus a flat-rate income tax, it was hailed by supply-side economists like Arthur Laffer and Gary Robbins. And conservatives have recently embraced a proposal that would replace California’s state income tax with a VAT.

House Budget Committee ranking minority member Paul Ryan, R-Wis., has received high praise from conservatives for his “Fiscal Roadmap” plan that would eliminate the national debt by slashing spending. But the plan would also replace the corporate income tax with what Ryan calls a business consumption tax. That is a type of VAT. Sen. Jim DeMint, R-S.C., generally considered to be the most conservative member of the Senate, has cosponsored the legislation.

Nevertheless, whenever I suggest a VAT for the U.S., I am attacked by supply-siders and right-wingers. On CNBC, my friend Larry Kudlow accused me of wanting to “Europeanize the American economy.” They believe the VAT is a money machine that will lead to higher taxes and bigger government precisely because it is such a “good” tax.

It is an article of faith among conservatives that the VAT is a money machine that must be fought to the death.

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ever to adopt such an insidious form of taxation, we would quickly become just like Europe, as if that entire continent is one big gulag instead of someplace where, by and large, the people are just as free and prosperous as Americans.19

I want to make two points about the money-machine argument.20 First, it is often implied that the VAT trends continuously upward. That is wrong. According to the OECD, 7 of the 29 member states with a VAT have lower rates today than they had in the past: Canada, the Czech Republic, France, Hungary, Ireland, the Netherlands, and the Slovak Republic. And Australia, Finland, Korea, and Poland have never increased their VAT rates. Indeed, the average VAT rate in OECD countries is actually lower today than it was in 1984: 17.79 percent then versus 17.61 today.

The VAT rates commonly referred to are statutory rates that don’t necessarily tell us anything about the effective tax rate. Conservatives just assume that the VAT covers everything and has the same structure in every country. In fact, every country with a VAT exempts many items and usually imposes lower rates on some things and higher rates on others. The rates one tends to see discussed, such as those that appear below, are the basic rates that apply to most things that a VAT covers. But the share of consumption covered by the VAT varies enormously from one country to another, as shown in Table 1.

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19See the following Wall Street Journal editorials: “The Abolitionist” (Aug. 6, 2004); “The Tax That France Built” (March 4, 2005); “The VAT Commission” (Feb. 19, 2010); “Europe’s VAT Lessons” (April 15, 2010). For evidence that Europeans are by and large as free and prosperous as Americans, see Peter Baldwin, The Narcissism of Minor Differences (New York: Oxford University Press, 2009). There is also a growing literature showing that American and European levels of taxation and spending are more similar than generally assumed. See Price Fishback, “Social Welfare Expenditures in the United States and the Nordic Countries, 1900-2003,” NBER Working Paper No. 15982 (May 2010); Willem Adema and Maxime Ladaïque, “How Expensive Is the Welfare State?” OECD Social, Employment and Migration Working Paper No. 92 (Nov. 2009).

20Previous research has emphasized that while countries with VATs tend to have higher tax/GDP ratios than those without them, countries with VATs also tended to have high tax ratios before introducing the VAT. Evidence that the VAT caused a rise in the tax ratio is weak. See Liam Ebrill et al., The Modern VAT (Washington: International Monetary Fund, 2001), pp. 25-39; Diana Furchtgott-Roth, OECD Countries and the VAT: The Historical Experience (Washington: American Petroleum Institute, 1990); J.A. Stoffich, “Value-Added Taxes and the Size of Government: Some Evidence,” National Tax Journal (Dec. 1985), pp. 547-552.
Another problem with the money-machine argument is that it ignores the critical role of inflation in fueling higher VAT rates in the 1970s. At that time, it was absurdly easy for governments to raise VAT rates because it was hardly noticed — what was another 1 percent rise in the inflation rate when the general price level was rising at double-digit rates? Further, to the extent that inflation was a function of budget deficits, higher taxes were a plausible means of reducing it. In the Keynesian model, higher taxes are inherently anti-inflationary because they reduce purchasing power.

It is critical that any money-machine analysis distinguish between those countries that adopted VATs before the great inflation of the 1970s and those adopting VATs in the era of relative price stability that we have seen since then. Tables 2 and 3 show that to the extent that there is a valid money-machine argument, it is only in the countries that could piggyback on inflation to ratchet up their rates in the 1970s. VAT rates show little evidence of a ratchet effect during the era of price stability.

In my opinion, opposing a VAT means implicitly supporting our current tax system, which imposes a deadweight cost equal to a third or more of revenue raised — at least 5 percent of GDP, according to various studies.\(^2\) This is insane. The idea that raising taxes in the most economically painful way possible will

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hold down the level of taxation, and the size of government, is obviously false. It just means that the total burden of taxation, including the deadweight cost, is far higher than it needs to be. If we raised the same revenue more sensibly, we could, in effect, give ourselves a tax cut by reducing the deadweight cost.

Those who oppose big government would do better to concentrate their efforts on cutting spending. The idea that we must hold down taxes or keep a ridiculously inefficient tax system because it will give us small government is juvenile.22 If people want small government, there are no shortcuts. Spending has to be cut. But if spending isn’t cut, we must pay our bills. It’s better to do so as painlessly and efficiently as possible.

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22A common conservative argument is that holding down taxes will somehow starve the beast and automatically lead to lower spending. Not only is there no evidence supporting that belief, but recent research argues that it is perverse. By reducing the tax cost of spending, the starve-the-beast theory has actually caused spending to rise. See Bruce Bartlett, “‘Starve the Beast’: Origins and Development of a Budgetary Metaphor,” Independent Review (Summer 2007), pp. 5-26; Christina D. Romer and David H. Romer, “Do Tax Cuts Starve the Beast? The Effect of Tax Changes on Government Spending,” Brookings Papers on Economic Activity (No. 1, 2009), pp. 139-200; William A. Niskanen, “Limiting Government: The Failure of ‘Starve the Beast,’” Cato Journal (Fall 2006), pp. 553-558; Michael J. New, “Starve the Beast: A Further Examination,” Cato Journal (Fall 2009), pp. 487-495.

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Table 2. VAT Rates in OECD Countries Establishing VATs Before 1975 (Ranked by Year of Inception)

<table>
<thead>
<tr>
<th>Country</th>
<th>Initial Rate</th>
<th>Year</th>
<th>2009 Rate</th>
<th>% Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denmark</td>
<td>10</td>
<td>1967</td>
<td>25</td>
<td>150</td>
</tr>
<tr>
<td>France</td>
<td>16.66</td>
<td>1968</td>
<td>19.6</td>
<td>17.6</td>
</tr>
<tr>
<td>Germany</td>
<td>10</td>
<td>1968</td>
<td>19</td>
<td>90</td>
</tr>
<tr>
<td>Netherlands</td>
<td>12</td>
<td>1969</td>
<td>19</td>
<td>58.3</td>
</tr>
<tr>
<td>Sweden</td>
<td>11.11</td>
<td>1969</td>
<td>25</td>
<td>125</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>8</td>
<td>1970</td>
<td>15</td>
<td>87.5</td>
</tr>
<tr>
<td>Norway</td>
<td>20</td>
<td>1970</td>
<td>25</td>
<td>25</td>
</tr>
<tr>
<td>Belgium</td>
<td>18</td>
<td>1971</td>
<td>21</td>
<td>16.7</td>
</tr>
<tr>
<td>Ireland</td>
<td>16.37</td>
<td>1972</td>
<td>21.5</td>
<td>31.3</td>
</tr>
<tr>
<td>Austria</td>
<td>16</td>
<td>1973</td>
<td>20</td>
<td>25</td>
</tr>
<tr>
<td>Italy</td>
<td>12</td>
<td>1973</td>
<td>20</td>
<td>66.7</td>
</tr>
<tr>
<td>U.K.</td>
<td>10</td>
<td>1973</td>
<td>15</td>
<td>50</td>
</tr>
<tr>
<td>Average</td>
<td>13.3</td>
<td></td>
<td>20.425</td>
<td>53.6</td>
</tr>
</tbody>
</table>
Those who complain most about the VAT generally oppose all tax increases no matter how large the budget deficit is. They imagine that the fiscal crisis that their opposition to higher taxes will help create will lead to massive spending cuts that would be politically impossible otherwise. But that cannot happen, because Congress will never enact a large deficit reduction package that has no tax increases. Historically such packages have aimed for a 50-50 split between spending cuts and revenue increases.

Moreover, when the crunch comes there will be a heavy premium on near-term budget savings, which tends to put entitlements off the table, since significant changes to these programs must be phased in. And given that defense and homeland security make up such a large percentage of discretionary spending, it’s impossible to achieve sufficient savings by cutting only domestic programs. Therefore, as a practical matter, higher revenues will have to be a major part of any budget deal drafted under crisis conditions.

Table 3. VAT Rates in OECD Countries Establishing VATs After 1975

<table>
<thead>
<tr>
<th>Country</th>
<th>Initial Rate</th>
<th>Year 2009</th>
<th>% Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Korea</td>
<td>10</td>
<td>1977</td>
<td>10</td>
</tr>
<tr>
<td>Mexico</td>
<td>10</td>
<td>1980</td>
<td>15</td>
</tr>
<tr>
<td>Turkey</td>
<td>10</td>
<td>1985</td>
<td>18</td>
</tr>
<tr>
<td>New Zealand</td>
<td>10</td>
<td>1986</td>
<td>12.5</td>
</tr>
<tr>
<td>Portugal</td>
<td>17</td>
<td>1986</td>
<td>21</td>
</tr>
<tr>
<td>Spain</td>
<td>12</td>
<td>1986</td>
<td>16</td>
</tr>
<tr>
<td>Greece</td>
<td>16</td>
<td>1987</td>
<td>19</td>
</tr>
<tr>
<td>Hungary</td>
<td>25</td>
<td>1988</td>
<td>20</td>
</tr>
<tr>
<td>Iceland</td>
<td>22</td>
<td>1989</td>
<td>24.5</td>
</tr>
<tr>
<td>Japan</td>
<td>3</td>
<td>1989</td>
<td>5</td>
</tr>
<tr>
<td>Canada</td>
<td>7</td>
<td>1991</td>
<td>5</td>
</tr>
<tr>
<td>Czech Rep.</td>
<td>23</td>
<td>1993</td>
<td>19</td>
</tr>
<tr>
<td>Poland</td>
<td>22</td>
<td>1993</td>
<td>22</td>
</tr>
<tr>
<td>Slovak Rep.</td>
<td>25</td>
<td>1993</td>
<td>19</td>
</tr>
<tr>
<td>Finland</td>
<td>22</td>
<td>1994</td>
<td>22</td>
</tr>
<tr>
<td>Switzerland</td>
<td>6.5</td>
<td>1995</td>
<td>7.6</td>
</tr>
<tr>
<td>Australia</td>
<td>10</td>
<td>2000</td>
<td>10</td>
</tr>
<tr>
<td><strong>Average</strong></td>
<td><strong>14.7</strong></td>
<td><strong>15.6</strong></td>
<td><strong>6.1</strong></td>
</tr>
</tbody>
</table>

_Note:_ There are 30 nations in the OECD and 29 have VATs, only the U.S. does not._

_Sources:_ EU, IMF, OECD, PricewaterhouseCoopers, and national sources.
Unless an alternative to existing taxes is in place, Congress will have no choice but to raise income tax rates. Since those who oppose a VAT also tend to be obsessive about holding down tax rates, especially the top rate, they must ask themselves which is worse — a broad-based consumption tax or confiscatory income tax rates? When that day comes, I think they will choose the former. But that option may not exist unless we act soon to adopt a VAT, because it takes two to three years to put it in place. Because revenue is needed immediately in a crisis, a VAT will effectively be off the table.

Finally, conservative opponents of a VAT must ask themselves what their true goal is. Is it to increase growth and economic prosperity, because low taxes generally support those objectives, or is it to keep taxes from being raised regardless of the circumstances? Unless one believes that budget deficits have no effect on growth and prosperity, one has to accept that there are times when higher taxes are the lesser of evils and can actually stimulate growth. Conservatives like to pretend that the 1982 and 1993 tax increases never happened, but the fact is that growth was stimulated in both cases because the increases led to lower interest rates, lower expectations of inflation, and less crowding-out in financial markets.

Unfortunately, ideological dogmatism, rather than serious analysis, seems to underlie most of the opposition to a VAT among conservatives. When, economic conditions eventually force them to live in the real world — instead of a fantasy world where the budget can be balanced by abolishing Medicare — I think they will support a VAT just as European conservatives did. The longer they wait to do so, the greater the economic pain we will have to go through before they bow to reality and support a VAT.

Even though I think we should enact a VAT as soon as possible, I am under no illusion that it is feasible under current

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political and economic conditions. But those conditions will inevitably change if projections of future federal deficits are even close to correct, and if economists’ beliefs about the impact of deficits are remotely true. The projections mean that sometime in the not-too-distant future we will see significantly higher inflation and interest rates. At some point — I don’t know when — we will pass a political threshold, and politicians can start to talk honestly about the sorts of fiscal actions that will be necessary to bring inflation and interest rates down to tolerable levels.

I don’t anticipate that even then a VAT will be among the first options considered. When there is the inevitable flare-up in financial markets as bond prices crash, the dollar takes an unexpected dip, and the price of oil shoots up, Congress and the White House will solemnly vow to cut the deficit because it will be the one thing that everyone will be able to agree on that might help and at least won’t hurt. Everyone will go out to Andrews Air Force Base and, after weeks of intense negotiations, announce that a deal has been struck to deal with the crisis.

Republicans will inevitably agree to some modest tax increases, Democrats will agree to trim Medicare and Medicaid, and both sides will promise that discretionary spending will be slashed. But after the low-hanging fruit has been picked and deficits continue to rise and financial markets once again suffer turmoil, we will, after perhaps 10 years of unsuccessful efforts to get our finances under control, eventually reach a point where a VAT is politically viable. Republicans will finally be brought around by using the revenue to offset many of the ad hoc tax increases that will have already been enacted, with a little left over for deficit reduction. That way they can rationalize that their surrender to the inevitable is a tax reform rather than a tax increase. But in fact it will simply be a retroactive tax increase.

As David Ignatius wrote in The Washington Post, “By ruling out a VAT when it could keep the federal deficit in check, politicians have all but guaranteed that the debt crisis, when it comes, will be more damaging. But by then, everyone will be clamoring for a VAT, so it will be safe to endorse it.”

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It’s stupid to put up with a decade of unnecessary pain and suffering before we finally bite the bullet and do what must be done to stabilize our public finances. But I see no other path that will get us there. The right-wing fantasy that our fiscal problems can be solved by only cutting spending must be enacted and proven a failure before rational people can finally put real solutions like a VAT on the table without being accused by Larry Kudlow and The Wall Street Journal of trying to turn every American into a tax slave.
The Case Against VAT

By Douglas Holtz-Eakin

Douglas Holtz-Eakin is president of the American Action Forum in Washington.

The VAT has been used around the globe for decades. Its emergence in the U.S. fiscal policy debate is not, however, a tribute to this performance. Rather, it is simply a reflection of the devastating fiscal outlook facing the United States. The federal government ran a deficit of $1.4 trillion in fiscal 2009, about 10 percent of GDP. There is no relief in sight. Over the next 10 years, according to the Congressional Budget Office’s analysis of President Obama’s budget, the deficit will never fall below $700 billion. In 2020 the deficit will be 5.6 percent of GDP, roughly $1.2 trillion, of which over $900 billion will be devoted to servicing debt on previous borrowing.

Importantly, the budget outlook shows revenues that are adequate by historical standards. The CBO projects that over the next decade, the economy will fully recover and tax revenues will be 19.6 percent of GDP — over $300 billion more than the historic norm. The problem is spending. Federal outlays in 2020 are expected to be 25.2 percent of GDP — about $1.2 trillion higher than the 20 percent that has been typical in the post-World War II era. This leads to:

Reason #1 to oppose a VAT: It does nothing to solve the real deficit problem — excessive federal spending.

This fiscal outlook is no surprise. It has been outlined in successive versions of the CBO’s long-term budget outlook. In broad terms, over the next 30 years, the inexorable dynamics of current law will raise federal outlays from about 20 percent of GDP to anywhere from 30 to 40 percent of GDP. That’s well above any reasonable level of federal receipts. All this was well understood years ago. The only news is that the train wreck is worse than some anticipated and will happen sooner than previously thought.

This leads to another insight. It’s true that instituting a VAT in the near term would reduce deficits and could ameliorate any
financial market distress emerging from the budgetary outlook. Unfortunately, any such progress would be quickly undone because of rising federal spending. When that happens, Congress might well be tempted simply to raise the VAT rate. Indeed, the United Kingdom’s recent move to raise its VAT by 2 percentage points suggests behavior of this type. Unfortunately, Greece’s experience indicates that having access to a powerful revenue raiser like the VAT does not insulate a country from financial crisis.

Reason #2 to oppose a VAT: It may undercut incentives to rein in excessive federal spending.

Advocates of a VAT typically acquiesce to higher levels of federal spending rather than make the hard decisions required to rein in spending. There is no more toxic economic potion than the mixture of this acquiescence, the need for balanced budgets, and the adoption of a VAT.

As the preceding discussion highlights, reform of our public finances should begin with federal spending policy. In many cases, however, the discussion ignores the spending context and begins with the virtues of a VAT. Indeed, in principle the VAT has many desirable characteristics. As is well known, like the sales tax, a VAT is a tax on consumption. This places tax burdens on the amount that individuals take out of the economy. In contrast, an income tax places the tax burden on the amount of labor hours, effort, skills, capital, and risk-taking that individuals supply. To my eye at least, the former is ethically superior.

The VAT would be a genuinely broad-based tax, paid by essentially every part of the citizenry. In contrast, the individual income tax has evolved to the point that roughly one-half of taxpayers have no net liability. As is becoming increasingly well appreciated, it is a dangerous dynamic in a democracy to put a majority of voters in the position of being able to vote for benefits financed by a minority. A VAT has advantages from this political-economy perspective.

Also, a VAT (or at least the textbook version of the VAT) taxes all goods and services at the same rate, and hence does not distort decision-making. In contrast, the existing corporation and individual income taxes are rife with phaseouts, carve-outs, and other distortions. The corporation tax is high relative to many of
our competitors’, and the U.S. remains unique in its anticompetitive dedication to taxing the worldwide income of its multinationals. The individual income tax provides subsidies for the excessive consumption of debt-financed housing, gold-plated health insurance, and myriad other activities. Its combination of refundable tax credits and phaseouts imposes strikingly high effective marginal tax rates on working Americans who are not “rich” by any stretch of the imagination. The income tax system in the United States desperately needs fundamental reform.

Of course, a real-world VAT would have to pass through the same congressional taxwriting committees — the House Ways and Means and Senate Finance committees — that have made such a mess of the existing income taxes. One cannot predict the degree to which exclusions, zero rating, or other special features would undercut a VAT’s putative efficiency. But the case could be made that the VAT’s efficiency characteristics would be superior to those of the income tax systems.

But the efficiency effects of a free-standing VAT are quite different from the effects of a VAT that would be added onto the existing tax system. Indeed, because deadweight losses rise non-linearly, the total distortion associated with an add-on VAT would be worse than the sum of the two systems.

Reason #3 to oppose a VAT: It will make the tax system less efficient, damaging economic performance at a time when rapid growth is especially valuable.

The case could be made that replacing the income tax system with a VAT would yield a more efficient way to raise the needed revenue. However, raising revenue efficiently is only one criterion for evaluating the desirability of a tax system. A second important aspect is the fairness with which tax revenues are raised. In this regard, the VAT might well be less desirable than the alternatives.

To see why, note that the base for a consumption-based VAT — the value of sales less the value of purchases from other businesses — includes wage and nonwage compensation to employees. Thus, one could imagine collecting a VAT in two separate filings. Businesses would remit taxes on a base that is the VAT base minus compensation to employees. Individuals would remit a tax — at the same rate — on the value of their
compensation. The revenues, economic incentives, and other fundamental characteristics are unchanged. Only the administration is altered.

Collecting part of the consumption tax from individuals permits three important improvements. The first is that the tax system can be tailored, at least in part, to the economic characteristics of households. For example, one could exempt the first, say, $30,000 of compensation (and thus consumption) from tax and thus improve the progressivity of the consumption tax. Also, one could imagine applying a schedule of graduated rates at the household level to further enhance the progressivity. (Notice that this taxes more heavily those who consume more, which has ethical merit.) That is essentially the “X tax” pioneered by the late David Bradford, a renowned expert on tax policy.¹

Besides improving the ethical foundations of the tax system, a two-part tax would also make easier the problem of taxing the value-added of subfederal governments, not-for-profits, and financial services companies. Although not the subject of this essay, taxing each of these entities poses significant policy challenges for the traditional VAT. Using a household-based collection minimizes these difficulties.

Finally, the two-part consumption tax could be implemented as a reform to the existing individual income and corporation income tax systems. That is, it would not require setting up an entirely new and separate administrative system. Instead it could be the outcome of pro-growth tax reform of our existing tax system.

Reason #4 to oppose a VAT: Even a replacement VAT is less fair than other pro-growth tax reforms.

It is also important to recognize that the VAT would have to coexist with state systems, especially state sales taxes. Because a VAT is conceptually a multistage retail sales tax, it raises tensions in the U.S. federalist system. States view the sales tax as their exclusive domain and will resist the federal intrusion. Moreover,

¹Some advocate a VAT with a rebate to low-income households for the same reasons. But in practice the rebate would be unrelated to actual tax payments, setting up a de facto entitlement subsidy for low-income households. The federal government does not need new entitlement programs.
to the extent they are unsuccessful, their systems will be pushed more toward income taxes that are potentially less efficient.

Reason #5 to oppose a VAT: It competes with state-level sales taxes and pushes states to use income taxes.

The final issues revolve around the fact that the VAT is a hidden tax whose cost is embedded in the price of goods and services. (Sales taxes raise the same transparency issues.) This feature, combined with the broad base, leads many commentators to fear the VAT as a money pump for larger government.2 In the United States, each percentage point increase in a comprehensive VAT would yield roughly $40 billion to $50 billion annually. What should one think of these concerns?

Some have argued that there are cosmetic measures that counter the hidden nature of the tax, such as ensuring that the full value of the VAT appears on the receipt for every transaction. It is an open question whether this raises sufficient visibility, but it would clearly be a useful step.

That leads to the second point, which is that adoption of a VAT might be a reflection of a desire for bigger government. There is a strong, well-established correlation between having a VAT — or having a larger VAT — and having a larger government.3

Like any correlation, this relationship between the VAT and size of government can have multiple interpretations. Perhaps the countries that adopted a VAT did so to smooth the path to a larger public sector. But it could also be the case that a VAT fueled a growth in government that people otherwise did not anticipate or want.4 We simply can’t know which story is true, but one can’t expect those who are concerned about the growth of government to be sanguine about the VAT in light of the historical record.

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Reason #6 to oppose a VAT: The devil you know is better than the devil you don’t know. Adopting a VAT exposes the economy to policy risks about the size of government.

At this point in the discussion, I confess some disappointment. Six is not a compelling number of arguments against a VAT. Five has some appeal, as the author can always refer to a “handful” of arguments. Seven is a prime number and, with some stretching, allows the author to reference the seven deadly sins or the movie Seven. Getting Brad Pitt and Morgan Freeman into a tax policy piece is always a coup. But I am left with six.

But weak numeration should not disguise a strong truth: The United States should not have a VAT.
The Distributional Case Against a VAT

By Jane G. Gravelle

Some reasons for adopting an add-on VAT may be justified (to meet ballooning revenue requirements); some reflect faulty reasoning (to increase international competitiveness); and some are just silly (everyone else has a VAT). The revenue need is real and may justify a VAT if the income tax cannot be increased sufficiently. Many economists support consumption taxes in principle because they do not distort investment and savings decisions.

That said, there are two potentially serious barriers to adopting a VAT: transitional effects and distributional effects. The latter concern — the regressivity of a VAT compared with the income tax — is probably the more frequently mentioned obstacle to any serious consideration of a VAT in the United States, and is the focus of this essay. The discussion also includes some broader issues of equity in the U.S. tax system.

This essay will not attempt to defend progressivity. We presume that a progressive tax system is an objective of federal tax policy. Although payroll taxes are not progressive at the upper end of income distributions, our overall tax system is progressive, so that American voters have displayed a preference for a progressive federal tax. Moreover, a progressive tax may be justified by the objective of maximizing welfare when there is a declining marginal utility of income; by a willingness to pay for public goods by those with more income and property to protect;

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1 See Tax Policy Center, Table T10-0027, which shows the effective rate ranging from -25.9 percent at the 10th percentile of the bottom quintile to 33.9 percent at the top (90th percentile of the top 0.1 percent). http://www.taxpolicycenter.org/numbers/displayatab.cfm?DocID=2620&topic2ID=40&topic3ID=41&DocTypeID=2
and by viewing income redistribution as a public good that benefits the high-income donors.²

Table 1 illustrates the dramatically different distributional patterns for an income tax and a VAT of equal yield, allocating the VAT based on consumption. Were this the end of the story, one could rest the case. Compared with our major revenue source — the income tax — a VAT completely reverses the distribution of taxes, excessively burdening low-income individuals while imposing a negligible burden on the wealthy.

Two factors account for the dramatically different distributional effects: the flat rate structure of a VAT and the declining ratio of consumption to income. The flat rate by itself would lead to a proportional tax burden even if the consumption-to-income ratio were constant. The declining ratio of consumption to income is primarily what leads to the VAT being a regressive tax.

Several factors could contribute to this pronounced decline in the consumption-to-income ratio as income rises. First, there may be some expectation of a declining ratio from life-cycle components, since individuals vary consumption relative to income. Second, when individuals have low transitory income (for example, from a job loss), they are likely to maintain consumption levels through drawing down assets, and these individuals will generally fall in lower-income classes. Third, people have different levels of permanent income, and high-income individuals are more likely to accumulate wealth without spending it during their lifetime, leaving bequests to heirs when they die. At the same time, there are many concerns about the reliability of data in the Consumer Expenditure Survey (CES), which is the main source of data on consumption patterns.

As a result of those concerns, there have been challenges to the standard method of allocating taxes based on consumption data from the CES, which leads to a highly regressive pattern. We will discuss these conceptual issues, comparing the tax with a consumption base using a different allocation method and questioning the reliability of survey data.

**Conceptual Issues**

The use of consumption rather than income to classify those in the distribution would simply lead to a proportional tax rate (with a higher average, since income is larger than consumption). But there are two important reservations to this approach. A comparison to other taxes that are measured relative to income would not be possible if the base were consumption. Moreover, if one views income as reflecting the capacity to pay taxes, then consumption is only one use of that income; income can also be used to accumulate capital.

In 1998 the U.S. Treasury Department changed its method of allocating excise taxes from consumption to allocating it like an income tax. This method was applied to the analysis of a VAT in

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a recent study by Toder and Rosenberg. The aggregate VAT naturally falls into two parts: a tax on wages and a tax on cash flow of businesses, the latter of which looks similar to a profits tax. The alternative approach allocates the wage part based on wages and the cash flow share based on the share of capital income. Neither Treasury nor the Toder-Rosenberg study provides a detailed rationale for this approach. The motivations appear to include both data issues and the problems with taking a one-year snapshot when annual income and consumption may differ from permanent income.

In Table 2, the burden of the consumption tax based on this allocation is derived from the patterns reported in a study by Burman, Gravelle, and Rohaly, scaled to be the same revenue as the income tax. This distribution differs dramatically from the consumption distribution, with an inverted U pattern: The burden first rises and then falls.

Is this a reasonable conceptual depiction of the burden of a VAT because of discrepancies between permanent income and an annual snapshot? This differential could occur because of transitory issues, but Cronin and also Burman, Gravelle, and Rohaly provide evidence that transitory income effects are of minor importance. Thus, a justification of this nature would reflect life-cycle effects.

To investigate this argument, consider a simple life-cycle model in which one old cohort consumes at the level referred to as “Co,” and one young cohort consumes at the level referred to as “Cy.” The old cohort is no longer working, but lives on assets saved when young. There are no bequests.

To illustrate the link between uses and sources, consider a tax-inclusive tax at rate t. This is a tax that is applied to income,
similar to how an income tax is described, but different from the way a normal VAT or sales tax is stated, which is a tax-exclusive rate.\(^7\)

To state these equations with a tax-exclusive rate of \(v\), the consumption on the left-hand side would be multiplied by \(1+v\).

\[
\begin{align*}
(1) \quad & C_0 = (1+R)K(1-t) \\
(2) \quad & C_y = (WL - (1+G)K)(1-t)
\end{align*}
\]

For the purpose of these equations: \(R\) is the rate of return, \(K\) is the capital stock, \(W\) is the wage, \(L\) is the labor supply, and \(G\) is the growth rate of the economy.

Adding (1) and (2) produces the source-side tax base assigned by Treasury:

\[
(3) \quad C_0 + C_y = (WL+ (R-G)K)(1-t)
\]

The total sum of consumption is \(C_0 + C_y\), and the base is wages plus a cash flow tax on \((R-G)K\).

\(^7\)As a simple example, if a tax-exclusive rate is applied to a dollar of sales at 33 percent, the consumption plus the tax will be $1.33. The tax-inclusive rate will be $0.33 divided by $1.33 or 25 percent. In general, a tax-inclusive rate is equal to \(v/(1+v)\) where \(v\) is the tax-exclusive rate.
The two cohorts are alive at the time the tax is imposed. It is clear that the tax on the old cohort relative to income is \( t(1+R)K/RK \), a tax rate that is higher than the statutory tax-inclusive rate. The tax rate on the young cohort relative to income is \( t(WL-((1+G)K))/WL \), which is lower than the statutory rate. If the old cohort has less average income than the young, the tax will be regressive.

The Treasury allocation method would result in a tax rate on the old cohort of \( t(R-G)K/RK \) that is less than the statutory rate and a tax rate on the young cohort of \( t \). Thus, Treasury’s allocation reverses the pattern of effective tax rates.

As a snapshot measure, the Treasury allocation is clearly incorrect. What about a lifetime measurement? The older person’s lifetime in this simple example is the same as the snapshot; allocating by consumption properly measures the burden, and the Treasury approach significantly misrepresents it. The younger individual, however, has two periods of lifetime. When the young person becomes old, consumption will be the same as the old person’s multiplied by \((1+G)\), but discounted (both consumption and resources when old divided by \((1+R)\)). Adding the two, the young person’s present value of consumption (this period and the next discounted) will be equal to the wages, and the effective tax rate based on lifetime consumption and income will be equal to the statutory rate.

In fact, these relationships are the reasons economists sometimes characterize a consumption tax as a tax on old capital, plus a tax on wages.

This two-period example is highly simplified. There are many cohorts of individuals, and earnings tend to peak during middle age, with both the young and old having lower incomes. Does Treasury’s tax rate measure do a better job than the consumption method at measuring lifetime burden? To explore this question, Figure 1 presents the results of a more sophisticated life-cycle
Figure 1. Annual Effective Tax Rates for a Consumption Tax: Life Cycle Model
model designed to reflect the characteristics of the economy and having 55 generations, from ages 22 to 76. The model is scaled to the same revenue as in Table 2.

To match this model’s aggregates (such as capital stock) to the economy, it is necessary to incorporate bequests. In the model, the lowest-income individuals (on an annual basis) are the elderly retired (with the oldest individual having half the average income), followed by the young individuals up to the age the bequest is inherited (48) who have income close to the average, followed by older but not retired individuals who have growing capital incomes as well as wages. Except at the very highest incomes, the consumption allocation matches the lifetime burden and does so much more closely at the lower income levels.

This diagram suggests that the Treasury allocation should be ruled out as a superior method of matching the lifetime burden of the population when the tax is imposed. Moreover, the mismatch with the consumption allocation arises because these individuals would not be high (remaining) lifetime income earners, because they are about to retire. The highest-income person in this life-cycle distribution will fall in the lowest income group the very next year and move to lower and lower incomes in the next few years. Thus, the pattern of the burden of the tax on a lifetime basis is regressive if ordered by remaining average lifetime income. Neither method captures the burden on unborn generations, which is constant and reflects the burden of the youngest member.

It should also be clear from this figure that life-cycle elements cannot account for the observed distribution of income and consumption in the economy. In this model, the highest income is slightly over 3 times the lowest; the bottom of the highest quintile is twice the top of the lowest quintile. In the distribution in Table 1, the bottom of the highest quintile is 6 times the top of the lowest quintile; incomes at the 99th percentile are 33 times

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8This model is described in Burman, Gravelle, and Rohaly, “Towards a More Consistent Distributional Methodology,” op. cit.
incomes at the top of the lowest quintile. Clearly, the main variation in income is not from life-cycle effects, but from differences in lifetime incomes.

Differences in permanent lifetime income that are many times larger than life-cycle effects also suggest that younger individuals entering adulthood after the tax is imposed will likely differ, since higher-income individuals are much more likely to save and leave bequests than lower-income individuals. Moreover, evidence indicates that there is a high correlation between permanent income classifications and annual ones, especially for the very rich and very poor. Sabelhaus and Groen find that 70 percent of those in the lowest and highest annual decile of the income distribution are also in the permanent (10-year) distribution. They also found that savings rates within income classifications did not appear to vary substantially by age. These results suggest that in principle, life-cycle concerns may be overstated and that the change in the ratio of consumption to income should tell us something about the distribution of a VAT, not only for the individuals alive at the time the tax is imposed, but also in the long run.9

Data Reliability

Sabelhaus and Groen raise concerns about the very high ratios of consumption to income (in excess of 2 in the lowest decile) reported in the CES data set, which cannot be sustained permanently. They suspect income in the lowest levels is significantly underreported.

When they adjust the annual income distribution to permanent income (defined as income over 10 years), they find smaller ratios, which range from 1.21 at the lowest decile to 0.74 at the highest decile, as compared with 2.30 to 0.64 for the annual data. They also find some inconsistencies with wealth-to-income ratios reported in other data sets in the lowest deciles. Yet they find income reported in other data surveys consistent with the CES.

They conclude that the most likely explanation of high consumption-to-income ratios is a general tendency toward underreported income that may be more prevalent at lower income levels. It is highly unlikely, however, that this revision would be sufficient to reverse the pattern of falling consumption to income. Moreover, evidence on education level, which is highly correlated with permanent income, indicates that savings rates and ratios of assets to income rise with education.10

We may conclude that, although the tax may not be as regressive as depicted in Table 2, it is nevertheless likely to be regressive.

Conclusions

This analysis suggests that despite the issues raised regarding the distributional methods and the data set, a VAT is regressive. Concerns about regressivity don’t just apply to lower income levels. In some ways, it is the regressivity at the higher end of the distribution (or even lack of progressivity) that is more problematic, since it cannot be addressed easily with offsetting benefits (such as an increase in transfer payments or earned income tax credits).

A VAT by its nature is, at a minimum, proportional because its rate is flat. There is no real way to address the lack of flexibility in such a tax for obtaining progressivity in the middle- and upper-income ranges. Since most income and most consumption are not in low incomes but in higher ones, this inability to achieve progressivity in the middle- and upper-income levels is a serious drawback of the VAT. All of this assumes, of course, that one is concerned about distributional issues.

VAT as the Key to Real Tax Reform

By Michael J. Graetz

Michael J. Graetz is the Isidor and Seville Sulzbacher Professor of Law and the Columbia Alumni Professor of Tax Law at Columbia Law School.

If the United States were to enact a VAT, how should its revenue be used? That is the question the editors of this volume asked me to answer. As many readers know, I have long advocated a VAT as the linchpin of reforming our nation’s tax system, most recently in the spring 2010 paperback edition of my book *100 Million Unnecessary Returns: A Simple, Fair and Competitive Tax System for the United States.* For those unfamiliar with my plan, it has four key pieces:

- First, enact a VAT, a broad-based tax on sales of goods and services now used by nearly 150 countries worldwide. The United States is the only OECD country that has no VAT or, as it is sometimes called, a goods and services tax.  
- Second, use the revenue produced by that consumption tax to finance an income tax exemption of $100,000 of family income and to lower substantially the individual income tax rates on income above that amount.  
- Third, lower the corporate income tax rate to 15 percent, or no more than 20 percent.  
- Fourth, replace the earned income tax credit and provide low- and middle-income families with tax relief from the VAT burden through payroll tax offsets and debit cards.

This plan has many significant advantages over current law and other tax reform alternatives:

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1Yale University Press, April 2010. Much of this article has been adapted from the introduction to the paperback edition of my book.
2Id. at chapter 5.
3Id. at chapter 6.
4Id. at chapter 7.
5Id. at chapter 10.
It would encourage saving and investment in the United States, stimulating economic growth and creating additional opportunities for American workers.

It would eliminate more than 100 million of the 140 million income tax returns and would free 150 million Americans from having to deal with the IRS.

A corporate income tax rate of 15 to 20 percent would be among the lowest in the world and would solve most of the vexing problems of international tax policy.

The plan would avoid most of the difficult issues of transition to an entirely new system that have affected many other proposals to replace the income tax with consumption taxation.

With relatively few high-income Americans filing tax returns, there would be far less temptation for politicians to use income tax exclusions, deductions, and credits as if they offered adequate or appropriate solutions to the nation’s most pressing social and economic problems. They do not.

The plan would take advantage of our status as a low-tax country by making us a low-income-tax country.

Finally, by combining taxes commonly used throughout the world, this system would facilitate international coordination and fit well with existing tax and trade agreements — something that most other consumption tax proposals fail to do.

I designed this plan in a manner generally to change neither the progressivity of the tax system nor the amount of revenue produced under current law. This allows my proposal to be evaluated by comparing it directly with the current system, and it follows the important precedent of both distributional and revenue neutrality that facilitated enactment of the 1986 Tax Reform Act, our last major tax reform.

Since the first edition of my book was published, however, major changes have occurred in our nation’s economic, fiscal, and political circumstances. During the George W. Bush administration, the combination of large tax cuts, costly wars on two fronts, a new unfunded Medicare prescription drug entitlement, and other spending growth turned projected surpluses into substantial deficits. Then, as a result of the financial crisis, the
most significant recession since the Great Depression (with unemployment reaching a 25-year high), and a vast amount of government spending aimed at combating these problems, our short- and long-term financial condition deteriorated dramatically. Now the U.S. financial position is perilous.

We have never in modern times faced such a dangerous ongoing imbalance between the levels of federal spending and revenue. Our federal debt as a percentage of our economic output is greater than it has been since the end of World War II. And we had all the money then: Europe and Japan were in shambles, and China was entering into a dark communist era. Our economy was poised to grow for decades at an unprecedented pace. And our government owed Americans 98 percent of the money it had borrowed to finance that war. The Congressional Budget Office now projects that in a decade, our national debt will reach $20 trillion — 90 percent of our economic output (GDP) — with more than half owed to foreigners, many of whom we cannot count as friends.6 If we are able then to borrow at a 5 percent interest rate, interest on the federal debt will cost us a trillion dollars a year.

Our long-term fiscal situation is even more dire.7 Our population is aging with fewer workers for each retiree, and we have no credible plan to control excessive and rapidly rising health-care costs. So the financial picture is projected to get even gloomier in the longer term. If we fail to get control of the federal budget, rising interest costs will gobble up an ever-larger share of our nation’s resources. Public debt growing to such levels will also decrease the value of the dollar and challenge its role as the world’s reserve currency. Our growing national debt increases the risks of substantially higher interest rates, inflation, and another financial crisis. Over time it will threaten the living standards of the American people. These are facts, not forecasts.

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We are heading toward a cliff, risking the economic well-being of our children and grandchildren.

We simply cannot allow projected deficits and the additional borrowing they will produce to occur. Once our economy recovers and resumes real growth and job creation, both substantial reductions in anticipated government spending and tax increases will be necessary to address the looming disaster. We must curb our government’s spending. But we should not cut Social Security or health benefits for low- and middle-income families. Americans will have to work longer and retire older. High-income retirees will no doubt see their benefits cut or taxed away. And the first major tax policy challenge of the 21st century is the need to address the nation’s unsustainable fiscal condition fairly and in a manner most conducive to economic growth.

A great advantage of my plan is that by introducing a VAT on sales of goods and services and thereby decreasing our need to rely so heavily on the income tax to finance government spending, we can have a tax system that is fair and yet substantially more favorable to economic growth than our current system. With this plan in place, our ability to raise additional revenue would be increased without the economic costs that would arise if raising income and payroll taxes were our only options. We can no longer afford the luxury of a tax system that relegates the goal of economic growth to the back burner. And any tax reform must take care not to stifle our economic recovery.

A number of other analysts, recognizing that simply reforming our income tax is inadequate, have proposed that the U.S. enact a VAT to address the gap between our spending and our revenue. For example, both the conservative economist Bruce Bartlett and the liberal Bill Gale have proposed a VAT to reduce our debt and deficits.8 Others, such as Len Burman, have proposed using a VAT to fund specific spending programs such as health insurance

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coverage. Burman regards using a VAT to fund progressive expenditures as the best way to address concerns about its potential regressivity.9 But despite the daunting challenges of our fiscal condition — challenges that a VAT can surely help ease — it would be a mistake to enact a VAT without using a substantial portion of its revenue to help finance a major reform and simplification of income taxes. That would be a wasted opportunity.

Let me begin with the corporate income tax. The statutory U.S. corporate rate has for many years been the second highest in the world, trailing only that of Japan, which has recently announced plans to reduce its rate, making ours the highest. This is a reversal of the situation immediately after the 1986 tax reform when we had the lowest rate in the OECD. As I describe in my book, the corporate income tax has long been popular politically — since everyone thinks it is paid by someone else — but makes little economic sense other than as a backstop to the individual income tax.

In today’s global economy, appropriately taxing multinational corporations has become extremely difficult. Recent disputes over the Obama administration’s international tax proposals illustrate the difficulties. (Consider, for example, the proposals dealing with cross-crediting of foreign taxes, the treatment of domestic expenditures that help produce foreign income, the treatment of U.S.-owned foreign entities, and transfer pricing, along with the recent trend of countries with foreign tax credit systems to move to dividend exemption systems.) But the problems are even more fundamental. As I have observed elsewhere, the basic building blocks of international taxation — the concepts of residence and source — are now built on quicksand.10 In today’s economy, both are easily manipulated.

I have come to believe that, absent broad international agreement and cooperation eliminating tax competition, a low statutory rate is essential. I have therefore urged lowering the corporate rate to 15, or at most 20 percent. With a rate that low, companies would plan to locate income here and their deductions abroad. Transfer pricing decisions would operate in our favor; borrowing, with its attendant interest deductions, would be located abroad. A low corporate tax rate would also benefit purely domestic business and would encourage investments in the United States by foreigners. The costs of a 15 percent corporate rate could be funded by 2 or 3 percentage points of a broad-based VAT, perhaps less if accompanied by corporate base broadening.

For the individual income tax, I have recommended a family exemption of $100,000 (indexed for inflation), and, in the first edition of my book, I suggested a flat 25 percent rate on income above that level. The exemption would remove 150 million Americans from the income tax altogether and create an opportunity for great simplification. Our need for additional revenue, coupled with a desire to increase progressivity at the very top of the income scale, might require a second income tax bracket, perhaps a 35 percent rate for income above some high threshold — say, $500,000 or even $1 million. But with a VAT as part of the tax mix, income tax rates could be much lower than would be possible relying on income taxes alone. In essence, my proposal would return the U.S. income tax to its pre-World War II form: a low-rate tax on a relatively thin slice of higher-income Americans.

Interestingly, the individual income tax changes I have proposed have proved the most controversial. Two criticisms have been offered most often. The first is that removing people from the income tax will diminish their connection to their government. The claim is that everyone needs to contribute taxes to

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have a stake in government decisions about spending. Back in
the day when my father took over our family’s dining room table
for a couple of months every year to fill out his tax returns, the
connection that income taxes forged between the government
and its citizens was palpable. But for most Americans today,
filling out their tax returns is simply another commercial exer-
cise, often between them and their paid preparers or by answer-
ing a series of questions on their computers. When you ask
people how much income tax they paid last year, all too often
they answer, “I got a refund of $600,” or something like that. If
the amount of VAT is separately stated, like a retail sales tax, at
the cash register (and there is no reason it cannot be), then
Americans will know how much they are paying the government
every time they make a purchase. This objection is unavailing.

The second objection reflects a fundamental policy disagree-
ment between me and my critics. Limiting the income tax to
families earning more than $100,000 will transform the politics of
tax expenditures. It will move the IRS away from serving as an
agency providing benefits and return it to its tax collection
mission. The income tax is riddled with incentives for unproduc-
tive expenditures. The number and size of tax expenditures have
exploded since 1986. Tax expenditures are popular with both
Republicans, who rarely see a tax cut they won’t embrace, and
Democrats, who view tax exclusions, deductions, and credits as
the only way to achieve their domestic policy goals without
being tarred as big spenders. Typically, tax expenditures are
unfairly distributed, benefiting most those least in need, and are
poorly targeted, overly complex, and inadequate to meet their
intended goals.

Consider two of the largest tax expenditures: the home mort-
gage interest deduction and the exclusion from income of
employer-provided health insurance. The former distorts invest-
ments to benefit housing over other, often more productive,
investments and encourages Americans to borrow excessively,
putting up their homes as collateral. The latter contributes to
making our healthcare costs the highest in the world, leaves
millions uninsured, gobbles up the wage increases of workers,
and makes American businesses and products less competitive in
the world economy.
Or look at the income tax provisions that help finance higher education. There are 13 altogether: two tax credits, three deductions, and three exclusions from income for current-year expenses, and five other provisions to encourage saving for college expenses. Together they represent the greatest increase in federal funding for higher education since the GI Bill. But no one can tell you what they are, how they work, or how they interact. They have no doubt aided tuition increases so we now have higher education expenses growing at a rate exceeded only by healthcare. Planning to pay for college around these tax breaks is essentially impossible for middle-income families.

The largest tax expenditures are directed at the public, not narrow special interests. Very few work well. We have been unsuccessful at repealing these tax expenditures, so the only practical alternative is to repeal the income tax. That is precisely what I recommend for most Americans. Doing so would transform the politics of tax expenditures. Many would simply disappear. Repealing or cutting back on those that remain would become much easier politically. The temptation to enact new ones in the future would greatly diminish. All of these I regard as substantial advantages of my proposal.

A further issue remains. Repealing the income tax for all but higher-income families would eliminate the earned income tax credit, which provides a much-needed wage subsidy to low-income workers, and it would also eliminate refundable child credits for low-income families. In my book I devote a chapter to the question of how to maintain similar benefits and protect low- and moderate-income families from potentially excessive tax burdens under a VAT. Space does not permit me to repeat that analysis here.

Curbing the regressivity of the VAT is actually straightforward — even though many VAT regimes around the world have used poorly targeted and overly expensive exclusions (such as for food) or complex multiple rate structures — options I do not recommend. At the outset, it is important to recognize that the VAT is not nearly as regressive as is often claimed. It is well known that a VAT burdens spending from both current income
and existing wealth, so it is more progressive than a payroll tax.\textsuperscript{12} The elderly would be largely protected from the one-time price increases attributable to a VAT through the indexing of Social Security benefits and government payments for healthcare costs.

Also, the corporate income tax is not nearly as progressive as the official estimates (which tend to allocate its burdens entirely to owners of capital) suggest. In today’s global economy, there is considerable evidence that a substantial share of corporate income taxes is a burden on labor, which is much less mobile than capital.\textsuperscript{13}

Finally, if enacting a VAT enables greater spending than would otherwise be possible, the distribution of the spending must also be taken into account. We should concern ourselves with the overall progressivity of the government’s taxing and spending and not worry excessively about the progressivity of a single aspect of that system. This was, of course, the political genius of Franklin Roosevelt’s decision to fund progressive Social Security benefits with a regressive payroll tax — one of our nation’s most successful public policies.

I propose two ways for offsetting the regressivity of a VAT and delivering benefits that could replace the EITC and refundable child credits: (1) wage increases funded through payroll tax rebates for employees and employers, and (2) a “smart” or “debit” card that could be swiped at the checkout counter to relieve families from paying VAT on a specified amount or purchases.\textsuperscript{14} The information requirements to deliver those benefits will depend on how targeted versus how simple one wants to be.

For example, exempting $10,000 of spending per person with a 10 percent VAT would simply require providing everyone with


\textsuperscript{14}See chapter 10 of 100 Million Unnecessary Returns, supra note 1.
a debit card worth $1,000. Under my plan, including the amount of the debit card in income would be a relatively simple way to claw back its benefits for families with incomes above $100,000. If more targeting was desired, more information would be required about wage or income levels and the number of children. And obviously, if one wanted to replicate the EITC of current law, information similar to that now provided through tax returns might be required. But that is neither necessary nor appropriate. The British have demonstrated that refundable credits can be delivered through increased paychecks without the need for workers to file annual returns, and both the national taxpayer advocate and President Bush’s advisory panel on federal tax reform have urged radical simplification of the EITC.15

The details of regressivity offsets such as these will depend on the VAT base and its rate, along with several other variables, but the essential point is this: Benefits can be provided to low- and moderate-income families, and the regressivity of a VAT can be reduced without either narrowing the VAT base or insisting that annual income tax returns be filed.

Combining a VAT with major reform of corporate and individual income taxes would permit us to achieve whatever revenue and distributional targets our political process determines to be appropriate. Reforming our income taxes does not preclude Congress from dedicating an amount of VAT revenue to funding specific expenditures, such as healthcare. And changes like these can be phased in on a timetable appropriate to our economic circumstances at the time of enactment. In contrast, simply adding a VAT to our existing tax system to address the need for more revenue would waste a once-in-a-lifetime opportunity for real and lasting income tax reform.

The plan I have advocated here (and more fully in my book) could help our economy and sharply reduce the wasteful costs of tax compliance and enforcement by using a well-known and time-tested tax — the VAT — to return the U.S. income tax to its

15See 100 Million Unnecessary Returns, supra note 1, at 175. For the simplified form recommended by the President’s Advisory Panel on Federal Tax Reform, see id. at 222-223 and Appendix 2.
original function as a tax on higher-income individuals and to dramatically lower our corporate income tax rate. The time for tax policy tinkering has passed. We owe it to ourselves and to future generations to put our fiscal house in order and to do so fairly, simply, and in a manner most favorable to economic growth. Our nation’s tax system is badly broken. We need to fix it and fix it right.
Responding to VAT: Concurrent Tax and Social Security Reforms

By Alan D. Viard

Most proposals for a VAT in the United States call for part, or all, of the resulting revenue to be used to reduce other taxes. In this essay, I discuss the possibilities of using a VAT to finance reductions in the corporate income tax, payroll and self-employment taxes, and the individual income tax. I also describe changes to the Social Security system that would need to accompany the adoption of a VAT.

If a VAT is adopted, it should be used to eliminate the corporate income tax and its assortment of economic inefficiencies. It should also be used to eliminate the Medicare component of the payroll and self-employment taxes. Replacement of the Social Security component of those taxes should be avoided, however, because it would be difficult to reconcile with the current design of the Social Security system. A variety of individual income tax reductions could be added to the corporate tax and Medicare tax reductions to achieve the desired mix of efficiency and distributional goals.

Repeal the Corporate Income Tax

Several recent VAT proposals have called for repeal or reduction of the corporate income tax. The Treasury Department (2007) analyzed three reform options, one of which would replace the corporate income tax with a VAT. The Roadmap for America’s Future proposal introduced by Rep. Paul Ryan, R-Wis., would also replace the corporate income tax with a VAT. Prof. Michael Graetz’s (2008) VAT proposal calls for a reduction in the corporate income tax rate to 15 or 20 percent.

On efficiency grounds, the corporate income tax is a prime candidate for full or partial replacement. Like any other tax on capital income, and unlike the VAT, the corporate income tax
penalizes saving for future consumption, relative to current consumption. But the tax induces a wide variety of additional distortions not imposed by other taxes on capital income.

Some of the distortions arise from the fact that the corporate income tax essentially applies only to equity-financed investment by corporations, not to corporate debt-financed investment or noncorporate investment. To be sure, corporate equity enjoys advantages at the individual level because reinvested earnings are not taxed until gains are realized and because dividends and capital gains are taxed at preferential rates, although the dividend preference is scheduled to expire at the end of 2010. On the whole, though, corporate equity-financed investment is taxed more heavily than other investment. As a result, the corporate income tax distorts the choice of organizational form and the choice between debt and equity.

The corporate income tax also penalizes the location of investment inside the United States. For foreign-chartered firms, the tax applies only to income derived inside the United States, giving those firms an incentive to operate abroad rather than here. In an effort to keep investment in the United States, the current system taxes U.S.-chartered firms on their foreign, as well as their domestic, income. At least in the long run, however, this charter-based taxation (misleadingly called “global” or “worldwide” taxation) probably does little to keep investment in the United States and instead simply encourages investment abroad to be done through foreign- rather than U.S.-chartered firms. This doubtlessly explains why charter-based taxation is being abandoned by many countries and why the United States’ application of it has always been diluted by the deferral of tax on overseas earnings.

All of these considerations suggest that the United States should join the international movement toward lower corporate tax rates. Given the lack of a coherent argument for why corporate equity investment should be singled out for taxation, outright elimination of the corporate income tax would be ideal. The resulting flow of investment to the United States would ultimately make labor more productive and thereby boost real
wages. Treasury (2007) estimated that replacement of the corporate income tax with a VAT would increase long-run output by 2 to 2.5 percent.

The repeal of the corporate income tax should be accompanied by a significant strengthening of the undistributed earnings tax to protect the individual income tax base from erosion. Also, preferential individual income tax treatment of dividends, relative to other types of capital income, would no longer be needed once there was no corporate tax to offset.

There might be resistance on distributional grounds to the use of the VAT to finance a repeal of the corporate income tax. Those concerns would be misplaced to the extent that the benefits of corporate tax repeal flow to workers in the form of higher wages. In any case, the concerns could be addressed by including individual income tax reductions in the package, as discussed below.

**Modify Payroll and Self-Employment Taxes**

There would be economic advantages to using a VAT to partially replace payroll and self-employment taxes, which are essentially equivalent to a wage tax. To be sure, wage taxes are relatively simple and relatively efficient because, like consumption taxes, they do not distort the saving decision. Nevertheless, wage taxes are economically inferior to consumption taxes. The consumption tax base effectively includes wages, plus above-normal returns on new investment and initial wealth. It is clearly desirable to tax above-normal returns, and it is probably desirable to place some tax burden on initial wealth while using transition relief to modulate the extent of the burden. Therefore, replacing a wage tax with a consumption tax offers at least modest economic gains.

Complications arise, however, because payroll and self-employment taxes are tied to Social Security and Medicare Part A. Those complications make it unwise to replace the Social Security component of these taxes but do not pose an obstacle to replacement of the Medicare component.

At the aggregate level, payroll and self-employment taxes are earmarked to finance Social Security and Medicare Part A benefits. Those programs are not authorized to pay benefits greater than the levels that can be supported by current and past
taxes, as tracked by a trust-fund accounting mechanism. On the whole, this earmarking appears to have promoted fiscal responsibility and spending restraint, particularly for Social Security. Legislation to restrain Social Security benefit growth was enacted in 1983 when earmarked taxes were insufficient to support scheduled benefits, and discussion of Social Security reform today is driven by the prospect that earmarked taxes will again fall short in roughly three decades.

Could these advantages be retained by earmarking some of the VAT receipts to finance Social Security and Medicare Part A? For Medicare, that approach would indeed be satisfactory. If a VAT is adopted, the Medicare tax should be abolished, as Burman (2008) has proposed, and a portion of the VAT receipts should be earmarked to finance Part A benefits. Unfortunately, that approach would not work well for Social Security. Formidable complications would arise because Social Security benefits are linked to tax payments at the individual level, a linkage that does not exist to any significant extent in Medicare.

Specifically, each worker’s Social Security benefits are based on her lifetime earnings (wages and self-employment income) that were subject to Social Security tax. A worker with higher average earnings receives higher monthly benefits, although the increase is less than proportional. The benefit computation includes only earnings subject to Social Security tax; it excludes earnings that exceeded the taxable maximum and those from employment not covered by Social Security, primarily some state and local government employment.

It would be difficult to maintain the current benefit formula if Social Security benefits were financed by a VAT rather than by payroll and self-employment taxes. At a minimum, it would be inappropriate to continue excluding earnings from employment previously exempt from Social Security tax, as those workers would now pay the same VAT as other workers to finance the system. More broadly, the principle of paying higher monthly benefits to those with higher lifetime earnings might be politically untenable in the absence of a visible link between earnings and tax payments. (Of course, there would still be a linkage, because workers with higher earnings would pay higher VAT over their lifetimes.)
One possible response would be to radically revamp the benefit formula, perhaps paying flat monthly benefits to all retirees. But that switch would create its own problems, as it would dramatically change public perceptions of the system’s contributory nature. Moreover, there would be no easy way to apply it to current workers, who have been paying earnings-related taxes and have been promised earnings-related benefits.

Social Security is often considered the third rail of American politics. Given the political contention that would surround the enactment of a VAT, it would be preferable not to combine it with a politically explosive set of Social Security changes.

Although the Social Security tax should not be reduced or replaced, it will still be necessary to make some changes to the Social Security system. If the system’s tax and benefit rules were left untouched, the adoption of a VAT would result in an unintended and capricious tax and benefit reduction. Those effects would occur because of how a VAT affects real wages.

Although a VAT and an individual income tax both reduce workers’ disposable incomes below the marginal product of their labor, they do so in different ways. The VAT is a firm-level tax that reduces the real wage paid by the firm; when a firm pays VAT on the output its workers produce, the real wage it can afford to pay falls accordingly. (It makes no difference in this context whether the Federal Reserve accommodates the VAT, allowing the real wage reduction to occur through an increase in consumer prices, or refuses to accommodate, forcing a decline in nominal wages.)

In contrast, the individual income tax does not reduce the real wage paid by the firm, but is instead paid by the worker out of the unchanged real wage. Although this should be a mere difference of form, the current payroll tax design and benefit formula cause it to have real implications for the Social Security system.

Because payroll taxes are imposed on the wages workers are paid by firms, the introduction of a 10 percent VAT would shrink the payroll tax base by 10 percent. (This effect is often referred to as the excise tax offset.) While individual income taxes are not deducted from the payroll tax base, the VAT would effectively be
deducted because it would diminish the wage on which the payroll tax is imposed. One way to maintain payroll tax revenue would be to redefine the payroll tax base in terms of VAT-inclusive wages. A worker paid $100 would then be subject to payroll tax on $110, including the $10 VAT paid at the firm level. If this approach is unpalatable, the payroll tax rate could simply be increased.

The need for an adjustment would be even more compelling on the benefit side. Current law effectively indexes each annual cohort’s real benefits to the real value of the Social Security Administration’s National Average Wage Index in the year that the cohort attains age 60. (In the benefits computation, each worker’s earnings in each past year are adjusted to reflect the growth in the wage index from that year to the year in which the worker turns 60.)

The introduction of a permanent 10 percent VAT in, say, 2012, would therefore reduce real benefits, relative to the marginal product of labor, by 10 percent for cohorts born in and after 1952, while leaving untouched the real benefits paid to cohorts born in and before 1951. Real benefits could be maintained by using VAT-inclusive wages in the benefit computation and in the construction of the National Average Wage Index.

It would be irresponsible to fail to offset these effects of a VAT on Social Security. Although a reduction of Social Security taxes and benefits may well be desirable, it would be inappropriate to implement those reductions through the back door in this manner. Letting them take effect would also worsen the system’s finances, as the revenue reduction would immediately take full effect for all workers while the benefit reduction would apply only to future retirees. Further, the disparate treatment of those turning 60 in the year of VAT introduction and those who turned 60 in the preceding year would be widely and correctly perceived as capricious.

**Reduce Individual Income Taxes**

Due to the wide range of potential individual income tax changes, including changes to refundable credits, such alterations should be viewed as a residual that can be tailored to achieve the desired mix of distributional and efficiency goals for
the overall tax package. Eliminating individual income taxes for low- and moderate-income households, as Graetz proposes, would promote simplicity and offer distributional advantages, while reductions in marginal tax rates, as proposed by both Graetz and Burman, would provide efficiency gains.

**Conclusion**

If a VAT is adopted, part of the revenue should be used to repeal the corporate income tax and the Medicare component of the payroll and self-employment taxes. Social Security taxes should not be reduced, however, because any reductions would complicate the operation of the Social Security system. Instead, the earnings measures used in the payroll tax and the benefit formula should be renormalized to account for the presence of the VAT. Reductions in individual income taxes should also be included, with the specific changes chosen to achieve distributional and efficiency targets. Those measures would help ensure that a VAT paves the way for a better tax system rather than simply facilitating the growth of government.

**References**


Combining a VAT With Corporate Tax Reform

By C. Clinton Stretch

The United States soon will have to make difficult and even painful policy choices about taxes and spending if it is to have a stable economic future.

Many think the adoption of a VAT will be part of the solution. If Congress turns to a VAT or other broad-based consumption tax, it will be in part a condemnation of the current income tax system. Lawmakers will have concluded that the income tax is not up to the challenge of raising more revenue for deficit reduction.

The potential corporate tax base is too small to make a major contribution toward meeting our fiscal challenges. The corporate income tax, in good years, generates revenue amounting to between 2 and 2.5 percent of GDP. Were it even advisable, a dramatic increase in that total corporate tax burden could not contribute more than a few tenths of 1 percent of GDP to a budget solution, and increasing corporate taxes would move them in the wrong direction.

Many would argue that corporate and business taxes must be reduced to maintain our global competitiveness. Most observers are troubled by the fact that the U.S. corporate tax rate is substantially higher than the rates in other countries. Raising corporate taxes through rate increases is impossible. The alternative — broadening the corporate tax base — would require a combination of increases on domestic and international business that likely would undercut U.S. competitiveness, discourage capital investment, hamper innovation, and remove support for development of new industries.

If an administration and Congress turn to a VAT, an early question they must confront is how high a tax to adopt. Many will argue for a tax only large enough to meet a specific deficit reduction goal. Policymakers on both sides of the partisan divide, however, could reasonably conclude that a much higher VAT is
appropriate. A relatively low VAT rate — for example, 6 percent — could generate substantial deficit reduction revenue, but it would also leave significant room for increases for other purposes in the future. Imposing an initial VAT at a higher rate could make future rate increases much harder to enact and provide the revenue necessary to substantially restructure and reduce other taxes.

Why Corporate Tax Reform?

Political forces, as much as policy considerations, will determine whether an excess in VAT revenue could occur and what it could be used for. In this debate, corporate tax reform should be high on the list for consideration.

Individual taxpayers, especially lower- and middle-income taxpayers, have seen significant tax relief over the last 30 years. Corporate taxpayers have not participated in this bounty. The logical places to look for dramatic tax relief would be:

- the Economic Recovery Tax Act of 1981 (ERTA, the Reagan tax cuts);
- the Tax Reform Act of 1986 (the 1986 act);
- the Economic Growth and Tax Relief Reconciliation Act of 2001 (EGTRRA, the first Bush tax cuts); and
- the Jobs and Growth Tax Relief Reconciliation Act of 2003 (JGTRRA, the second Bush tax cut bill reducing taxes on capital gains and dividends); and
- the American Jobs Creation Act of 2004 (the Jobs Act).

Corporate taxpayers, however, would search in vain for any dramatic, permanent benefits in those five bills.

ERTA contained $54.7 billion of favorable corporate tax changes related to depreciation and leasing rules over a five-year period. This represented about 20 percent of the entire 1981 tax cut. However, the 1982 Tax Equity and Fiscal Responsibility Act clawed back much of those benefits with $31 billion of increases related to limitations on the investment tax credit, depreciation, and leasing, as well as another $9.1 billion in business tax

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increases. The Deficit Reduction Act of 1984 continued the clawback with $8.4 billion of increases related to leasing transactions. Finally, in the 1986 act, the investment tax credit was repealed ($118.7 billion over five years), and recovery periods were further modified ($7.7 billion). So the gains of 1981 were substantially eliminated by the end of 1986.

The 1986 act lowered corporate tax rates from 46 percent to 34 percent, but at the same time, it shifted $120 billion of tax burden from individuals to corporations. It also increased business taxes through new inventory capitalization rules, partial denial of meal and entertainment deductions, and the corporate alternative minimum tax.

In 2001 EGTRRA brought $1.35 trillion of tax reductions over 10 years. All of them benefited individuals. Corporate taxpayers benefited incidentally from changes related to employee benefits.

In 2003 JGTRRA reduced taxes by an estimated $349.7 billion over 10 years. Businesses received temporary bonus depreciation and increased small-business expensing, totaling a $10.1 billion temporary benefit.

In 2004 the Jobs Act provided a $76.5 billion benefit for businesses through the domestic production activity deduction (section 199). However, that benefit was fully offset with other tax increases, including repeal of the exclusion for extraterritorial income and reforms in leasing rules related to tax-indifferent parties.

Other legislation has renewed expiring provisions, created new incentives, and corrected problems in the law, but often at the cost of permanent tax increases on business. Thus, the burden of corporate income taxes has not fallen three decades after the beginning of the tax cut and tax reform revolution. At a minimum, this suggests that a serious debate about the rates, reach, and base of the corporate income tax is long overdue, as is an

2JCS-38-82.
3JCS-41-84.
4JCS-10-87.
5JCX-51-01.
6JCX-55-03.
7JCX-69-04.
effort to provide greater stability in the incentives that the tax code seeks to provide. Revenue generated from a VAT could make that debate possible.8

Corporate Rates

Since the United States chopped its corporate tax rate in 1986, other countries have followed suit and surpassed it. According to the latest data from the OECD, the current 35 percent top rate in the United States is the highest national rate among OECD countries and the second highest combined rate when figuring in subnational corporate taxes.9

And the trend continues as other countries, including major economies, continue to cut their top corporate rates. Germany cut its rate in 2007, and in June 2010 the United Kingdom announced that its current rate of 28 percent would begin dropping by a percentage point a year until it reaches 24 percent in 2014.10

Because of the growing rate differentials, many observers have argued that the United States must lower its corporate rate to remain competitive economically. Proponents of rate reduction argue that lower tax rates would attract capital investment both from non-U.S. firms seeking to expand U.S. activity, and from U.S. firms that would be encouraged to repatriate earnings that could be reinvested in the U.S. business or distributed as a dividend to shareholders who could redeploy the capital within the United States.

The widespread support for a lower corporate rate is demonstrated by the range of proposals from across the political spectrum. A few relatively recent proposals illustrate ways a rate reduction could be addressed.

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8House Budget Committee ranking minority member Paul Ryan, R-Wis., has suggested replacing the entire corporate income tax with a subtraction method VAT on businesses. See “A Roadmap for America’s Future,” Doc 2010-2100, 2010 TNT 19-31.


In 2007 then-House Ways and Means Committee Chair Charles B. Rangel, D-N.Y., introduced legislation\(^\text{11}\) that included a reduction of the corporate rate to 30.5 percent. Also in 2007, Treasury hosted a conference on business taxation and global competitiveness and issued a report suggesting that the corporate rate could be reduced to 27 percent by eliminating tax breaks.\(^\text{12}\) Earlier this year, Senate Finance Committee member Ron Wyden, D-Ore., and Sen. Judd Gregg, R-N.H., introduced comprehensive tax reform legislation that would lower the corporate rate to 24 percent.\(^\text{13}\)

Rangel would have paid for his full package of reforms with a surtax on upper-income individuals and a repeal of some business preferences — such as the section 199 domestic production deduction and the last-in, first-out method of accounting — while raising taxes on carried interests and making changes to the international tax rules.\(^\text{14}\) Wyden and Gregg’s legislation would eliminate several business tax preferences, including the section 199 deduction and some oil and gas benefits, to buy down the corporate rate.\(^\text{15}\)

**The Reach of Corporate Taxes**

The United States’ worldwide taxation approach — which generally taxes residents and business entities on their worldwide income regardless of where the income is earned — contrasts sharply with the approach taken by most of the rest of the world. Most of the OECD-member countries use some form of territorial system that taxes income earned within a country’s borders and exempts foreign-source income. Japan and the U.K. recently switched to territorial systems, leaving the United States, Chile, Ireland, Mexico, Poland, and South Korea as the only OECD countries that still have a worldwide system.

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\(^\text{11}\)H.R. 3970, the Tax Reduction and Reform Act of 2007, introduced October 25, 2007.


The debate over which system best fits the modern global economy is a major policy debate the other OECD countries have had and that the United States needs to have as well. The current system is rooted in policy decisions made in the early 1960s when the United States dominated global cross-border investment. The question coming from both ends of the political spectrum is whether a major overhaul is past due.

Critics of extraterritorial taxation say that the United States’ choice to stay out of step with the rest of the world is making it hard for American companies to compete globally. They also argue that the worldwide system discourages repatriation of earnings, thereby locking out domestic reinvestment.16

A move to a territorial tax is not, however, a foregone conclusion. Defenders of the worldwide system say the real challenge is to reform and strengthen the current extraterritorial tax system.17 The Obama administration favors the reform approach, having proposed several measures to strengthen the worldwide system.18 Although the most fundamental changes recommended by the administration have received little congressional support, Congress recently passed a series of foreign tax credit reforms as revenue offsets for spending rather than as part of a comprehensive approach to international tax issues.19

Excess VAT revenue could create the conditions necessary for a tough but thoughtful debate over territorial or extraterritorial taxation.

17See, e.g., Edward D. Kleinbard, “Throw Territorial Taxation From the Train,” Tax Notes, Feb. 5, 2007, p. 547 (recommending the United States reject territoriality and adopt a better worldwide approach); and testimony of Stephen E. Shay before the House Ways and Means Subcommittee on Select Revenue Measures, June 22, 2006, Doc 2006-12169, 2006 TNT 121-36 (recommending base-broadening reforms and noting that the current U.S. system can yield more taxpayer-favorable results than a territorial system). In 2009 Shay became deputy assistant secretary for international tax affairs at Treasury.
The Tax Base

The Rangel, Wyden-Gregg, and 2007 Bush Treasury reform proposals discussed above suggest that rate reduction could be financed through a broadening of the tax base. The Bush administration’s work also suggests expensing of capital investment as an alternative or complement to rate reduction.

Many would argue that the corporate tax base is too broad. A recitation of all the recurring debates about the corporate income tax base — from the AMT to the treatment of net operating losses — is unnecessary for our purposes here. Two examples, however, illuminate the challenges: the almost annual fight over expiring business tax provisions that Congress treats as must-do legislation and the constant reconsideration of capital cost recovery at each economic downturn.

According to the Joint Committee on Taxation, there were more than 60 income tax extenders in 2009 and more than 40 expiring in 2010.20 The on-again, off-again quality of extenders that are allowed to lapse creates tax planning havoc for practitioners and can have severe economic effects on an industry. For example, the American Wind Energy Association says that annual installation of wind capacity drops precipitously in years when the production tax credit was not renewed.21

The research credit provides another example of the seemingly schizophrenic nature of our approach to the corporate tax base. There is wide consensus that the credit is necessary to keep American business competitive with major trading partners who give generous research incentives. Even with this consensus, Congress has never made the credit permanent. Since it was enacted in 1981, the research credit has been extended 14 times and was allowed to lapse for one year (from July 1, 1995, to June 30, 1996).

The capital cost recovery rules were liberalized in 1981, then tightened and tweaked over the next five years. The rules have

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remained stable since 1986, although many argue they are outdated (the asset life classifications were mostly set 30 to 50 years ago) and bear little relation to assets’ true economic depreciation.22 The 2007 Treasury report on business taxation and competitiveness said the current system distorts the measurement of capital income and suggested expensing as the best way to stimulate investment.23 Congress seems to agree, as it has used bonus depreciation several times over the last 10 years to spur investment when the economy is lagging.24

Conclusion

Deficit reduction efforts may present a rare opportunity to reshape corporate taxation in ways that address long-standing concerns and create a tax system appropriate for the 21st century. Changing the existing tax system, however, will not be easy. Adoption of a VAT would disturb existing expectations of taxpayers, raise important transition issues, and open debates on saving incentives and the taxation of financial products and services.

A simple review of tax footnotes to financial statements would demonstrate the extent to which the system creates relative winners and losers. Taxpayers with significant deferred tax assets essentially are prepayers of tax relative to their book income, while those with deferred liabilities are postpayers. Firms in those positions could have sharply contrasting views of any effort to level the playing field.

Those taxpayers with significant deferred assets would fear that the value of those assets could be eroded by any tax reform that significantly reduces the corporate rate. Taxpayers with deferred liabilities might be perceived as receiving tax windfalls through any rate reduction.

Introduction of a VAT as an additional tax, rather than a replacement tax, could assist in smoothing transition problems.

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23Treasury background paper, supra note 12.
and would interject a whole new set of considerations into the basic debate. Proponents of a VAT as a replacement for the entire income tax have long argued that it would encourage saving and capital investment and effectively create a territorial tax that would advantage U.S. exports. The extent to which an add-on VAT would justify less aggressive action on capital cost recovery or territoriality will be hotly debated.

As difficult as those debates will be, they must take place. The time to have them must be when the country is renegotiating the basic fiscal contract between taxpayers and government.
Coordinating a Federal VAT With State and Local Sales Taxes

By Harley Duncan and Jon Sedon

Harley Duncan is a managing director and Jon Sedon is a manager in the State and Local Tax Group of KPMG LLP’s Washington National Tax practice.

KPMG LLP’s Washington National Tax Office is conducting an initiative to inform the debate over a VAT as a tax reform option in the United States. The project comprises webcasts, publications, speaking engagements, and university instruction, all designed to inform professionals, academics, and policymakers about VAT issues.

A key part of this project is Views on VAT, a yearlong series of articles in Tax Notes on the VAT regimes in foreign countries, the comparison of VAT and U.S. retail sales taxes, VAT administration and compliance issues, how a U.S. national VAT would theoretically be administered, and other issues related to the VAT.

This article explores the issues involved in coordinating state and local sales taxes with a federal VAT in the United States. Modifying state and local sales taxes to emulate a well-designed federal VAT could improve their operation and policy underpinnings. Developing a coordinated federal-state system in the United States will not be simple and may well require new approaches. It may also be achieved only at the expense of some of the autonomy that states exercise over the design and operation of their taxes.

The information contained herein is of a general nature and based on authorities that are subject to change. Applicability of the information to specific situations should be determined through consultation with your tax adviser. This article represents the views of the authors only and does not necessarily represent the views or professional advice of KPMG LLP.

The authors thank Walter Hellerstein, Francis Shackelford Professor of Taxation at the University of Georgia School of Law, and Charles E. McLure Jr., Senior Fellow Emeritus at the Hoover Institution at Stanford University, for comments on earlier drafts of this article. Any errors or omissions are the authors’.
One of the many questions that will need to be addressed if the U.S. government considers a VAT is how it can be coordinated with current state and local retail sales taxes (RSTs). Adoption of a VAT by the federal government will present states with mixed prospects. On one hand, it would represent a significant increase in the federal government’s use of consumption taxes, an area that to this point has largely been the province of states and localities. This could ultimately constrain future state and local government use of those taxes. On the other hand, if state and local RSTs could be modified to emulate and be coordinated with a well-designed federal VAT, it could improve their operation as a comprehensive tax on individual consumption of goods and services that does not tax business inputs. It might also reduce the burden imposed on sellers involved in collecting the tax and improve compliance with the tax. Experience elsewhere, however, suggests that these gains may be achieved only at the expense of some of the autonomy that states exercise over the design and operation of their sales taxes.

In this Views on VAT, we examine the consequences a federal VAT may have for states and the potential opportunities it might present to aid them in improving their consumption taxes. We look at five questions: (1) Why are states concerned about a federal VAT? (2) What policy improvements could a VAT bring to RSTs? (3) What are the constraints on coordinating RSTs with a federal VAT? (4) What options do the states have for coordinating their sales taxes with a federal VAT? (5) And what other issues might states encounter?¹

A. State Concerns With a Federal VAT

For a considerable period, some state legislators, governors, and tax administrators have expressed opposition to — or at least apprehension toward — a federal VAT.² The executive director of

¹When we speak of coordinating with a federal VAT, we assume that the federal government has adopted a well-designed credit-invoice VAT that taxes final individual consumption broadly, excludes business inputs from taxation, and taxes consumption on a destination basis. The merits of coordinating with a poorly designed federal consumption tax are debatable.

the Federation of Tax Administrators, Jim Eads, responding to comments about state interaction with a federal VAT, said:

Sovereignty, in the matter of taxes for the states, is a big deal for us and something the states guard vigorously. . . . The federal government has not seemed inclined to consider state issues in the past and today does not seem anxious to consult with the states about their concerns, so I would be very worried if they began to seriously consider these major reforms. . . . If Congress did adopt a VAT and the president signed it, the states could be seriously harmed economically in the short and long terms.3

As reflected in Eads’s statement, the states’ main concerns regarding implementation of a federal VAT are state autonomy and state revenue impact.

1. Autonomy. One concern among states is that a federal VAT, or at least coordinating with a federal VAT, explicitly or as a practical matter, could force the states to structure their consumption taxes to piggyback on the federal VAT. Such a requirement could decrease a state’s autonomy if the tax rate, the tax base, the administration of the tax, and the allocation of revenue among states is “de facto dictated by the national government.”4 A related concern is that the policy decisions of the national government may not be in a particular state’s best interest. For example, the federal government’s decision to exempt or zero rate specific items, industries, or activities could cause a state to lose a source of revenue by virtue of its conformity to the federal base.5 These concerns are plausible considering the types of coordinated VATs that have been adopted in other countries with a federal system and the degree to which they require uniformity

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5 Id. This situation, of course, also arises with state income taxes; most states have substantially conformed their individual and corporate income tax bases to the federal income tax.
in the federal and state tax base.6 As other commentators have pointed out, a system under which a state VAT or RST is not coordinated with a federal VAT is not necessarily unworkable, but it could significantly damage the administrative advantages of implementing a VAT.7

2. Revenue impact. State officials fear that implementation of a federal VAT may diminish consumer spending and cause state revenues to decrease.8 Economists, on the other hand, note that unless consumption is expected to be taxed at a lower rate in the future, a general consumption tax will not reduce consumption — at least not significantly more than an equal tax increase in the income tax.9 A more indirect concern of states is that a federal VAT may begin to restrain their use of the consumption tax base. The federal government’s foray into the consumption tax arena — traditionally the province of the states — could result in an aggregate tax rate that “cannot be enforced satisfactorily” (that is, evasion balloons).10 From the states’ point of view, “the concern is that if federal reform causes the national government to dominate a base that has traditionally been used primarily by states, it could reduce the fiscal flexibility of states and disrupt the current balance in the intergovernmental system.”11

B. Policy Improvements

From a tax policy perspective, there are generally four features of an effective or well-designed consumption tax: (1) virtually all goods and services purchased for individual use are subject to tax; (2) businesses ultimately bear no burden from the tax (other

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7Id.

8Under a well-designed VAT, a reduction in consumption (that is, an increase in saving) does not permanently deprive the government of the revenue — it merely defers taxation until savings are spent. However, even a temporary reduction in state revenues can be problematic, given that most states require a balanced budget.

9In some scenarios, a transaction tax is imposed — or at least justified — under the auspices that the taxed item has undesirable social effects (e.g., taxes on alcohol, tobacco, soft drinks, candy, and plastic bags).


than administrative costs); (3) goods and services are taxed on a
destination basis (that is, by the jurisdiction where consumption
occurs); and (4) compliance and administrative costs are mini-
mized.12 Current RSTs fall well short of these policy norms.

1. Taxation of goods and services. As was noted in an earlier
Views on VAT, although either an RST or a VAT is capable of
being structured to apply broadly to the final consumption of
goods and services, in practice, state RSTs generally apply to
sales of tangible personal property but to only a limited number
of enumerated services.13 VATs, however, generally apply to a
much broader range of goods and services sold for final con-
sumption within the jurisdiction.14 While in principle there is no
reason a state RST could not be applied to services, recent efforts
to do so have failed.15 If the federal government adopts a VAT, it
could provide a vehicle for states to modify their tax base to
include a broad range of services. Besides eliminating the current
distortion of consumer choices in favor of untaxed consumption,
this would allow a lower tax rate to raise a given amount of
revenue and decrease the compliance burden on businesses.16

2. Business inputs. State RSTs also fail to meet the model
consumption tax feature of relieving businesses of any tax
burden.17 Generally, taxing business inputs is undesirable be-
cause the tax cascades or pyramids through the production

12See Duncan, “Administrative Mechanisms to Aid in the Coordination of State and
Local Retail Sales Taxes With a Federal Value Added Tax,” American Tax Policy Institute,
Duncan.pdf (hereinafter “Administrative Mechanisms”). See also McLure, “Thinking
Straight About the Taxation of Electronic Commerce: Tax Principles, Compliance
Problems, and Nexus,” 16 Tax Policy and the Economy 115 (2002), pp. 115-140; McLure,
“The Taxation of Electronic Commerce: Background and Proposal,” in Public Policy and
13See Leah Durner and Bobby Bui, “Comparing Value Added and Retail Sales Taxes,”
14Walter Hellerstein and Timothy H. Gillis, “The VAT in the European Union,” Tax
Notes, Apr. 26, 2010, p. 461, Doc 2010-7537, or 2010 TNT 79-8. See also Durner and Bui,
supra note 13.
15See Duncan, “Administrative Mechanisms,” supra note 12, at n.12 (noting that the
state legislatures in Florida, Massachusetts, and Michigan have passed legislation to
impose sales tax on a broad array of services, but in each case the tax was repealed
shortly before or shortly after it was implemented).
16See infra text accompanying notes 23-25.
17See Durner and Bui, supra note 13.
process as the value added at one stage is taxed at each succeeding stage, which ultimately could distort consumer and producer choices. Although states have enacted some exemptions that exclude business inputs from taxation (for example, sale for resale and manufacturing exemptions), no state exempts all business purchases.\textsuperscript{18} In fact, some studies suggest that more than 40 percent of RST revenues result from tax paid on purchases by businesses.\textsuperscript{19} While the tax on business inputs is hidden in an RST, a VAT is more transparent because the consumer can see the total tax on the good or service rather than having a tax on inputs simply built into the cost of the good or service. Again, while there is no reason as a theoretical matter that state RSTs could not be reformed to exclude business-to-business transactions, the introduction of a federal VAT may give the states an opportunity to reform their consumption tax bases to exclude purchases by businesses.

It is important to note that because RSTs apply to many business purchases, they may reduce business investment. A VAT, however, tends not to interfere with investment.\textsuperscript{20} Relieving the tax burden on business inputs has resulted in a marked increase in business investments in Canada.\textsuperscript{21} This evidence suggests that by reforming state consumption taxes (that is, adopting a VAT), U.S. states may experience a similar increase in business investments.\textsuperscript{22}

\textsuperscript{18}Id. (citing Jerome R. Hellerstein and Walter Hellerstein, \textit{State Taxation}, para. 12.01 (3d ed. 1998-2009)).


\textsuperscript{22}Id.
3. **Destination-based taxation.** Through the technique of zero rating under the VAT, exports enter world markets free of the VAT of their country of origin. Imports bear the same tax as domestically produced goods. By comparison, exports to other states and nations bear the RST embedded in their prices, and imports do not bear these embedded taxes.

4. **Reduce compliance burden.** Complying with current state and local RSTs is complex. A retailer operating in multiple jurisdictions must be aware of the tax base and tax rate in each jurisdiction, retain proper documentation of exempt sales, and properly and timely file returns and payments.\(^2\)\(^3\) Evidence suggests that the average cost of collection of RSTs is more than 3 percent of the total tax collected.\(^2\)\(^4\) The compliance burden under a VAT could arguably be considered greater. While an RST requires documenting and reporting sales, a VAT further requires documenting and reporting inputs as well as detailed information on exports.\(^2\)\(^5\) If state RSTs are not coordinated with a federal VAT, taxpayers will have to deal with compliance costs at the federal level and separately among the states. However, if the states choose to instead adopt state-level VATs and dispose of the state RSTs, businesses would not have to comply with two separate systems. Most of these savings could be realized if a state were to adopt the integrated sales tax (IST) described below. Although it resembles an RST in its effect, the IST uses a VAT-type mechanism to eliminate tax on business-to-business transactions. Further, to the extent that states were to conform to the federal VAT base, it would alleviate the need to monitor and comply with what are now different RST bases in each state.

**C. Constraints to Imposing a Coordinated VAT**

The previously discussed concerns of state officials regarding political authority and autonomy as well as concerns about revenue flows will likely act as constraints on the adoption of any coordinated federal-state consumption tax system. Also, there are


\(^3\) Id. (citing Peter J. Merrill, PricewaterhouseCoopers National Economic Consulting, *Retail Sales Tax Compliance Costs: A National Estimate* (Apr. 7, 2006)).

other features of the current environment that could affect the design of a coordinated approach. These include:

- **Diversity in states’ approaches.** Not all states impose an RST. Likewise, even if some states opt to convert their RST to a VAT, it is highly unlikely that all will do so, especially at the outset. The resulting patchwork will probably make it impractical to implement approaches that would involve a uniform system nationwide.

- **Local government concerns.** As discussed below, the large number of local governments that use an RST will compound exponentially some of the complexities involved in ensuring the final taxation on a destination basis. Put another way, the large number of local government RSTs effectively precludes the adoption of some border-tax adjustment mechanisms needed to produce destination-based taxation at the local level and requires alternative arrangements.

### D. Options Available to the States

The central issue to be addressed in designing a coordinated national-subnational VAT structure for a country with a federal system is dealing with interstate sales, or more specifically, ensuring that interstate sales are taxed on a destination basis. Other countries have not always been successful in achieving a smoothly functioning destination-based tax. Nonetheless, there are experiences in other countries (notably experiences in

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26Alaska, Delaware, Montana, New Hampshire, and Oregon do not levy a broad-based RST at the state level.


30*Id.* at pp. 1650-1651 for a discussion of current arrangements in Brazil and India where the state-level taxes are origin-based taxes.
Canada and proposals in India) from which the United States could draw in designing a coordinated consumption tax structure if the federal government did adopt a VAT. Further, the treatment of intra-Community supplies of goods and services in the European Union may also provide guidance in dealing with the national-subnational coordination issues in the United States.

Based on those experiences, states would have four choices available to them for retaining or modifying their RSTs if the U.S. government were to adopt a VAT: (1) maintain the status quo and retain their sales taxes as they exist; (2) harmonize their sales taxes with the VAT and have them treated essentially as add-ons to the federal VAT; (3) adopt state-level VATs that are coordinated with and emulate the federal VAT but are administered separately by the states; and (4) adopt ISTs, which, as described below, are a type of RST that relies on some VAT techniques to achieve the aims of an ideal RST in terms of taxing individual consumption. Experience in Canada and traditions of U.S. states suggest that not all states would choose the same option, meaning that some states would retain an RST while others would select among other options.

1. Status quo. States could, if they so desire, maintain their RSTs and make no changes in their operation, structure, or administration in response to adoption of a VAT by the federal government. This approach characterizes the initial policy response among the Canadian provinces after adoption of the federal goods and services tax in 1991. Five of the nine provinces with a sales tax when the GST was adopted simply maintained their provincial sales taxes. In 1997 three provinces — Nova Scotia,

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31 Id. at pp. 1648-1652.
33 See Duncan, “VATs in a Federal System,” supra note 6, at pp. 1648-1650. See also Sullivan, supra note 27.
34 The provinces maintaining their RSTs were British Columbia, Manitoba, Ontario, Prince Edward Island, and Saskatchewan. See Duncan, “VATs in a Federal System,” supra note 6, at 1647.
New Brunswick, and Newfoundland — harmonized their sales taxes with the GST, and in 2009 British Columbia and Ontario announced that they would harmonize their RSTs with the GST.  

Because this route requires no action by a state and no modification of the state’s tax structure, it seems to be the likely initial position of many states. If states maintain their RSTs, the primary impact will be on U.S. businesses, which will be required to comply not only with the federal VAT, but also with what is acknowledged to be an exceedingly complex RST system. The impact will be most acute for businesses involved in multistate retailing. In short, if states maintain their RST systems, there will be few policy dislocations, at least from an RST standpoint. There will be no tax policy improvements at the subnational level, and the combined federal and state compliance burden faced by multistate sellers could increase significantly.

2. Harmonized sales taxes. A second option, which is at the opposite end of the spectrum of policy responses, would be for states to harmonize their sales taxes with the federal VAT. We use the term “harmonized” to mean a system that is similar in key aspects to the harmonized sales tax system in place for Canada’s three Atlantic provinces, to be expanded to British Columbia and Ontario in July 2010.  

In that arrangement, the provincial tax is
essentially a surcharge applied to the provincial portion of the federal GST base. As applied to the United States, the most relevant HST features are that the tax base is identical (or nearly so) with the federal tax, the tax is administered by the federal government on behalf of the states, and the state is responsible for establishing the rate at which sales of goods and services sourced to the state are taxed. Federal legislation creating this system could provide that on interstate sales involving one or more states that have adopted the HST, the tax of the HST state of origin would not be collected and that the tax of the HST state of destination would be collected along with the federal tax — thus eliminating the Quill restriction for these states. International exports would be zero rated for both the federal and state taxes; imports by registered traders would be reverse charged; and U.S. Customs and Border Protection, part of the Department of Homeland Security, could collect the federal and state tax (for an HST state) on international imports by others.

Adoption of the HST approach by states would seem to yield the most policy benefits to the overall consumption tax system because, presuming a well-designed federal VAT, it would significantly move states toward a consumption tax that comports with the standard policy norms of taxing all final personal consumption of goods and services, while not imposing tax on intermediate business purchases and inputs. Moreover, to the extent the HST approach is adopted by a significant number of

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37 Some variations are accomplished in Canada through point-of-sale rebates and other rebates.
38 The Atlantic provinces in Canada adopted the same HST rate by mutual agreement, rather than being required to do so by law. By agreement they also place limits on their ability to increase or decrease their HST rate. Ontario and British Columbia have each determined their own rate for HST, and Nova Scotia has set its own rate, effective July 1, 2010. Duncan, “VATs in a Federal System,” supra note 6, at 1649.
40 These provisions would achieve a destination-based tax. They are similar to those in place in Canadian HST provinces except that the Canada Border Security Agency collects the provincial HST only on sales to nonregistered traders and final consumers. See Duncan, “VATs in a Federal System,” supra note 6, at 1649. An additional issue that would need to be addressed is how to distribute the HST revenues to the participating states. In Canada, HST revenues are distributed on the basis of a formula that is intended to estimate taxable consumption by province rather than by tracking and reporting sales and tax collections by province.
states, it could reduce the administrative and compliance complexity facing multistate sellers in the United States by reducing the number of different tax bases and regimes with which they are expected to comply.\textsuperscript{41} Finally, if implemented as in Canada, where the federal government administers and collects the HST on behalf of participating provinces, the HST approach would relieve participating states of the cost of administering their RSTs, a feature being used as a selling point for harmonization in British Columbia and Ontario.\textsuperscript{42}

Although the HST approach holds potential for substantial improvements in subnational consumption taxes in the United States, it requires states to surrender to the federal government much of the authority to define their own consumption tax base and tax administration. The HST approach can be effectively implemented only if the state and local HST tax base is uniform in nearly all regards with the federal VAT base. Compliance with the HST would become far more complicated if each state defined its own tax base, and it would become much more difficult, if not impossible, to have a single level of government administer and enforce the tax.\textsuperscript{43} This requirement alone (not to mention possible concerns about such matters as foregoing state administration of the tax, the manner and timeliness with which revenue is distributed to the states, and the quality of federal enforcement) makes it seem unlikely that a significant number of states would opt for the HST approach, at least at the outset. As any observer of state and local sales taxes knows, states have used their near-plenary authority\textsuperscript{44} over the RST base in a fashion...
that creates countless differences among the base from state to state.45 The importance of this authority to state policymakers is demonstrated by the fact that an underlying principle of the Streamlined Sales and Use Tax Agreement (SSUTA), the most far-reaching effort ever to promote consistency and uniformity in sales tax practices across states, is that states should be free to determine their own tax base.46 While SSUTA contains uniform definitions for some products that states are required to use, the determination of whether an item is taxed in a state is reserved to the state legislature.47 Adopting an HST would also expose states to potential revenue swings if the federal government were to enact laws that affect the shared HST and VAT base.48

not be imposed on the U.S. government or its instrumentalities. Federal statutory law also limits state sales tax bases in some areas, as in prohibiting the imposition of sales taxes on purchases made under some federal nutrition programs. See 7 U.S.C. sections 2011-2025 (Food Stamp Act); 42 U.S.C. section 1786 (special supplemental nutrition program for women, infants, and children).

45For a flavor of the different treatment accorded different products from state to state, see CCH, 2009 State Tax Handbook, at pp. 531-599. In addition to product exemptions, states also provide exemptions to various types of entities on their purchases and sales, and in many cases, the taxability of a product is based on the use to which it is put. See McLure, “The Nuttiness of State and Local Taxes — And the Nuttiness of Responses Thereto,” State Tax Notes, Sept. 16, 2002, p. 841, Doc 2002-20866, or 2002 STT 179-2 (hereinafter “The Nuttiness of State and Local Taxes”). See also McLure, “Administrative Mechanisms,” supra note 12, at pp. 6-9.


47Some observers argue that state ability to establish the tax base should not be an overriding concern and that the focus should instead be on preserving states’ authority to establish tax rates, as that is the key element of state autonomy — the ability to choose the level of spending and how to finance it. McLure, for example, argues, “The case for state autonomy over tax rates is taken as axiomatic.” McLure, “How to Coordinate State and Local Sales Taxes With a Federal Value Added Tax,” American Tax Policy Institute, Feb. 2009, at 6, available at http://www.americantaxpolicyinstitute.org/pdf/VAT/McLure.pdf (hereinafter “How to Coordinate”). He argues further that states have not used their authority to establish the tax base wisely and that the taxation of business inputs and the innumerable exemptions that cause the tax to be less than comprehensive in the taxation of individual consumption contribute needlessly to complexity, inefficiency, and distortions. Id. See also McLure, “The Nuttiness of State and Local Taxes,” supra note 45, and McLure, “Understanding the Nuttiness of State Tax Policy: When States Have Both Too Much Sovereignty and Not Enough,” 58 Nat’l Tax J. 565 (2005).

48McLure, “How to Coordinate,” supra note 47, argues that this would not be likely — certainly not as likely as under the income tax.
Implementing an HST in the United States would seem to be problematic given that there may be a large number of local governments with varying tax rates that would also be included in the HST and given that not all local governments within a state will necessarily levy the HST. This would seem to necessitate the tracking and reporting of sales by state and local jurisdiction, a feature that would make the HST in the United States more complex than in Canada.

3. State-level VAT. If states are reluctant to adopt the HST approach to coordination, the question becomes whether states could implement a state-level VAT that addresses some of the fiscal autonomy concerns, but at the same time brings subnational consumption taxes into closer alignment with accepted policy norms. The international experience with successful administration of a destination-based VAT at the subnational level is limited primarily to the province of Quebec, which administers both the Quebec sales tax (QST) — a destination-based subnational VAT — and the federal GST.49

Prof. Charles McLure has devoted considerable effort to the analysis and design of various approaches to a state-level VAT in the United States.50 As noted by McLure and others, the central issue to address in designing a subnational VAT is dealing with interstate sales, or more specifically, ensuring that interstate sales are taxed on a destination basis.51 Three approaches have been developed in the VAT literature to achieving a destination-based subnational VAT:

- the standard border tax adjustment process, employed in the EU and by Quebec, in which an interstate sale would be zero

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49 For further discussion of the QST and provincial administration of the GST, see Duncan, “VATs in a Federal System,” supra note 6, and sources cited therein. Possible state-level administration of the federal VAT is not considered further here since it seems unlikely to be transported to the United States, given that many states are unlikely to adopt a VAT and some states do not have an RST — not to mention concerns about allowing subnational administration and enforcement of a national tax.

50 See McLure, “How to Coordinate,” supra note 47. See also McLure, “Coordinating State Sales Taxes With a Federal VAT: Opportunities, Risks, and Challenges,” State Tax Notes, June 20, 2005, p. 907, and Duncan, “VATs in a Federal System,” supra note 6, at n. 25. We draw extensively from McLure’s ideas and research regarding state-level VATs.

51 Id.
rated in the origin state and subjected to tax in the destination state using a “reverse charge” mechanism in the case of business-to-business purchases; the seller-supplier would be eligible for a refund on any input tax paid in the origin state;52; 

■ a viable integrated VAT (VIVAT) in which each state establishes its own tax rate for sales to final consumers and unregistered traders, but a uniform VIVAT collected by the origin state would be levied on both intra- and interstate sales between registered traders; sellers would receive a credit for all VIVAT paid on their inputs, and a clearing-house would be responsible for reconciling the credits and payments on interstate business-to-business sales;53; and 

■ a compensating VAT (CVAT) in which a state CVAT would be collected on all interstate sales that would be collected by the national government or a consortium of states, along with the national VAT; the CVAT would be fully creditable on business-to-business purchases.54

McLure concludes55 that these approaches would not be the optimal way to implement a destination-based VAT at the state and local government levels in the United States for several reasons. The volume of interstate trade in the United States and the resulting VAT refunds on zero rated business-to-business sales would create a substantial risk of fraud and noncompliance, thus making the EU/QST zero rating/reverse charge approach undesirable in his estimation.56 Either the VIVAT or the CVAT approach would work best if all states adopted it, which is

52Note that in the United States, the Quill restriction would presumably apply. For further descriptions, see Cnossen, supra note 32; Bird and Gendron, supra note 36; and Duncan and Sedon, supra note 28.

53 Again, note that in the United States, the Quill restriction would presumably apply. The VIVAT was designed for the EU where no overarching central tax is levied. Thus, a clearinghouse would be required to ensure that the tax on business-to-business sales is actually remitted on a destination basis. For further discussion, see Duncan, “VAIs in a Federal System,” supra note 6, at 1646, and sources cited in notes 32-35 therein.

54 For further discussion, see McLure, “Implementing Subnational Value Added Taxes on Internal Trade: The Compensating VAT (CVAT),” 7 Int’l Tax & Pub. Fin. 723 (2000).


56 Id. at 22.
unlikely. The VIVAT approach would also require the establishment of a revenue clearinghouse and an agreed-on VIVAT rate, each of which McLure considers unlikely.57 Finally, he finds that the CVAT also comes up short in workability in the U.S. setting because it would rely on federal government administration (or administration by a consortium of states) and would be difficult to implement at the local level.58

4. The IST. To overcome these issues, McLure has developed what he calls the IST that he believes can be used to implement a destination-based state sales tax.59 The IST is an RST that uses some VAT approaches to exclude business inputs from tax, and to tax individual consumption on a destination basis. Under the IST, all sales between registered traders (both intrastate and interstate sales) would be zero rated, and only sales to individual consumers and unregistered traders would be subject to a positive tax rate.60 States would establish the tax rate on in-state sales to final consumers. States would also administer the IST, but its administration would be closely coordinated with the federal VAT, particularly in the registration of taxpayers.61 As formulated by McLure, the base of the state tax on sales to consumers would conform to the federal VAT base, in part to facilitate coordination in administering the state and federal taxes.62

For several reasons, McLure believes the IST approach is the optimal choice for those states that want to modify their sales taxes in a way that would be coordinated with a federal VAT. First, the IST approach is consistent with the state tradition of imposing RSTs, while eliminating the problems that characterize the RSTs. Second, not all states would be required to adopt the

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57 Id. at 26, n.71.
58 Id. at 27-28.
59 The IST is most fully explained in McLure, “How to Coordinate,” supra note 47, at 4 n.19, and 31.
60 By zero rating all sales to registered traders, the IST uses some of the mechanics of a VAT to achieve the results of an “ideal” sales tax, i.e., a tax collected at a single stage on sales to final consumers and no tax on business inputs. See McLure, “How to Coordinate,” supra note 47, at 31.
61 Id.
62 Id. at 31 and 51-53.
IST for it to be usable by those desiring to do so, and it does not require federal administration of a state tax or a clearinghouse to distribute funds among states. The IST also avoids the refunds that would be necessary under the standard border tax adjustment process, and the resultant exposure to various fraudulent practices. Finally, like existing sales taxes, it could be used at the local government level.63

E. Issues for States
As proposed, the IST would appear to bring state consumption taxes into much closer alignment than RSTs with the accepted policy norms for consumption taxes. It does, however, represent a radical departure from current RSTs, primarily in terms of the composition of the tax base. As such, the IST raises several issues that states would have to carefully evaluate in assessing whether to adopt it in coordination with a federal VAT.

1. Tax rate. A primary consideration for states will be the tax rate that would have to be applied to the new tax base of intrastate sales to final consumers in order to compensate for the IST’s lack of tax on sales to businesses (which is estimated at 40 percent of all sales tax collections).64 As reviewed in an earlier Views on VAT,65 some analysts believe a well-designed U.S. federal VAT could have a base equal to roughly 60 percent of GDP. This implies a federal VAT base of roughly $8.6 trillion based on the 2008 GDP of $14.4 trillion, meaning that an average state IST rate of about 3 percent would be able to generate revenues roughly equal to the $240 billion in general sales taxes collected by states in 2008.66 As we also said in the earlier article, a federal VAT with a base equal to 60 percent of GDP would be quite broad compared with most VATs in place today.67 Among OECD countries, the average VAT base is equal to roughly 60 percent of final household consumption. If the U.S. federal VAT base were equal to that, it would translate to a VAT base of about $6 trillion

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63 Id. at 32.
64 See supra sources cited in note 19.
65 Duncan and Sedon, supra note 28, at 1372-1373.
67 Id.
(based on 2008 data), meaning an average state tax rate of about 4 percent would be necessary to be revenue neutral given current state RST collections. (States that currently tax several services would be differentially affected in terms of making up for not taxing business inputs.)

2. Tax base. As noted, McLure proposes for administrative and policy reasons that the base of the state-level IST would conform to that of the federal VAT. In fact, most if not all experiences with attempts to coordinate national and subnational VATs call for base uniformity, whether it is the HST in Canada, the provincially administered QST/GST in Canada, or the proposals for an integrated GST now being considered in India. This will undoubtedly be a sticking point for states as they consider whether to coordinate with a federal VAT, given the degree to which they jealously guard the ability to define their own tax base.

As the Canadian experience indicates, some differences in tax base can be accommodated through on-the-spot rebates or varying rebates to some sectors without unduly complicating compliance and enforcement. Because the state IST would apply only to in-state sales to final consumers and would be administered by the states, it may be possible for states to vary to some degree from the federal base without making compliance or administration overly complicated. It would seem necessary, however, to minimize deviations in tax base and state taxation of business-to-business sales. Based on past actions of the states, the state-to-state differences and complexity could soon become overwhelming. Differences in federal and state tax bases would also complicate coordination of enforcement and administration.

68KPMG calculations based on data on final household consumption as reported by the OECD are available at http://stats.oecd.org/Index.aspx?DatasetCode=SNA_TABLE1.
69KPMG calculations. The calculations of the required state tax rate do not make adjustments to GDP for household consumption for the four states (Alaska, Montana, New Hampshire, and Oregon) that do not have a sales tax, because of the lack of data on state GDP or consumption. Given the size of these states, such an adjustment would not be expected to alter the conclusions significantly.
70See supra text accompanying notes 61-62.
71See generally Duncan, “VATs in a Federal System,” supra note 6, for a review of these systems and proposals.
72See supra text accompanying notes 4-7.
with the federal government as discussed below. Given the need to have a single federal and state taxpayer registration, it seems impossible for a state tax base to deviate from the federal base in a manner that would require a seller to register and collect state IST when it is not required to register for federal purposes.

3. Compliance. The state IST would be collected entirely on the final sale to the individual consumer. As a result, there will be a substantial volume of trade moving among registered traders without payment of tax, thus creating opportunities for evasion and compliance risks for states. Some of these compliance risks might be overcome by coordinating the administration of an IST with a federal VAT.

a. Taxpayer registration. The cornerstone of a cooperative approach to administration would be a common taxpayer registration system in which the federal government and the states would rely on a single registration process and registration number for taxpayers. Possession of a valid VAT registration number would identify the holder as being eligible to engage in zero rated purchases from another registered trader for the IST and as eligible for the input credits associated with the federal VAT.73 A common registration and identification number would also be integral to performing any meaningful information exchanges between the federal government and the states to promote compliance.74

Establishing a common registration system will create some problems that must be addressed. Nearly every country that administers a VAT has a registration threshold, providing that businesses with an annual sales volume below some specified level are not required to charge and collect VAT on their sales.75 Voluntary registration is ordinarily allowed. A registration threshold, while reducing revenues somewhat, simplifies administration of the VAT for both the government and sellers. Given

74See id. at 32-35 for a discussion of the types of exchanges that could be fruitful. See also id. at 13-14 for a discussion of various information exchanges under the individual income tax.
75See Duncan and Sedon, supra note 28. Businesses below the threshold would pay VAT on their inputs, and they would not receive input credits on those purchases.
the difference in the way the two taxes operate (essentially single-stage RSTs versus multistage VATs), the stakes involved in choosing the threshold are quite different for the states and the federal government. States would likely support a lower threshold than might be optimal for the federal government given the differences in scale between the two levels of government.76 Likewise, states are likely to be more interested than the federal government in aggressive sanctions against a broader range of noncompliant taxpayers.77 Some accommodation of the different interests would be necessary to a coordinated VAT system.

b. Information sharing. The exchange of information between the IRS and state tax administration agencies is a linchpin of state income tax enforcement, particularly for individual income taxes.78 A similar active data exchange program could be beneficial to states in overcoming some compliance issues involved with an IST. Sharing information in taxpayer registration applications; data on purchases, sales, and tax collections by taxpayer; and the results of federal audits and compliance activities could be beneficial to states in augmenting their compliance efforts.79

A feature of the state IST under consideration here is that, unlike the current situation under defective RSTs, there will be a substantial volume of cross-border sales between registered traders on which no tax is collected, and no record of the sale is necessary at the state level to claim any input tax credit. The concern is that those goods and services could ultimately be sold

76Duncan, “Administrative Mechanisms,” supra note 12; McLure, “How to Coordinate,” supra note 47, at 36 and 38. State RSTs generally do not have those thresholds, although they generally exclude casual sales from tax. The revenue loss from such a threshold will be less under a VAT than under an RST because tax will be collected on inputs purchased by sellers under the threshold. As evidence of the importance of this issue, federal legislation that would grant some states the authority to require remote sellers to collect use tax on goods sold into the state has over the recent past provided that sellers with less than $5 million in remote sales nationally would not be required to collect tax when they were required to by current law. See, e.g., Sales Tax Fairness and Simplification Act, H.R. 3396, 110th Congress. A group of state representatives recently expressed a desire to reduce that threshold to $100,000.


to final consumers without collection of tax. Information on these types of transactions will, however, need to be made available to the federal government as part of the process of verifying input credits and output tax liability. Consequently, it has been suggested that either the states or the federal government should establish a database on these cross-border sales between registered traders as a compliance aid to states.\textsuperscript{80} Such a database would enable states to monitor the flow of goods and services into and out of the state and to ascertain whether the appropriate tax has been paid and remitted when goods and services are sold to an individual consumer. A database of this sort would be similar to the VAT information exchange system that is in place in the EU and is being considered as part of the VAT reform in India.\textsuperscript{81} For a database of this sort to be helpful to states, the information collected will have to include the state of origin and the state of destination — information that would most likely not be required for federal VAT administration purposes only. It will also require considerable planning and technical capacity as well as some level of financial resources.

\textbf{c. Distance selling.} Absent a change in current law, a seller without a physical presence or the requisite substantial nexus in a state with a VAT could not be required to collect VAT on sales to final consumers in that state.\textsuperscript{82} States have long worked to overcome this situation for RSTs, but the issue could be seen as more important to states if they adopted an IST. Because tax would be collected only on sales to final consumers, the rate would need to be higher. However, collecting tax on business-to-business sales would no longer be an issue. To aid compliance with ISTs and to provide an incentive for states to move away from the traditionally defective RST to the IST, the federal government could adopt a “distance selling rule” providing that sellers above some threshold volume of sales would be required to collect the IST on all sales to final consumers, even in states

\textsuperscript{80}Id.
\textsuperscript{81}See IBFD VAT Monitor, Mar./Apr. 2010.
\textsuperscript{82}Quill, 504 U.S. 298.
where they would not be considered to have nexus under current
law. The EU has similar rules for the intra-Community supply
of goods to final consumers.

d. Tax on international imports. Like under the distance
selling rule, the federal government could aid compliance with
ISTs and encourage their adoption by agreeing to collect tax on
imports into the United States when the importer is not a
registered trader. Given that the base of the federal tax and the
state taxes would be quite similar, to make such a system work,
U.S. Customs and Border Protection would need only determine
the destination state, the appropriate tax rate, and determine that
the importer is not a registered trader.

4. Local government sales taxes. The extent to which local
governments rely on RSTs presents a unique set of challenges to
the coordination of national and subnational VATs that is not
encountered in Canada or other federal countries. About 8,000
local governmental units use an RST. In all but four states —
Alabama, Arizona, Colorado, and Louisiana — the local tax is
administered by the state government, and is generally, but not
always, imposed on substantially the same tax base as the state
RST. In 2007, local governments collected about $61 billion in
general sales taxes, or just under one-fifth of their total tax
revenues, indicating they should be considered in designing
potential coordinated federal and state consumption tax systems.
Local RSTs are often considered to add complexity to the
administration of RSTs because not all local units or all local units
of a particular type (for example, cities or counties) levy a local

83 See McLure, “How to Coordinate,” supra note 47, at 49, and Duncan, “Administrative Mechanisms,” supra note 12. States, through the Streamlined Sales Tax Project, have been working to simplify sales tax administration and to encourage Congress to adopt a similar rule for the RST in some states. A distance selling rule for ISTs might be considered more palatable to some given the presumption that the IST base would exclude business inputs, and for all practical purposes, would be identical to the federal VAT with which the seller would be required to comply.

84 Hellerstein and Gillis, supra note 14, at 466.


sales tax, and the rate varies from locality to locality within a range specified by the state legislature. In some cases, special purpose districts (for example, transit districts) whose boundaries do not coincide with general purpose local governments are authorized to levy a sales tax.

McLure has examined the issues involved in implementing a VAT at the local government level. He essentially draws three conclusions: (1) it is impractical to impose a standard VAT with traditional border adjustments at the local level because of the potential refund and fraud issues as well as general complexity given the number of jurisdictions involved and the volume of interlocal trade expected\(^\text{87}\); (2) a state administering a standard VAT\(^\text{88}\) could possibly handle local VATs through a VIVAT mechanism, but this would be complicated by the patchwork pattern and varying rates at which local taxes are levied\(^\text{89}\); and (3) if a state adopts the IST approach outlined above, local governments could add a surcharge on the state IST.\(^\text{90}\) Even if states and localities were both to adopt a coordinated IST, it would entail some administrative complexity for traders making taxable sales to final consumers. They would be required to determine the local jurisdiction to which the goods or services are to be sourced for tax purposes and the rate of tax to be applied. Also, states and localities would need to determine the manner in which the local VAT revenue is to be distributed — either on the basis of actual sales and the reporting and accounting that it requires, or on the basis of a formula that is intended to determine where consumption occurs as under the Canadian HST. In short, replacing local RSTs with a local IST is feasible (presuming the state adopts the IST). It is not, however, without some complexities.

F. Conclusion

If the federal government adopts a VAT, developing a coordinated federal-state consumption tax system could pay substantial rewards by improving the policy underpinnings of state

\(^{87}\)McLure, “How to Coordinate,” supra note 47, at 32.

\(^{88}\)Meaning one that used zero rating and a reverse charge mechanism to achieve border tax adjustments.

\(^{89}\)Id.

\(^{90}\)Id. at 33.
consumption taxes and reducing the compliance burden imposed on U.S. businesses. Implementing such a coordinated system will not be an easy task, given the complexity of the current RST structure and the history of political autonomy enjoyed by states in designing their RSTs. It may well also require the implementation of novel approaches such as the IST and untried administrative mechanisms such as the substitution of zero rating for exemption of business-to-business sales. It is also likely to require a substantial amount of cooperation between the federal government and the states in administering the consumption taxes at each level. In the final analysis, successful implementation of a coordinated federal VAT and state IST may well depend on the degree to which the federal VAT and the state IST bases can be made consistent with one another.
VAT Treatment of the Financial Sector

By Peter R. Merrill

The U.S. Bureau of Economic Analysis estimates that financial services — including banking, brokerage, asset management, insurance, and rental and leasing services (other than real estate) — accounted for 9.7 percent of GDP in 2008 (see Table 1). Thus, as personal consumption expenditures accounted for 70.1 percent of GDP, financial services represented almost 14 percent of the potential tax base of a U.S. value added tax.

A company’s value added generally is measured in the national income accounts as sales of goods and services, less purchases from other companies. Within the financial sector, however, charges for some services are not explicitly stated as fees or commissions, but are implicit in interest rate spreads and other financial margins. As a result, national income accountants must estimate value added in the financial sector using indirect methods.¹

Most countries with VAT have chosen to exempt a broad range of financial services because of the difficulty in measuring implicit financial fees. However, that has led to VAT rules that are neither simple nor economically neutral.

¹See Brent R. Moulton and Eugene P. Seskin, “Preview of the 2003 Comprehensive Revision of the National Income and Product Accounts: Changes in Definitions and Classifications,” U.S. Commerce Dept., Survey of Current Business, June 2003, 17-34. The output of banks includes implicit financial intermediation fees measured as interest received on loans, less interest paid to depositors and the imputed cost of equity supplied by shareholders. The value of insurance services, other than life insurance, is measured as premiums accrued less expected losses plus expected investment income on reserves.
This chapter describes the difficulties in measuring implicit financial fees, summarizes current international practices for applying VAT to financial services, assesses the limitations of those approaches, and discusses alternatives.\(^2\)

**Implicit Financial Fees**

The concept of implicit financial fees can be illustrated by considering a bank loan. Banks incur labor and other costs in originating and servicing loans and, where necessary, working out bad debt. Some of these costs may be recovered through separately stated charges, such as loan application and document fees. However, some or all of these costs commonly are recovered as a component of the interest rate charged on the loan.

The interest charged on a loan can be thought of as comprising three parts: the risk-free interest rate representing the pure time value of money, a premium for risk of default, and an implicit fee.\(^3\) This can be expressed formulaically as follows:

\[
\text{loan interest rate} = \text{risk-free rate} + \text{risk premium} + \text{implicit fee}
\]

Similarly, premiums charged for general (i.e., non-life) insurance can be viewed as comprising three parts: the present value

\(^2\)Countries use different terms to refer to a value added tax, such as goods and services tax or GST. The term “value added tax” is used here to refer broadly to similar taxes regardless of name.

of expected future benefit payments, a risk premium, and an implicit fee for underwriting and servicing the policy. Bid-ask spreads for trading in securities and foreign exchange also include implicit fees charged to buyers and sellers.

Inclusion of a bank’s gross interest income within the base of a VAT would tax more than value added and would therefore discourage the consumption of financial services relative to other goods and services, unless a sufficiently reduced rate of tax were imposed.

Some argue that interest income should be entirely excluded from the base of a VAT. Under this view, financial intermediation is considered to be more in the nature of investment than consumption and thus not the proper object of a consumption tax. Others have suggested that a distinction should be drawn between financial intermediation fees that are proportional to interest payments (deemed not appropriate to tax) and fees for services provided (which are deemed appropriate to tax). This chapter adopts the view of Auerbach and Gordon, who argue that financial services should be included in the base of a VAT if real resources are used to produce them.

**International Practice**

**The Exemption System**

No country that has VAT requires financial services companies to separate implicit fees from financial margins for purposes of assessing tax. Typically, countries treat implicit fees as exempt, meaning that these fees are not subject to tax, and VAT incurred on inputs deemed attributable to exempt financial services is not recoverable. Many countries also exempt a variety of explicit financial fees as well as implicit fees.

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The European Council’s VAT directive generally requires European Union member states to adopt VAT legislation that exempts domestic supplies of specified financial services such as:

- insurance and reinsurance transactions, including related services performed by insurance brokers and insurance agents;
- the granting and the negotiation of credit and the management of credit by the person granting it;
- the negotiation of, or any dealings in, credit guarantees or any other security for money and the management of credit guarantees by the person who is granting the credit;
- transactions, including negotiation, concerning deposit and current accounts, payments, transfers, debts, checks, and other negotiable instruments, but excluding debt collection;
- transactions, including negotiation, concerning currency, bank notes, and coins used as legal tender, with the exception of collectors; items — gold, silver, or other metal coins or bank notes — that are not normally used as legal tender or coins of numismatic interest;
- transactions, including negotiation but not management or safekeeping, in shares, interests in companies or associations, debentures and other securities, but excluding documents establishing title to goods, and certain rights or securities; and
- the management of special investment funds as defined by member states.

A zero rate (with input VAT recovery) may be applied to exports of these financial services. The tax treatment of other financial services is left to the discretion of EU member states.

While the exemption of financial services obviates the need for measuring implicit financial fees, it creates a different set of administrative difficulties.

First, it is necessary to define the scope of exempt transactions. This is challenging because of the diversity and sophistication of

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7 See article 135 Council Directive 2006/112/EC of Nov. 28, 2006 (on the common system of value added tax). Under article 137 of the directive, member states, in domestic legislation, may provide an option to elect taxation of these services, other than insurance and reinsurance.
financial services and the provision of some financial services by companies that are not subject to regulation and supervision under financial charters. The British Bankers’ Association guide to the taxable status of banking services under the U.K. VAT rules (the “blue book”) runs several hundred pages in printed form.8

Second, it is necessary to allocate inputs between taxable and exempt transactions. No recovery is allowed for VAT paid on inputs allocated to exempt transactions, referred to as “blocked” input VAT (see Figure 1 above).9 Rather than allocate inputs according to the value of taxable and exempt transactions, a variety of proxies are often used, such as head count or square feet of office space.

Exemption distorts competition in several ways. It undertaxes business-to-consumer (B2C) supplies because value added by the supplier escapes tax. At the same time, exemption overtaxes supplies to VAT-registered businesses (B2B) because of blocked

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8Available from the British Bankers’ Association for a fee at www.bba.org.uk.
9Out-of-scope supplies include activities conducted in foreign jurisdictions, gratis supplies to charity, issuance of shares, and payment of dividends. Some EU member states took the view that VAT costs related to shares transactions were not deductible. Recently, the ECJ has taken the view that these costs can be treated as overheads allocable to the taxpayer’s in-scope activities (cf. case Kretztechnick C-465/03, AB SKF C-29/08, Cibo C-16/00). However, if the costs related to share transactions are not connected to in-scope activities, the VAT deduction will be denied (cf. case C-437/06 Securenta, 2008).
input VAT that is never recovered in the supply chain. Exemption thus encourages use of financial services by consumers and discourages use by businesses.

Outsourcing by financial services companies is penalized because of blocked input recovery, unless the exemption system is extended to their suppliers. Moreover, exemption of financial services does not address the competitive advantage of foreign companies that, barring regulatory barriers, may be able to export financial services to the domestic market free of VAT.

To compensate for the perceived preferential treatment received by financial services as a result of VAT exemption, some countries impose special taxes on financial services companies. Examples include insurance premium tax (U.K.), payroll tax (Denmark and France), and wage and profit tax (Israel). These compensatory taxes typically exacerbate the overtaxation of B2B financial services.

Modified Exemption System

To reduce the complexity and economic distortions that arise under the exemption system, some countries have adopted modifications. They include: (1) taxing all explicit financial fees, (2) providing taxpayers with the option to treat otherwise exempt financial services as taxable, and (3) zero rating B2B supplies of some financial services. A survey of international practices illustrates these approaches.

Mandatory Taxation of Explicit Fees

South Africa initially followed the New Zealand GST when it enacted its VAT regime in 1991. Beginning in 1996, however, South Africa included all domestically rendered, fee-based financial services in the VAT tax base.\(^\text{10}\) That lessened the amount of blocked input VAT, but did not eliminate the need to allocate input tax between taxable and exempt supplies. To reduce

disputes, the South African Revenue Service later issued stand-
ardized input allocation guidance for members of the Banking
Council.\textsuperscript{11}

Compared with full exemption, taxing explicit financial service
fees promotes economic efficiency by reducing the overtaxation
of B2B supplies and the undertaxation of B2C supplies. Of
course, if there is flexibility regarding the choice of pricing,
financial companies will have an incentive to charge explicit fees
only for B2B supplies. Thus, it might be expected that taxation of
explicit financial intermediation fees would raise less revenue
than the EU exemption system. However, that need not be the
case if pricing decisions are dominated by nontax consider-
ations.\textsuperscript{12}

\textit{Option to Tax}

member states to enact legislation that provides an option to
charge VAT on otherwise exempt financial services (except
insurance and reinsurance). To date, only six of the 27 member
states have enacted option-to-tax provisions: Austria, Belgium,
Estonia, France, Germany, and Lithuania. Lack of widespread
adoption may be due to revenue-loss concerns on the part of
domestic tax authorities.

In theory, an option to tax would allow taxpayers greater
control over the financial transactions subject to VAT as com-
pared with mandatory taxation of explicit fees. In practice,
however, option-to-tax rules include significant restrictions lim-
itng taxpayer flexibility, such as:\textsuperscript{13}

- limitations on the types of services eligible for the option to
tax (Austria, Belgium, and France);
- requirements to opt for all services or all services of the same
  nature (Belgium, Estonia, France, and Lithuania);

\begin{itemize}
\item \textsuperscript{11}Ibid.
\item \textsuperscript{12}Under section 73 of the VAT Act, the government can challenge tax-motivated
manipulation of fees and margins based on the VAT status of the parties involved.
\item \textsuperscript{13}European Banking Federation, “Design and Impact of the ‘Option to Tax’ System
■ inability to opt selectively on a customer-by-customer basis (Belgium, Estonia, France, Germany, and Lithuania); and
■ limitations on revocation of election (Belgium, Estonia, France, and Lithuania).

Taxpayer adoption of option-to-tax has been limited for several reasons, including: the restrictions imposed, the cost of upgrading accounting systems, and the lack of customer acceptance. Moreover, the option-to-tax system does not solve the fundamental problem of measuring the value of implicit financial intermediation fees. For example, where option-to-tax applies to lending transactions, the lender is required to treat gross interest received as taxable, rather than the loan spread. One exception is Lithuania, where the option to tax foreign currency transactions applies to the dealer’s margin.14

Zero Rating

Effective in 2005, 20 years after enacting its GST, New Zealand revised its exemption system to allow, on an elective basis, zero rating of supplies to taxable customers.

Under this regime, electing companies may zero rate otherwise exempt financial services supplied to a GST-registered customer, but only if 75 percent or more of the customer’s sales are taxable (at a positive or zero rate) under GST. If information is not provided by the customer, the electing company can establish whether the customer meets the 75 percent test based on the customer’s standard industrial classification code. Zero rating is contingent on receipt of evidence that the customer is registered for GST. Under a special rule, financial services provided to another financial services company may be zero rated to the extent that the second company supplies financial services that are zero rated.15

Zero rating B2B financial services appears to be the most effective method of eliminating the tax cascading that otherwise occurs under the exemption method. However, it does not

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14Ibid.
15This summary is based on Schenk and Oldman (2007) op cit.
address undertaxation of B2C financial services. And for financial companies with nonbusiness customers, zero rating B2B transactions does not eliminate the need to allocate input VAT between taxable and exempt transactions.

Partial Input Recovery

Exemption of financial services results in no input recovery, while zero rating allows full, 100 percent input recovery. Partial input recovery represents a middle ground.

Singapore annually publishes fixed percentage input VAT recovery rates for five types of exempt financial institutions: full banks, merchant banks, wholesale banks, offshore banks, and finance companies. The recovery percentages generally are based on the share of services estimated to be provided to VAT-registered customers and overseas customers. Thus, the Singapore system is an alternative approach to zero rating transactions with VAT-registered and overseas customers that does not require a financial company to determine the VAT registration or residence status of its customers. However, the lower compliance burden on financial companies (as compared with zero rating B2B transactions) comes at the expense of accuracy, as the share of VAT-registered and overseas customers may vary considerably among companies within each of the five institutional categories.

Australia allows recovery of 75 percent of VAT on inputs allocable to exempt financial services. Unlike in Singapore, this percentage is not intended to approximate the proportion of VAT-registered and overseas customers. Instead the intent is to eliminate the disincentive for financial companies to outsource services. If 75 percent of the cost of outsourced activities represents value added by the outsourcer (and the remaining 25 percent represents materials purchased by the outsourcer), then the 75 percent input VAT credit would leave financial companies indifferent, from a VAT perspective, between self-provision and outsourcing.

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Assessment of Current Approaches

The inability to find a satisfactory measure of implicit financial intermediation fees has led most countries to exempt financial services where fees are wholly or partially hidden within financial margins. While avoiding the need to measure implicit fees, exemption has proved to be neither simple nor economically neutral. Exemption of financial services results in overtaxation of B2B services and undertaxation of B2C services, discourages outsourcing, and favors imported financial services over domestic supply.

Relatively few countries have chosen to modify the exemption system by the methods discussed above. Some countries have expanded the scope of exemption to include provision by third parties of some services to the financial sector. In general, allowing increased input tax recovery reduces the overtaxation of B2B transactions, reduces the disincentive to outsourcing, and limits the competitive advantage of imported financial services, but comes at the cost of exacerbating the undertaxation of B2C transactions.

Exemption alternatives that fully include financial services within the VAT base hold the promise of achieving neutral taxation of B2B, B2C, and outsourcing transactions. The challenge is to find a way to do this with an acceptable level of compliance and administrative burden. Some options are discussed in the following section.

Alternatives to Exemption

A variety of proposals have been made to include financial intermediation services within the base of the VAT to avoid the deficiencies of the exemption system.

Cash Flow Taxation

The R+F Approach

In 1978 the Institute for Fiscal Studies in London released a report, known as the Meade Commission report, that proposed a

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18Unless extended to imported financial services, full inclusion would not resolve (and could aggravate) the competitive advantage of foreign-based competitors.
cash flow tax on business that includes both real (R) and financial (F) flows in the tax base — or what has been referred to as the R+F tax base.\textsuperscript{19}

The R base is the same as that in the flat tax originally proposed by Hall and Rabushka in 1985 — an origin-based, subtraction method VAT with a deduction for employee compensation.\textsuperscript{20} The F base equals financial inflows less financial outflows. Financial inflows include:

- sales of financial assets (other than own shares or shares of other domestic residents);
- receipt of debt repayments;
- borrowing of funds;
- interest income;
- dividend income (other than from shares of domestic residents);
- other receipts in connection with financial instruments;
- receipt of insurance premiums; and
- receipt of insurance claims.

Financial outflows include:

- purchases of financial assets (other than own shares or shares of other domestic residents);
- payments to reduce debts;
- interest expense;
- other payments in connection with financial instruments (other than dividends paid);
- payments of insurance claims; and
- payments of insurance premiums.

While the report made clear that a cash flow method could be used to include financial services within an origin-based, subtraction method VAT, it did not address the destination-based, invoice credit method VAT that is the international standard. Subsequent authors have noted specific difficulties in applying


\textsuperscript{20}Robert E. Hall and Alvin Rabushka, The Flat Tax, Hoover Institute, 2007. Under the flat tax, the business base equals sales less purchases from other businesses less payments of wages and benefits to employees, and the individual tax base equals employee compensation less a standard exemption.
the cash flow method within the VAT system, including compliance burden, strains on taxpayer liquidity, and windfalls.\textsuperscript{21}

Under the cash flow method, all taxpayers, not just financial institutions, would have to include financial flows in determining tax liability. (For example, business would need to pay VAT on the receipt of loan proceeds.) This would be a burdensome and unfamiliar departure from existing accounting practices. Such a tax likely would be viewed as straining liquidity and impairing businesses’ ability to invest, because tax would be due on the gross amount of borrowed funds.

Moreover, at the adoption of a cash flow tax (and later, if tax rates change), there would be unintended windfall gains and losses. For example, taxpayers that lent money before the effective date of the cash flow tax would be liable for tax on repayments after the effective date, even though no deduction had been allowed for the original loan.

\textit{The TCA System}

The tax calculation account (TCA) system was developed to address the liquidity and windfall issues identified with use of the cash flow method to tax financial services under a VAT.\textsuperscript{22} The TCA defers tax on principal amounts until accounts are settled, with an interest charge on deferred tax liability and an interest credit on deferred tax assets.

Tax liability is determined periodically on an account-by-account basis. The tax base includes interest charged (credited) on deferred tax liabilities (assets). Changes in VAT rates are handled by a tax-free restatement of deferred VAT liabilities and assets. Explicit financial fees that are not run through the TCA system are subject to VAT in the same manner as payments for other services.

Application of the TCA method is limited to transactions between financial services companies and their customers. The method does not apply to capital market transactions such as


issuance of debt and equity securities, payments to the owners of debt and equity securities, or investing in securities as a principal.

The detailed application of the TCA system to loans and deposit accounts is explained in the appendix following this chapter.

Truncated TCA Method

The TCA addresses the liquidity and windfall concerns with the cash flow method, but not the compliance burden that would arise if taxpayers outside the financial services sector were required to account for tax on financial transactions. The “truncated” cash flow system addresses this issue by limiting the cash flow method to financial services companies.

Under the truncated TCA method, financial services companies would determine VAT liability on an account-by-account basis using the TCA method and would issue invoices to VAT-registered customers, allowing them to claim an input VAT credit. Accounts with foreign customers would be zero rated. VAT-registered customers would follow normal rules for determining tax liability except that they would claim a credit for the amount of VAT reported to them by financial services companies.

Over a two-year period, beginning in 1996, the truncated TCA method was tested by 10 financial companies in Europe, including six banks, as part of a study sponsored by the European Commission. The results of the study indicated that the TCA method was technically feasible, but concerns were raised regarding disclosure of proprietary information, application to complex financial instruments, and cost of implementation.

Under the truncated TCA method, banks would be required to provide invoices to business customers showing VAT paid by the bank on customer accounts. This would have the effect of disclosing implicit financial fees, which could be inferred from invoices and are considered proprietary information by some financial companies. Also, questions were raised about the application of the TCA method to complex financial products, such as derivatives. Further, there was concern about the cost to financial companies of purchasing, installing, and operating new accounting systems to implement the TCA method.
Faculty TCA Method

Harry Huizinga has proposed a simplified TCA method, which we refer to as the portfolio TCA method. This approach would address some of the concerns that surfaced in the testing of the truncated TCA method sponsored by the European Commission.23

Under the portfolio TCA method, transactions with VAT-registered customers would be treated as zero rated, meaning that no tax would be paid by the supplier and no tax credit would be claimable by business customers. The revenue effect of zero rating supplies to a registered customer is the same as taxing these supplies provided that the customer has the right to fully recover input VAT. For transactions with nonregistered customers, financial companies would be allowed to make TCA calculations on an aggregated basis for portfolios of similar financial products, rather than on an account-by-account basis.

The portfolio TCA method addresses concerns regarding disclosure of proprietary loan pricing information because no invoices would be required. Moreover, as complex financial products primarily are sold to business customers, the portfolio TCA method eliminates the need to calculate VAT on many of those products. Also, the portfolio TCA method partially addresses the cost of accounting system modifications by excluding B2B accounts and allowing TCA calculations to be made on an aggregated basis for B2C transactions.

General Insurance and Warranties

Premiums charged for insurance or reinsurance coverage and services provide by insurance agents and brokers generally are treated as exempt supplies under the VAT systems of most countries. By contrast, warranty charges that are embedded in the price of goods and services, and thus not separately stated, generally are included in the VAT base.

For example, an appliance with a one-year manufacturer’s guarantee may be sold for $1,000, with the customer having an

option to purchase a $100 contract to extend the warranty another two years. Alternatively, the appliance might be sold for $1,100, with the manufacturer guaranteeing the appliance for three years. In the first case, most countries with VAT systems would exempt the $100 premium for the extended warranty contract and apply VAT only to the $1,000 appliance price. In the second case, VAT would be charged on the $1,100 appliance price, including the embedded $100 charge for the extended warranty. As a result, in the case of B2C sales, VAT generally can be reduced by separately stating warranty fees. This tax advantage may be offset by imposition of an insurance premium tax, as in the U.K.24

A few countries have departed from the common practice of exemption by taxing general insurance (i.e., insurance other than life insurance) on a modified cash flow basis, similar to the treatment of embedded warranties. This is referred to as a modified cash flow tax because cash flows associated with the investment activities of insurance companies are treated as outside the scope of tax.

New Zealand

New Zealand was the first country to adopt a VAT or GST regime in which general insurance is taxed on a modified cash flow basis. Under the New Zealand system, general insurance premiums are subject to VAT. Similar to the treatment of warranties, VAT incurred by an insurance company for repair or replacement of insured property is creditable. Where the policyholder is reimbursed for the cost of repairs, the claims payment is viewed as VAT inclusive, and the imputed VAT is allowed as a credit to the insurance company.

Consider the following example: If the VAT rate is 10 percent and a $1,100 general insurance claim is paid to a policyholder, the insurance company would be allowed a VAT credit for $100 (0.10/(1+0.10)) \times $1,100). Consequently, the same amount of VAT credit is claimed whether the insurance company pays the repair

company for a $1,000 repair (on which $100 of VAT is due) or the insurance company pays the policyholder $1,100.

VAT charged on general insurance premiums is reported on a VAT invoice and is creditable in the normal manner for VAT-registered policyholders. Receipt of a general insurance claims payment by a VAT-registered policyholder is treated as a taxable supply by the policyholder on a VAT-inclusive basis if the payment relates to a loss incurred in the conduct of the policyholder’s taxable business.

For example, if the VAT rate is 10 percent, receipt of a general insurance claim payment of $1,100 regarding a loss incurred in the conduct of a taxable business would be treated as a taxable supply of $1,000 ($1,100 / (1 + 0.10)) on which $100 (10 percent of $1,000) of VAT is owed by the policyholder. Policyholders that are not VAT registered are not liable for VAT on insurance claim payments and may not claim input credit for VAT charged on insurance premiums. Similarly, no recovery is permitted for VAT on general insurance premiums paid in connection with an exempt business activity, and no VAT is due on receipt of claims payments regarding those policies.

When the New Zealand VAT went into effect, general insurance companies were allowed to claim imputed VAT credits on claims payments made on policies for which premiums had not been subject to VAT.

South Africa and Australia

South Africa has adopted the New Zealand model, while Australia has adopted a modified version. Under the Australian system, taxable VAT-registered policyholders are not taxed on receipt of general insurance claims payments and no imputed VAT credit is allowed to the insurance company. Australia follows the New Zealand approach with respect to exempt policyholders. For partially exempt policyholders, claims payments are treated as partially taxable supplies.25

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25Ibid., p. 355.
Singapore

Under the Singapore VAT system, general insurance premiums are subject to tax. The insurance company is allowed a notional input tax credit for cash payments made to non-VAT-registered policyholders and to policyholders unable to claim input VAT recovery on the premiums. Imposition of VAT on medical and accident insurance premiums and on passenger car insurance is prohibited under the Singapore VAT system.

Life Insurance

Life insurance contracts — including whole life, variable life, universal life, and annuity contracts — provide insurance against mortality-related risks. Unlike general insurance contracts, life insurance contracts often extend over more than one year and may have a savings component that is similar to a savings account or mutual fund. If bank savings accounts and mutual funds are included within the VAT system, competitive neutrality requires that the savings component of life insurance be similarly taxed.

The TCA system can be extended to life insurance contracts by dividing premiums between a pure insurance component and a savings component and making separate TCA calculations for both components.26 Premiums could be separated between insurance and savings components based on actuarial reserves computed for financial, regulatory, or income tax purposes, or by reference to the cash surrender value of the contract. As with loan and deposit accounts, TCA calculations could be made on a portfolio basis.

Bid-Ask Spreads

Market-makers for currency, equities, bonds, options, futures contracts, and other securities recover their costs through brokerage commissions and bid-ask spreads. The bid-ask spread is the difference between the price quoted by the market-maker for an immediate purchase from a customer (bid) and an immediate sale to a customer (ask).

Where the bid-ask spread is readily observable, a reference price for the security can be calculated as the midpoint (i.e., average) of the bid and ask prices. The reference price can be used to allocate the implicit brokerage fee between buyers and sellers as follows. The excess of the price at which a security is purchased over the reference price is the implicit brokerage fee charged to the buyer, and the excess of the reference price over the price at which a security is purchased is the implicit brokerage fee charged to the seller.

In principle, implicit brokerage fees could be calculated at the time of the transaction and reported to VAT-registered customers. Alternatively, as under the portfolio TCA method, implicit brokerage fees could be calculated on a portfolio basis for B2C transactions, and B2B transactions could be zero rated. In either case, explicit brokerage fees would be subject to tax, and VAT incurred on inputs would be fully recoverable.

**Conclusion**

The economically neutral application of VAT to financial services requires their inclusion within the tax base as fully as possible. Because of the practical difficulties in measuring the value of implicit financial fees, most financial services historically have been exempt from VAT. However, advances in theory and information technology make exemptions unnecessary.

As a starting point for the design of a U.S. VAT, there seem to be few impediments to including all explicit financial services fees within the base of a VAT, as in South Africa. Experience also shows that it is relatively easy to include general insurance within the VAT system, following the approach pioneered by New Zealand. Although there is only limited experience, it does not appear inordinately difficult to impose VAT on market-makers based on the bid-ask spread for currency and securities that are regularly traded.

The portfolio tax calculation account method seems to hold considerable promise for including lending and deposit-taking services in the VAT base with a relatively low compliance burden. The key to simplification of this approach is treating implicit financial fees charged on transactions with VAT-registered customers as zero rated, and measuring and taxing
value added on transactions with unregistered customers on an aggregated basis. Portfolio approaches could also be applied without use of the tax calculation account methodology by, for example, using the addition method (profit plus wages) to calculate value added attributable to B2C transactions.

Zero-rating supplies to VAT-registered customers, of course, would be at variance with the normal operation of VAT rules. However, it is economically equivalent to full taxation for customers that are entitled to full recovery of input VAT. Special rules would be needed for partially exempt customers.

Portfolio approaches to taxing life insurance also seem promising, although additional development and testing would be necessary before implementation.

As traditional VAT systems are modified to expand the range of financial services included in the base, it will be important to ensure equivalent taxation of financial services that are: (1) economically similar but differently characterized (for example, finance leases versus loans); (2) supplied by companies that are not regulated as financial institutions; and (3) supplied by foreign-based financial companies to domestic consumers.

Appendix

Consider the application of the TCA system to loans and deposit accounts. In a loan transaction, VAT liability ($V$) under the TCA method can be expressed as follows:

\[
V = TCA_b \times (1+r) - t \times (I+P) - TCA_e
\]

where:
- $TCA_b$ = tax calculation account at the beginning of the accounting period;
- $TCA_e$ = tax calculation account at the end of the accounting period;
- $t$ = VAT rate for the accounting period;
- $I$ = interest received for the accounting period;
- $P$ = principal received for the accounting period; and
- $r$ = short-term government bond rate for the accounting period.
The TCA is determined as the outstanding loan balance (A) at the beginning and the end of the period (expressed as a negative number) times the tax rate for the period.

Equation #3:
\[ TCA = -A \times t. \]

The loan balance at the end of each accounting period \((A_e)\) is equal to the loan balance at the beginning of the period \((A_b)\) plus accrued interest, less the sum of interest and principal paid, and less write-offs of bad debt.

Equation #4:
\[ A_e = A_b \times (1+i) - (I+P) - w \times A_b \]

where:
- \(i\) = interest rate charged on loan for the accounting period; and
- \(w\) = portion of beginning of period loan balance written off during accounting period.

From equations 2, 3, and 4, it can be seen that the VAT base for a loan transaction under the TCA method is equal to the interest rate spread over the short-term government bond rate less bad debt write-offs during the period.

Equation #5:
\[ V = t \times (i-r-w) \times A_b \]

Over a portfolio of loans, if the risk premium built into the interest rate accurately prices the risk of default, the tax base under the TCA method is equal to the implicit fee charged by the lender, as defined above in Equation #1 (loan interest rate = risk-free rate + risk premium + implicit fee). Unanticipated favorable loan performance will increase the tax base, while unanticipated unfavorable loan performance will decrease the tax base.
Application of the TCA method to deposit accounts is described by the same algebra, except that there are no write-offs of bad debts and the signs of financial stocks and flows are reversed.27

The index rate used to adjust deferred tax assets and liabilities in the TCA to reflect the time value of money is the government borrowing rate that corresponds to the TCA accounting period. For example, if TCA calculations are made monthly, the 28-day Treasury bill rate at the beginning of each month could be used to index TCA accounts for that month.

Use of a short-term government bond rate to index the TCA for a long-term loan may be viewed as too low a rate where the yield curve is upward-sloping (overstating value added) and too high a rate where the yield curve is downward-sloping (understating value added). However, under the market expectations theory of the term structure of interest rates, the long-term government bond rate equals the yield that market participants expect could be earned by investing successively in short-term government paper.28

If market expectations are correct, repeated indexing of the TCA at the T-bill rate over the maturity of a long-term loan would be equivalent to using the initial long-term government rate over the entire loan period (if the VAT rate is unchanged).

Where market expectations are incorrect, however, there would be a capital gain or loss to the lender, and that gain or loss would be subject to tax or credit.

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27Outstanding deposits, interest paid, and amounts withdrawn from an account have the opposite signs as outstanding loans, interest received, and principal repaid on a loan, respectively.

28Alternative theories suggest that factors other than market expectations about future short-term rates affect the yield curve, such as a premium to compensate investors for sacrificing the liquidity of short-term bonds. If so, these other factors would be included in the VAT base of the lender under the TCA method.
References


Does a VAT Promote Exports?

By Joel Slemrod

How a VAT affects international trade is a good example of the disconnect between what economists believe to be true and what most other people believe. VAT regimes, as implemented around the world, are commonly thought to promote exports. Some Americans bemoan the competitive advantage this gives other countries relative to the VAT-less United States. The concern is usually not enough for them to advocate that the U.S. enact its own VAT, but it’s often sufficient grounds to recommend some kind of offset such as an import tariff or WTO sanction.

Nearly all economists think a well-functioning VAT does not promote exports. Importantly, there is no partisan divide among economists on this issue, as there is for some other key issues such as the impact of higher tax rates on labor supply and savings.

For example, note that Martin Feldstein and Paul Krugman — two stranger bedfellows could hardly be found — once collaborated on an article which asserted that the claim that “countries that have a VAT have an advantage in international competition over countries that rely on income taxation . . . is wrong.”¹ They went on to write that an “idealized VAT is neither pro-competitive nor anti-competitive: whatever your definition of competitiveness, it has no effect at all.”²

Before I explain why economists think the way they do, let me lay out as best I can the argument many non-economists make. A

²Feldstein and Krugman, p. 269.
quick Internet search uncovers the basic argument on many websites, and what follows is an adaptation from one such site. I have changed the numbers and the wording a bit, but have preserved the logic of the argument entirely.

Consider a U.S.-manufactured car that sells for $20,000. When the car arrives in Germany, a 19 percent VAT will be added on to the $20,000 price, meaning the car will be sold in Germany for $23,800.

Yet no tax comparable to a VAT is imposed on a German-manufactured car imported into the United States. Consider a German car that is sold in Germany for $20,000 after the 19 percent VAT is imposed. When the German car is imported to the U.S., Germany rebates the 19 percent VAT to the manufacturer, allowing the export value of the car to be $16,807 ($20,000/1.19). When the German car is imported to the U.S., no U.S. tax comparable to the VAT is assessed, so the car is allowed to enter the U.S. market at a price under $17,000.

In short, the U.S. manufacturer suffers price disadvantages when the U.S. car is exported to be sold in Germany, compared to the price advantages the Germany manufacturer receives when the German car is exported to be sold in the U.S.

In this example, U.S. producers are disadvantaged in two ways. On export, a U.S. product that otherwise sells for the same price in domestic markets starts off with a disadvantage of $3,800 because of Germany’s VAT. At the same time, the German car — which sells at home for the same price as the U.S. car does in America — is sold to the U.S. for a price that is $3,193 less than the U.S. car.

When you add these two factors, U.S. car companies face a combined disadvantage (at home and abroad) that totals $6,993. In effect, the VAT rebate for German exports serves as a government export subsidy, while the imposition of VAT on the U.S. car serves as a tariff imposed on U.S. exports to Germany.
There is a grain of truth in this argument about how VATs operate with regard to imports and exports — that is, VATs are usually destination-based in their treatment of trade flows.

First take exports. While a firm’s VAT base is sales minus purchases from other businesses, sales means sales to domestic businesses or consumers. Equivalently, the base is total sales net of exports minus purchases from other businesses. Or — also equivalently — tax liability is the tax rate times total sales minus purchases from other businesses, minus the tax rate times exports. Put this last way, it certainly looks like a VAT contains an export subsidy.

Now consider imports. While a firm’s VAT base is sales minus purchases from other businesses, purchases means purchases from domestic businesses. Equivalently, the base is total sales minus total purchases plus the tax rate times the value of imports. Put this last way, it certainly looks like a VAT contains a tax on imports. Indeed, most countries collect VAT at the border on imports and then allow businesses to credit these tax remittances.

To see the flaw in the above argument, suppose that instead of VAT Germany imposed a 19 percent retail sales tax (RST) of the kind levied by most U.S. states. Assume that, before imposing the RST, both Germany and the U.S. produced cars that are sold for $20,000 in both countries.

With the German RST, the consumer price for both cars becomes $23,800, where the seller receives $20,000 and the German government receives $3,800. Because the tax liability is based on where the car is sold and not on where the car is produced, levying the tax does not change the relative attractiveness to a German of buying one car over the other. It also clearly does not affect the relative attractiveness of the two cars to an American consumer. The addition of a U.S. RST would not change this conclusion.

Juxtaposing these two examples should cause an extreme case of cognitive dissonance. According to the argument cribbed from the Internet, a destination-based VAT causes a whopping disadvantage to American-produced cars while an RST causes none at all. Yet a destination-based VAT and RST (assuming they work perfectly well) are exactly the same, other than which parties remit the money to the government. (Under an RST, only retailers
collect and remit tax; while under a VAT all businesses do.) Both VAT and RST levy a flat-rate tax on domestic consumption, and neither levies a tax on goods produced domestically but exported.

The cognitive dissonance can be eliminated by correcting just one key assumption in the Internet example. Recall that the example maintains that the U.S. car sells for $20,000 in either country, but the German car sold in Germany sells for $20,000 after the 19 percent VAT is imposed. Thus, net of tax, the German manufacturer receives just $16,807 — which the Internet example calls the “export value.” But this assumes both that the German manufacturer has some natural cost advantage over the U.S. manufacturer and that it would squander that advantage by selling cars for $16,897 in Germany when it could sell them for $20,000 in the U.S.

A more reasonable assumption is that, before tax, the two countries’ manufacturers are equally cost efficient and both require $20,000 per car to cover their cost (and make a profit). Once we correct that mistake, the apparent disadvantage under a VAT goes away and we are back to the RST case. Specifically, the German manufacturer can sell its car for $23,800 in Germany, from which it receives $20,000. Or it can sell it for $20,000 in the U.S., pretax and posttax (because the U.S. has no VAT). The exact same choices are available to the U.S. manufacturer. Recognizing that Germany uses euros rather than dollars changes nothing in this argument.

To some, the argument by analogy to the effects of an RST may seem like sleight of hand. A VAT has explicit border adjustments in both directions; an RST has neither. So the argument goes that a VAT and an RST are not the same, and a VAT favors exports.

I suspect the underlying stumbling block is something known to economists as the Lerner symmetry theorem, posed by economist Abba Lerner in 1936. It demonstrates that, in equilibrium, an across-the-board export tax is equivalent in all respects to an across-the-board import tariff. This is probably the time for many readers to take a deep breath.

Although the Lerner theorem is an undisputed part of the canon of economics, it is counterintuitive to many because it asserts that exports can be subsidized equally well by applying a
subsidy to imports. Moreover, it implies that getting rid of the VAT export rebate while keeping the import tax would turn the VAT into an export tax (which is, by the above rationale, the equivalent to an import tariff).

The theorem relies on the fact that the import tariff and export tax identically alter the relative price of exports and imports, as the RST example shows. The tariff raises the price of imports, while the export rebate lowers the price of exports. In both cases the relative price of imports in terms of exports rises by the tax rate.

Crucial to the theorem is the so-called trade-balance condition, which holds that the value of what a country sells on world markets must equal what it buys. Not every year, but over the long run, in equilibrium, this condition will hold true. Of course, the trade-balance condition calls into question why one might want to have tax or trade policies that favor exports. Even if successful those policies would, in the long run, increase the value of imports as much as exports. But the wisdom of export promotion is not the topic of this paper.

From personal experience I know that, even for people who are sincerely trying to grasp these issues, invoking the trade-balance condition, long-run equilibrium, and exchange-rate adjustments are seldom persuasive to non-economists. For the nonspecialist, I return to the three-step argument by analogy. First step, understand why a uniform VAT is equivalent to a uniform RST; both levy tax on domestic consumption regardless of where goods or services were produced. Second step, calmly reassure oneself that, as is intuitive, an RST does not favor domestic over foreign production and neither encourages nor discourages exports or imports. This implies step three: that a VAT (like an RST) neither encourages nor discourages exports or imports. If step three fails, return to steps one and two until fully convinced.

Let me make two more points. Feldstein and Krugman claimed that an “idealized” VAT is neither pro-competitive nor anticompetitive. What idealized means is that the VAT applies uniformly to all goods and services. In practice, this is not true because of the noncoverage of some goods — either by design or difficulty of administration — or because of differentiated rates applying to different goods.
A non-uniform VAT may indeed affect the size of the traded goods sector. In fact, real world VAT regimes tend to offer more favorable treatment to non-traded goods such as services (for example, owner-occupied housing and medical services). A VAT that is non-uniform because it favors non-traded goods therefore levies a relatively higher tax rate on tradable goods, with the effect of increasing non-tradable consumption and production at the expense of tradable goods. Imports and exports are both reduced by such a non-uniform VAT.

Finally, we might go beyond economic theory to ask the natural empirical question: Do countries that rely more on VAT have larger export (and import) sectors? Finding that answer in the data might undermine confidence in the theoretical argument. It turns out that the answer is no. Another pair of eminent economists (though less ideologically mismatched than Feldstein and Krugman), Mihir Desai and James Hines, have examined this issue by analyzing data from 168 countries over the 50-year period between 1950 and 2000.3 They conclude that countries with a VAT have substantially fewer exports than countries without a VAT. A recent paper by Michael Nicholson of the U.S. Department of Commerce also finds that VATs reduce trade volumes, including exports.4 Desai and Hines conjecture this result may be due to the fact that VATs tend to be imposed at higher rates on traded goods than non-traded goods, and in practice exporters often receive incomplete VAT rebates.

To be sure, this is a tricky question to resolve with data analysis, in part because the causation might run in the opposite direction. That is, countries with a strong natural propensity to export may be more, or less, attracted to VAT as a way to raise revenue. But this careful analysis provides no evidence that adopting a VAT is a surefire way to expand a country’s exports.


VAT and Cross-Border Trade: Do Border Adjustments Make VAT a Fair Tax?

By Bert Mesdom

Although the VAT is relatively easy to administer, it becomes more complicated when businesses operate across borders. In those situations, more than one jurisdiction may impose its VAT rules. If those rules don’t permit border adjustments, double taxation or non-taxation may occur.

One of the most important principles in VAT design is whether the tax operates on an origin or destination basis. That has a significant impact on the avoidance of double taxation and the equal treatment of imports compared with locally produced goods or services.

An origin-based VAT is imposed in the jurisdiction where the goods or services come from. That means an exporter has to levy VAT on the same basis, and at the same rate, as a local supplier. The principle assumes that imports in the country of destination are not subject to VAT.

A destination-based VAT is imposed in the jurisdiction where the goods or services go. That means an exporter does not have to levy VAT on his or her supply, because it is assumed the supply will be subject to VAT in the country of destination. The destination principle puts imports and locally consumed goods on equal footing and achieves neutrality in cross-border trade.

The destination principle is in line with WTO rules and isn’t considered a prohibited export subsidy. The WTO Agreement on Subsidies and Countervailing Measures states in footnote 1:

the exemption of an exported product from duties or taxes borne by the like product when destined for domestic
consumption, or the remission of such duties or taxes in amounts not in excess of those which have accrued, shall not be deemed to be a subsidy.¹

This article will explain how border adjustments work from a technical perspective, the outcome if there were no border adjustments, and some key focus points regarding application of border adjustments. The purpose is not to dwell on technical details, but to show the reader how VAT operates in cross-border situations and how that may influence trade.

**Border Adjustments for Goods**

In most jurisdictions, goods are defined as tangible property. It is relatively easy to follow trade in tangible property, and VAT legislation often relies, when possible, on customs rules and documentation. Intangible property is much more difficult to follow and will be discussed later.

The best way to explain how the cross-border trade of goods is treated from a VAT perspective is to use an example in which we will describe the different moments when VAT comes into play. We will use two examples to illustrate how border adjustments guarantee a fair VAT result.

**Exports by U.S. Companies**

Let’s assume a U.S. company produces information technology hardware. The company buys raw materials in the U.S. for $1,000 and then uses its staff to assemble and market the hardware for a price of $2,000. The U.S. company sells both domestically and internationally (for example, to Belgium). Now imagine that the U.S. Congress introduces a VAT regime. How would the transactions in the supply chain of the IT hardware be treated from a VAT perspective? The overview below illustrates the relevant transactions.

**Transaction 1: Domestic Purchase of Raw Materials**

Assume the domestic purchase of the raw materials is subject to VAT. The transaction would be subject to U.S. VAT under both

US Supplier

1 USD 1,000 + USD 50 VAT

US Co

2 USD 2,000 + USD 100 VAT

US Customer

3 USD 2,000 + USD 0 VAT

Int’l Customer

4 21% VAT on import value (assume: 21% of USD 2,000 = USD 420)

Belgium

US

21% VAT on import value (assume: 21% of USD 2,000 = USD 420)
the origin and destination principles. That is because the goods come from the U.S. and are consumed there. If we assume a VAT rate of 5 percent, the U.S. company must pay a total price of $1,050 to the supplier of the raw materials (the $1,000 sales price plus $50 VAT). The supplier will remit the $50 to the government.

Transaction 2: Domestic Sale of IT Hardware

The domestic sale of the IT hardware would, under both the origin and destination principles, be subject to U.S. VAT. That’s because the goods come from the U.S. and stay there. If we assume a VAT rate of 5 percent, the customer must pay a total price of $2,100 to the U.S. company (the $2,000 sales price plus $100 VAT). The U.S. company will remit the $100 VAT to the government. However, it could net the $100 VAT due against the $50 VAT paid on the purchase of raw materials described in Transaction 1. On balance, the U.S. company would pay $50 to the government. Depending on whether the customer performs activities that give him the right to deduct the VAT, it might be able to deduct the $100 VAT later.

Transaction 3: International Sale of IT Hardware

The international sale of the IT hardware will be treated differently depending on which principle applies. Under the origin principle, the transaction would be subject to U.S. VAT because the goods originate from the United States. That means the Belgian customer must pay $2,100 to the U.S. company (the $2,000 sales price plus $100 VAT). The U.S. company will remit the $100 VAT to the government and credit the $50 paid on the purchase of the raw materials described in Transaction 1.

Depending on whether the Belgian customer performs activities that result in a right to deduct input VAT, he might be able to deduct the $100 VAT paid. However, if the customer is not registered for VAT purposes in the U.S., he would be unable to deduct the tax via a VAT return. Instead it would have to recover the VAT through an alternate refund process that is often cumbersome. In any event, the Belgian customer will also have to pay Belgian VAT on the import of the goods in Belgium (see transaction 4).

Under the destination principle, the outcome is different. The export transaction would not be subject to U.S. VAT because the
goods leave the U.S. for delivery in Belgium. That means the Belgian customer has to pay only $2,000 to the U.S. company (the $2,000 price and no VAT). The transaction, as an export, would be zero rated from the U.S. perspective — that is, treated as exempt with a right to deduct input VAT. The U.S. company would not have to remit any VAT to the government, but it would still be entitled to deduct the input VAT paid on the purchase or raw materials in Transaction 1. Otherwise the U.S. company would incur an economic disadvantage of $50. Because there is no VAT on this export transaction, the Belgian customer does not have to reclaim U.S. VAT, because none was paid.

Transaction 4: The Import of IT Hardware in Belgium

Belgium, as a member of the European Union, applies the destination principle for VAT. Consequently, it makes the import of goods subject to VAT irrespective of which approach (origin or destination) is chosen by the country where the goods came from. Goods imported into Belgium will be subject to Belgian VAT. That puts imported goods on equal footing with goods produced, sold, and delivered by domestic suppliers.

To calculate the VAT due on the import, Belgian VAT rules refer to the customs legislation and stipulate that the starting point for the taxable basis of the imported goods is the customs value, as adjusted for some items. For the sake of simplicity, we will assume that the customs value of the IT hardware is the same as the sales price: $2,000. Because Belgium has a VAT rate of 21 percent, the import will be subject to VAT in the amount of $420. This amount will be borne by the customer. In principle, it will always be the customer who must pay the import VAT to the government.

Note that if the U.S. adhered to an origin-based VAT, while Belgium adhered to a destination-based VAT, the customer would be taxed twice: once in the U.S. and once in Belgium. If the customer has no right to deduct input VAT, it would pay $520.

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2 Different jurisdictions use different terminology, but the VAT logic remains the same.
3 The VAT amounts to be paid on the importation will be calculated in euros. However, to make the example simple, we will continue to use dollar amounts.
VAT ($100 in the U.S. and $420 in Belgium) on products coming from the United States. That would lead to double taxation and would give the U.S. company a competitive disadvantage compared with Belgian suppliers — or suppliers from any third country that operates on the destination principle. Even if the customer had the right to deduct the input VAT, it would have to go through a cumbersome refund process to recover the $100 VAT, which might easily discourage purchase of U.S. products even where double taxation is avoided.

This example illustrates that the only solution that ensures equal treatment of exporters and domestic suppliers is the destination principle, under which the exports are zero rated for VAT purposes.

**Import by Foreign Companies**

We will again explain the impact of border adjustments using an example.

Two companies sell picture frames through an online catalog. Customers buy goods online, and after payment the picture frames are shipped to the home address of the customer. Company A is established in the U.S. and ships from a warehouse there. Company B is established in the European Union and ships from a warehouse in an EU member state. Both companies are active in the U.S. consumer market.

Company A will have to charge U.S. VAT on the sale of its products shipped from its U.S. warehouse. Without a border adjustment (that is, under an origin-based VAT), Company B has an incentive to ship goods from a country that applies a destination-based VAT and zero-rates exports. By doing so, it could bring goods into the U.S. free from VAT (because the importation in the U.S. would not be made subject to VAT). That would give the importer a competitive advantage over the domestic businesses.

To eliminate this distortion of competition, the import should be subject to VAT in line with the destination principle. If the import is subject to VAT at the same rate as domestic sales, both domestic and foreign products are treated equally from a VAT perspective. For that reason all imports, whether done by businesses or private individuals, should be subject to VAT.
Otherwise a private individual would have an incentive to shop in a country with a low VAT rate and bring the goods to the U.S. using either his or her personal luggage or a commercial carrier to ship them. To make this rule administrable, many jurisdictions have thresholds for private individuals to report and pay VAT on their imports. For example, a DVD costing $20 would not be subject to import VAT, but a flat-screen television or a watch costing $2,000 would be subject to import VAT.

Focus Points

Besides explaining the basic principles, it’s useful to highlight some of the key focus points regarding border adjustments. We will limit ourselves to the two most important issues from a business perspective.

The first point is that a destination-based VAT is vulnerable to fraud because exports are zero rated. Therefore it’s necessary to require sufficient proof of exportation. Usually that is done by relying on customs documentation.

If the U.S. introduced a VAT with different rates among the states, it would have to use a system like that in the EU to create export and import transactions. (In the EU those are called intra-Community supplies and intra-Community acquisitions.) The main difference with the country-to-country scenario is that one cannot rely on customs documentation, because the transactions take place within the same national customs zone. The problems with these transactions are the lack of proof of exportation and the inability to promptly spot fraudulent transactions.

VAT fraudsters exploit the fact that the country of dispatch (which zero-rates the intra-Community supply) and the country of arrival (which requires the recipient to report and pay VAT on the intra-Community acquisition) do not exchange information on a real-time basis. By the time the country of arrival has discovered that VAT on the intra-Community acquisition has not been paid, the supplier in the country of dispatch has already

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4 There are multiple other differences, such as the fact that private individuals are obliged to report and pay VAT on an intracommunity acquisition in only some circumstances. However, in this article we focus on the most important difference that causes problems regarding border adjustments.
recovered the VAT on the purchase of the goods that were subsequently sold without VAT as an intra-Community supply. This is one of the reasons why a federal VAT would be preferred over a state-by-state VAT.

The second point is how the import VAT is paid and by whom. Different parties can be held liable for a VAT payment: the customer, the supplier, or the person who holds possession of the goods (for example, toll manufacturers or lessees).

VAT rules may require the person liable for VAT to pay the tax directly to the customs authorities when the goods physically enter the country. The VAT paid can then later be reclaimed via the VAT return or refund procedure, assuming the importer of record has the right to deduct the VAT. Another option is that VAT would not be paid at the border, but later via a VAT return. In that case, the importer of record may report the VAT as both payable and deductible in the same VAT return.

Experience shows that whenever possible, foreign persons should not be required to pay VAT on imports if another party can do so. Rather, taxable persons who regularly file VAT returns should have to pay VAT on importation. The table below shows the EU member states that allow payment of the tax on imports via a VAT return.

**Border Adjustments for Services**

In theory, the VAT treatment of cross-border services should be exactly the same as for tangible goods. The principles and issues are the same. However, because services are intangible and can cross borders without customs control, it’s much harder to identify and control the destination of the service.

To achieve a fair VAT system, jurisdictions take different approaches. In the EU, the destination is applied under the place of supply rules (that is, the place of taxation). In a business-to-business (B2B) transaction in the EU, the general rule is now that the place of supply (the place of taxation) is the location where the customer is established. That means that a Belgian company that sells online software to a U.S. business would not have to charge Belgian VAT, because the supply “takes place” in the United States. One must then look at the rules in the U.S. to determine whether the supply is subject to U.S. VAT and at what
<table>
<thead>
<tr>
<th>Country</th>
<th>Can the payment of VAT due upon importation be deferred to the VAT return?</th>
<th>Is a license necessary?</th>
<th>Is a cash deposit required (advance payment) to be allowed to defer the payment of import VAT to the VAT return?</th>
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<tr>
<td>AT</td>
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<td>No</td>
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<tr>
<td>BE</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes, advance payment</td>
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<tr>
<td>BG</td>
<td>Yes*</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>CY</td>
<td>No</td>
<td>Not Applicable (N/A)</td>
<td>N/A</td>
</tr>
<tr>
<td>CZ</td>
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<td>No</td>
<td>No</td>
</tr>
<tr>
<td>DK</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>ET</td>
<td>Yes(^b)</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>FI</td>
<td>No</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
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<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>DE</td>
<td>Yes</td>
<td>Yes</td>
<td>No (bank guarantee)</td>
</tr>
<tr>
<td>GR</td>
<td>No(^c)</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
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<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>IE</td>
<td>Yes(^d)</td>
<td>Yes</td>
<td>No (bank guarantee)</td>
</tr>
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</tr>
<tr>
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<td>N/A</td>
</tr>
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<td>No</td>
</tr>
<tr>
<td>MT</td>
<td>Yes(^g)</td>
<td>Yes</td>
<td>No (bank guarantee)</td>
</tr>
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<td>Yes</td>
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<td>No</td>
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<tr>
<td>Country</td>
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<td>Is a cash deposit required (advance payment) to be allowed to defer the payment of import VAT to the VAT return?</td>
<td>Is there a license necessary?</td>
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<td>No</td>
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<td>No (but other deferral scheme)</td>
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<td>Yes</td>
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<td>No</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
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<td>N/A</td>
</tr>
<tr>
<td>UK</td>
<td>No (but other deferral scheme)</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Source: PricewaterhouseCoopers — A Guide to VAT in the 27 EU Member States, Norway and Switzerland — edition 2010

Legend:
- **positive for business**
- **less positive for business**

\(^a\)Yes in case of major investment projects

\(^b\)Certain conditions

\(^c\)Yes in case importation of investment goods by companies specifically mentioned in the law

\(^d\)Certain conditions

\(^e\)Yes in case of non-current assets and certain goods (crude oil, LPG, CNG and others)

\(^f\)Provided that the importer is VAT registered in Luxembourg

\(^g\)On application and on a case by case basis

\(^h\)If the importation is governed by the simplified customs procedure

\(^i\)Payment of the VAT due on importation can be deferred if the goods are placed:
  - in temporary storage according to customs regulations;
  - in a free zone or in a free warehouse according to customs regulations;
  - under customs warehousing arrangements or inward processing arrangements according to customs regulations.
rate. Other jurisdictions have VAT rules providing that the transaction takes place where the supplier is established but is zero rated if the sale is made for a customer established abroad, similar to the export treatment mentioned above.

The attentive reader will have noted that the EU legislation uses the establishment of the business customer as a proxy to determine the destination of the service. Usually that gives a correct and fair VAT result, and the rule is relatively easy to administer for businesses.

Sometimes, however, the establishment of the customer (or any other proxy) is not where the services are used. Typical examples are telephone services and real estate. A customer established in the U.S. may be able to use his cellphone all over the world, and a customer doesn’t necessarily have to be established in the country where he rents a hotel room or buys a second home. One can see different VAT results depending on the proxies that are chosen. And it’s clear that it is sometimes very difficult for a supplier or customer to determine where services are used and whether they are subject to VAT in the country where they are used.

Because a proxy does not always help identify a correct destination for service, some countries have introduced so-called use-and-enjoyment rules. These rules override the proxy and make a service taxable for VAT purposes where it is effectively used and enjoyed. In principle, this would lead to the fairest results, but experience shows that it’s difficult to apply use-and-enjoyment rules, either because the supplier does not always know where the customer uses and enjoys a service, or because the rule relies on practical interpretations that may vary among jurisdictions.

Given the different ways to determine the VAT treatment of cross-border services, a more harmonized approach would reduce a lot of issues. The OECD is doing interesting work in this field \(^5\) and in 2010 published draft guidance for public consultation on the VAT treatment of internationally traded services and

\(^5\)See www.oecd.org; Guidelines on the application of VAT/GST to international trade in services and intangibles.
intangibles. A task force is working on guidelines to achieve fair but administrable results. If a VAT is introduced in the U.S., that draft guidance would be worth reviewing.

**Conclusion**

Border adjustments are necessary to design a fair destination-based VAT. Otherwise, local businesses may face unfair competition both domestically and internationally. That is true both for businesses that sell tangible goods and businesses that provide services. Border adjustments are easier to administer for tangible goods than for services. To achieve fair results, some proxies for services will be necessary. The OECD’s work can offer useful guidance on these important design features.
VAT Fraud and Technological Solutions

By Richard T. Ainsworth

Every VAT regime is susceptible to missing trader fraud. The fraud is simple and can be easily prevented with the right technology. It arises when a business makes a purchase without paying VAT, collects VAT on an onward sale, and then disappears without remitting the tax collected.

Missing trader fraud is common with high-value/low-volume goods sold across borders; computer chips and cellphones are classic examples. But the fraud easily migrates when pursued. It

1This is a broad statement intended to include all multistage consumption taxes, such as the European credit invoice VAT, the Japanese consumption tax, and similar VAT or GST regimes, whether at the national or subnational level, as in Canada or Brazil.

2There are circumstances in every VAT system when standard business-to-business transactions are made without VAT being charged. Most notable are transactions between EU member states. The standard result is for the purchasing business to self-assess the VAT due with what is called a reverse charge.


4House of Lords, European Union Committee, “Stopping the Carousel: Missing Trader Fraud in the EU (Report With Evidence),” HL Paper 101 (May 25, 2007) 7 (indicating that HMRC believed in 2006 that MTIC fraud occurred mainly with cellphones and computer chips). But see Fabrizio Borselli, “Pragmatic Policies to Tackle VAT Fraud in the European Union,” Int. VAT Monitor (Sept. / Oct. 2008) at 333 (observing that data from the Office of National Statistics reported a significant reduction in MTIC fraud adjustments in the first quarters of 2006, corresponding with a rise in U.K. VAT receipts; however, Borselli observes the data reflect only the cellphone and computer chip markets and that MTIC fraud most likely moved to other markets undetected. Indeed, that was the year it moved to the EU carbon permit market, though it was not detected until 2010).
operates well with goods as varied as xenon light bulbs, automobiles, and earth-moving equipment.

**MTIC and Carousel Fraud**

In the European Union, this form of VAT fraud is commonly known as missing trader intra-community (MTIC) fraud. An intra-community goods transaction (that is, a business-to-business sale between EU member states) is the initial sale in the fraud. The initial sale is zero rated so that no VAT is charged on the purchase. Often the same goods participate in the same fraud multiple times, making multiple trips across community borders. In those cases, the goods appear to be on a rotating carousel, hence the less formal name of carousel fraud.

In one widely reported MTIC fraud case, a 21-year-old fraudster appeared to be selling 10 percent of the world supply of a kind of computer chip, when in fact he had only a single box of chips going round and round in U.K.-Irish cross-border trade.
Fraud in Services

VAT fraud has recently moved into services. The fraudsters exploit an oversimplification in the definition of taxable supply found in all VAT regimes. It’s common to define goods as tangible property and then to define services as everything else. However, not all services are the same. Some are readily resold like goods, rather than immediately consumed like services.10 This variant of fraud can occur between Norway and Denmark, or Nigeria and Switzerland, or Austria and France. Each of these countries have EU-style place of supply rules for tradable services. The six countries following New Zealand place of supply rules for services are not as vulnerable to this fraud.11

Because missing trader fraud relies on the resale of a supply purchased without VAT, and because most of the early fraud was detected in goods, it’s common to assume that VAT fraud is confined to goods. In fact, missing trader fraud is flourishing among services that are bought and sold like goods (tradable services). It has remained undetected for years.

Services-based missing trader fraud is common for carbon permits, VOIP, and cellphone minutes, and in cloud computing and other areas. The difficulty in fighting services-based missing trader fraud is that the commodity evaporates on use. It is one thing for an auditor to find a box of computer chips riding a carousel, and quite another for an auditor to find VOIP termination minutes that have been repeatedly sold and resold before being fully used.

While it appears there are two classes of taxable supplies (goods and services), in fact there are three: goods, tradable services, and consumed services. The first two are susceptible to missing trader fraud.

10For example, the EU VAT is imposed on taxable transactions. Those are the supply of goods (the transfer of the right to dispose of tangible property as owner) or the supply of services (any transaction that doesn’t constitute a supply of goods). Art. 5(1), Sixth EC VAT Directive/ Art. 14(1), Council Directive 2006/112/EC and Art. 6(1), Sixth EC VAT Directive/ Art. 24(1), Council Directive 2006/112/EC.

Size of the Fraud

Missing trader fraud is so widespread in the EU that it has distorted national trade statistics in the U.K.\(^{12}\) It has been the largest single kind of fraud uncovered in Canada,\(^ {13}\) Italy,\(^ {14}\) and Poland.\(^ {15}\) The Russian mob has long been suspected of involvement in missing trader fraud.\(^ {16}\) The Ndrangheta mafia, a crime syndicate from southern Italy, uses missing trader fraud to launder money at a profit through the Italian telecommunications system.\(^ {17}\) Although it is possible to trace missing trader funds and fraudsters from Berlin to Dubai and on to Lahore, Pakistan, there is no direct proof that missing trader fraud is a terrorist funding source.\(^ {18}\) Some authorities are suspicious about the ultimate destination of the funds.\(^ {19}\)


\(^{15}\) Supra note 5.

\(^{16}\) Ashley Seager and Ian Cobain, “Carousel Fraud: Bogus Deals Keep Customs in a Spin: Smart Criminals Stay Ahead of Investigators; Russian Mafia and IRA Linked to Swindles,” The Guardian (May 9, 2006), available at http://www.guardian.co.uk/uk/2006/may/09/ukcrime.ashleyseager.


\(^{19}\) Press Review: Agreement on the European Union to Combat Against So-Called Carousel Fraud Possibly Linked to Terrorism,” SEPBLAC — Timesonline (Oct. 27, 2006) (stating, “The six biggest EU states [Britain, France, Germany, Italy, Spain and Poland] have pledged to join forces in the fight against the growing problem of carousel fraud, a multibillion pound tax scam the government believes is linked to terrorism”), available (Footnote continued on next page.)
Accurate estimates of the extent of missing trader fraud are unavailable — not for single member states or the EU as a whole. There are no reliable estimates of global losses or country losses in non-EU jurisdictions. In 2006 the U.K. government estimated it had experienced MTIC fraud losses of between £2.98 billion and £4.47 billion. The German government had similar estimates.

During the same 2006 period, Europol’s best estimate for MTIC fraud across the EU as a whole was €23 billion. If we assume that base-line estimate was accurate in 2006, then it is still accurate in 2010. The reason is simple. As explained by Michael Cheetham in his 2006 report to the U.K. House of Lords, one of the most popular solutions to missing trader fraud is a product-specific reverse charge. However, the reverse charge has been adopted by few VAT jurisdictions and is transformative, not curative. The country adopting the standard reverse charge


22Europol press release, “Experts Discuss Missing Trader Intra-Community Fraud” (Dec. 13, 2006), available at http://www.europol.europa.eu/index.asp?page=news&news=pr061213.htm (reporting on meeting at Europol of 40 experts from 22 EU countries gathered to discuss ways to fight MTIC fraud where a report from Eurocanet, the European Commission-sponsored task force, was provided showing that MTIC fraud cost the EU €23 billion between June 2005 and June 2006).
becomes a base camp for VAT-free supplies that can be sent into the other jurisdictions.23 Overall the fraud is not reduced, but maintains the same volume or probably increases in scope.24

Europol’s 2009 estimate of an additional €5 billion in carbon MTIC fraud in the EU alone should be added to earlier estimates. Thus, MTIC fraud in the EU has probably risen to at least €28 billion.25

Reckon LLP studied the so-called VAT gap for the European Commission in 2009 (also based on 2006 data). The study indicated that the two most significant research efforts to measure MTIC fraud were that of HM Revenue & Customs, mentioned above, and a study by the Belgian Finance Ministry.26 The Belgian estimates, which also don’t include carbon MTIC fraud, are lower than the Europol estimate for the entire EU (€19.9 billion compared with €23 billion). However, the Belgian estimate for MTIC fraud in the U.K. was considerably higher than the U.K.’s own estimate (€8.85 billion as compared with the U.K. estimate of £2.98 billion to £4.47 billion). Reckon can’t explain the differences.27

The only reliable conclusion that can be drawn about the size of the MTIC fraud problem in the EU is that current estimates are highly speculative and miss entire classes of fraudulent transactions. EU losses are enormous. Because VOIP and other tradable-services types of missing trader fraud are not confined to the EU, there is much more to measure. It will take considerable international cooperation to combat the problem.

23Richard T. Ainsworth, “CO₂ MTIC Fraud — Technologically Exploiting the EU VAT (Again),” Tax Notes Int’l, Jan. 25, 2009, p. 357 and Figure 3 (Jan. 25, 2009).
24The reason fraud may increase is that distribution lines are shortened. Instead of being transported back and forth to Dubai, a two- or three-day journey, the goods can be circulated within the EU with a transit time of a day or less. The carousel simply moves faster.
26Reckon LLP, “Study to Quantify and Analyze the VAT Gap in the EU 25 Member States,” Sept. 21, 2009 (analysis based on 2006 data for all EU member states except Cyprus), available at http://www.reckon.co.uk/item/cb5873cb.
27Id., at paragraph 383.
The issues raised here affect OECD discussions on harmonizing VAT rules in services and intangibles just as much as they affect EU efforts to combat services and intangibles MTIC fraud in Europe. These issues should be a key policy concern in the United States if there is a sustained effort to design and implement a VAT.

Technological Solutions

MTIC fraud is technology intensive, so it stands to reason that technology-based responses will offer the best solutions.

A transaction in tradable services can be completed in minutes, and the theft of the VAT can occur in the next few minutes. The VAT filing on which the trade is reported might not be due for several months in the future. If the intent is to commit fraud, the funds will pass at lightning speed through a series of domestic and foreign banks. China, Dubai, Hong Kong, India, Pakistan, and Russia are common transit points.

When a cash withdrawal is made on the other side of the world, the stolen VAT becomes impossible to recover, and the supply that supported the fraud has evaporated. The only thing

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30Aline Robert, “La Fraude a la TVA du CO2 Se Revele Gigantesque,” La Tribune 22 (Dec. 16, 2009) (in French, original and translation on file with the author; the average time for a MTIC transaction to be closed out on the BlueNext exchange in Paris is 15 minutes).

31Financial Action Task Force, “Laundering the Proceeds of VAT Carousel Fraud” (Feb. 23, 2007) (see, for example, the £36 million U.K. carousel fraud operation that was based in southern Spain and used Swiss bank accounts, with funds eventually (Footnote continued on next page.)
that slows down missing trader fraud is the nature of the supply — goods must be delivered,32 and services and intangibles must be made available.

The three leading technology-based solutions will be considered here: the Real Time VAT (RTvat),33 the VAT Locator Number (VLN) system,34 and the Digital VAT (D-VAT).35 There are important differences among them, but generally, the RTvat focuses on securing the tax, the VLN focuses on securely tracing the supply, and the D-VAT certifies that the correct tax is charged, collected, and remitted. RTvat is mandatory for all transactions. In the EU it would have to be adopted throughout the entire bloc. The VLN is also mandatory, but it can be adopted by a single jurisdiction. The D-VAT is voluntary, but it would have to be made mandatory in market segments where fraud is suspected (cellphones, computer chips, VOIP, or carbon permits, for example).

RTvat

The RTvat essentially moves the point of taxation from the invoice date to the settlement date.36 It is also a cash-basis system that mandates debit cards and wire transfers of tax amounts in real time directly to the tax authorities when payments are made.37 (This proposal considers MTIC in goods, not tradable services.) The key to the RTvat is the network of 27 identical servers — one for each EU member state — that are linked together as transfer centers for communications and funds.

withdrawn as cash in Hong Kong or invested in Spanish real estate and later sold to be reinvested in Las Vegas after passing through Dominica and Gibraltar).

32Teleos plc & Others v. Commissioner of Customs and Excise, Case C-409/04, at 42 (determining that goods must physically leave the territory of the member state of supply to qualify as an intra-community supply).


37Id., at 13
Each EU member state would have to establish a national server system that is separately owned and operated by a national public/private partnership. The private-sector participants would fund the investment and operating costs, and the tax administration would share in any surplus from the revenue stream generated through transaction fees. All VAT payments would have to be made through this system.

The RTvat would change the EU VAT from a withholding system to a direct payment system. Sellers (other than those selling to final consumers) will never hold or otherwise retain the purchaser’s VAT payments. Rather than require sellers to collect and remit VAT, the RTvat would use electronic payments to automatically remove the VAT component from a buyer’s payment and remit that amount to the tax authority in real time. If business X purchased goods from business Y for €100 in a jurisdiction where the VAT rate is 20 percent, X would pay €120. But instead of requiring the seller to collect, hold, and remit €20 in VAT, the RTvat would use the automated payment system to send it directly the tax authority. The seller will receive €100 (plus a notification that €20 was sent to the tax authority).

Although the RTvat system has never been implemented, automated VAT withholding systems have been in place in Latin American countries for several years. A similar (pre-digital) system was proposed for the EU called the PVAT. In the Dominican Republic, 30 percent of the tax reported on all VAT invoices paid with a credit card is withheld by the credit card company and remitted to the tax authority. If VAT is not listed on the invoice, the withholding is 100 percent of the tax.

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38Williams, “RTvat,” supra, note 33 at 7.
39Business-to-consumer transactions would be handled in the traditional manner, with VAT held by the seller and remitted to the tax authority in batches — not transactionally in real time.
40Williams, “RTvat,” supra, note 33 at 7.
41Argentina, Chile, Colombia, Ecuador, Mexico, and Venezuela have systems like this.
42See also the PVAT proposal that requires vendors to collect VAT on all sales, domestic and interstate, with the exception of interstate sales in which the buyer prepays the VAT to the state of destination and provides proof of payment to the vendor. Proof would be a tax deposit receipt. Satya Poddar and Eric Hutton, “Zero-Rating of Interstate Sales Under a Subnational VAT: A New Approach,” in National Tax Association Proceedings: Ninety-Fourth Annual Conference (2001) 200-07.
The seller is notified that a VAT payment has been made on his or her behalf.\textsuperscript{43} Puerto Rico’s sales tax may change to the same withholding regime so that the full amount of the tax would be due on all invoices paid with credit or debit cards.\textsuperscript{44}

The RTvat proposal anticipates a staged rollout, with the first stage confined to domestic transactions in a member state and a second stage when intra-community transactions are handled. Only during the second stage would MTIC fraud be eliminated. This stage would require a single VAT registration across the EU.

MTIC is eliminated with the RTvat because a business buyer would always pay domestic VAT on purchases, even those made across intra-community borders. In the example above, €100 will be remitted to the cross-border seller, and €20 will be sent directly to the buyer’s jurisdiction. There will be no reverse charge. Cross-border sales will be taxed at the applicable rate in the buyer’s jurisdiction, not zero rated by the seller in the expectation that the buyer will perform a reverse charge.

The RTvat would affect businesses that take advantage of cash flow opportunities under the current system. It would require the immediate payment of VAT on value added at each stage of production, and some businesses would have to finance the VAT. That is particularly the case in a down economy where inventory is purchased but not easily resold. The RTvat will also not eliminate B2C frauds — for example, the use of automated sales suppression technology at the point of sale to skim cash sales (for example, so-called zappers and phantomware applications).\textsuperscript{45}

Of the three technology solutions considered here, only the D-VAT could provide that kind of comprehensive fraud prevention.

\textsuperscript{43}Decree (DR) 140-98; Tax Code (DR) 11-92; General Regulations (DR) 02-05 and 08-05.


The VAT Locator Number system is the simplest of the three solutions to adopt. It’s also the least disruptive to the current VAT system. Statutory changes would be minimal. Its creator, Michael Cheetham, proposed it at the May 25, 2007, House of Lords hearings. The VLN solution is targeted — it prevents only MTIC fraud.

The most significant policy change under the VLN proposal would be the denial of a buyer’s input credit if a seller pays VAT on an invoice with an invalid VLN (or an invoice with no VLN at all). The most significant procedural change is that businesses would need to secure a VLN when selling supplies, or validate an opposing trader’s VLN when purchasing supplies. Accounting software platforms would usually make automated requests for VLNs from the government’s central computer system and make automatic validation requests in the same manner. Each link in the commercial chain would be given a number, and the numerical sequence would follow the goods or services from initial manufacture through to final consumption. A backup system whereby VLNs could be secured through a website or a call center would be available.

The VLN system requires the seller on each transaction to secure and print on the invoice the encrypted VLN. The number would be unique to the transaction (based on the essential data elements of the invoice and prior related VLNs from transactions up the commercial chain). The VLN number would be attached to the invoice, either numerically or as a bar code that could be scanned and read with an optical reader. The advantage of a bar

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46 Supra, note 34.
47 Michael Cheetham, personal e-mail communication (Apr. 25, 2010) (on file with author).
48 A similar bar code will be added to each cash register receipt issued by Quebec restaurants under their enforcement effort directed against zappers. The sales recording module is a device that secures ECR data and uses it to digitally sign each receipt with a bar code that can be read with a handheld optical scanner. That will allow inspections whereby during a 30-minute visit an auditor observes that customers are receiving receipts and then quickly verifies with the scanner that the receipts being issued are recorded in the SRM. Full inspections can follow in cases of irregularities. Gilles (Footnote continued on next page.)
code and optical reader capabilities is that a trader could quickly scan the VLN bar code into a national database to verify the VLN.

A similar fraud prevention system is in place in Brazil, where it has proven to be reliable. In Brazil invoices receive a digital bar code at the interstate border from a federal computer feed. The bar code is used to validate the invoice and the physical transit of the goods.\footnote{Several Brazilian states and the federal government signed an agreement on Sept. 30, 2005, to create (1) the e-invoice and (2) the auxiliary document of the e-invoice. Ajuste Sinief N.07 de 30 de Setembro de 2005, available at http://www.sef.rj.gov.br/legislacao/tributaria/convenios_ajustes_protocolos/confaz/ajustes/2005/aj05007.shtml. On Dec. 20, 2005, through the ATO Cotepe/ICMS N.72 de 20 de Dezembro de 2005 http://www.sef.rj.gov.br/legislacao/tributaria/convenios_ajustes_protocolos/confaz/pareceres_ecf/2005/ato072_05.shtml, the structure of the e-invoice was established and testing was initiated with 19 companies and those companies and six states. The program has been deemed a success and has been extended.}

Two examples of the VLN may be helpful. The first involves a standard cross-border sale within the EU. The second shows what happens if a trader sells without a VLN. The response of the next trader in line to the lack of a VLN is to pay all the VAT to the tax authority to secure a VLN that will allow him to continue reselling the purchased supplies. No VAT is paid to the business that sells without a VLN. MTIC fraud is eliminated, and the commercial chain continues uninterrupted. It is expected that the merchant that sold without a VLN would be penalized (and that business may find it more difficult to secure a VLN in the future because a risk assessment would suggest that it needs more careful oversight).

**Example #1: VLN Import**

A business in France (B1) sells goods or a service to a business in the U.K. (B2). B1 zero rates the sale, and B2 requests a VLN (for the reverse charge) from HMRC (VLN-1). The VLN request will include the essential elements of the invoice received from B1. HMRC performs a risk assessment, and if B2 is deemed a low-risk importer (the risk we are concerned with is whether B2 is likely to go missing), a VLN number will be issued.

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VLN-1 is an encrypted identifier that will be the basis of subsequent VLN-2s, which will be necessary when B2 sells the goods or service to another U.K. business (B3). The B2/B3 transaction is accompanied by VLN-2, which will be requested by B2. VLN-2 includes within its encryption base not only data related to the B2/B3 transaction, but data from VLN-1. That allows for the construction of a digital trail. B3 will not be allowed a deduction for VAT paid if there is no VNL on the invoice B3 receives, or if the VLN it receives on the invoice is invalid.

Example #2: Sale Without Valid VLN

As before, a business in France (B1) sells goods or a service to a business in the U.K. (B2). B1 zero rates the sale, and B2 applies for a VLN for the reverse charge. B2 receives VLN-1 from HMRC after a risk assessment determines that B2 is a low risk to go missing.

B2 resells to another U.K. business (B4) without securing a resale VLN. In this situation, B4 would be unlikely to pay VAT to B2, because B4 would be denied a VAT deduction for the amount paid. If B4 wants to complete the trade, it will pay the VAT directly to the U.K. Treasury, effectively performing a reverse charge. B4 would now receive (from HMRC’s computer system) a VLN number that will allow it to deduct the VAT on any future resale.

When a resale occurs (B4/B5), there is a request for a VLN for the transaction. (It may be that quantities are different for the B2/B4 transaction; changes could have been made in the product.) With the new VLN, which relates back to the VLN-1s that B4 and B2 received from HMRC, it is possible to make a sale to B5, impose domestic VAT, and remit it normally.

D-VAT

MTIC fraud can be eliminated by the use of certified tax software and a conditional change in the standard place of supply rules. Certified tax software is being used by 23 U.S. states to manage retail sales tax under the Streamlined Sales and Use Tax Agreement.
Figure 1.

VLN-1 & 2 – encrypted numeric & scanned bar code on invoice identifying vendors, goods, & trail. One number merges all data.

Automated request for a "reverse charge" VLN followed by a request for a resale VLN (essential elements of invoice)
1. Goods/service code
2. Quantity
3. Price paid
4. Vendor ID
5. Vendee ID

Confirming the VLN – OK to pay VAT?
Automated request for an import/“reverse charge” VLN (essential elements of invoice)
1. Goods/service code
2. Quantity
3. Price paid
4. Vendor ID
5. Vendee ID

Confirming the VLN is good – VAT can be deducted if paid
Tax Agreement. The same software mechanisms could be applied to VAT to fight missing trader fraud.

Like the VLN proposal, D-VAT changes the place of supply — and thereby the party that was required to remit the tax — based on whether the businesses involved in the transaction used certified tax software. Under VLN, the determinant is whether a valid VLN code appears on the invoice.

A testing regime for the certification of enterprise-level transaction tax software is required under a D-VAT. The software must be comprehensive and able to:

- determine the correct tax for each transaction;
- post that amount on the appropriate invoice;
- link each VAT input or output amount to the correct VAT return; and
- complete the VAT return accurately.

Certified tax software also must verify whether the companion system used by the other trader is also properly certified.

Business use of certified tax software would be voluntary. In some instances a jurisdiction might make use mandatory — for instance, when an enterprise is heavily engaged in transactions.

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deemed prone to missing trader fraud (emissions permits, cellphones, computer chips, etc.). In judicial proceedings, the government could seek the use of certified software by some traders because of proven instances of fraud in the past.52

If a jurisdiction were to adopt a D-VAT, four permutations of the software must be considered. Assume a taxable transaction occurred between taxpayers A and B, which are in different jurisdictions. It could be the sale of goods or tradable services among EU member states, or a sale of tradable services between any two VAT jurisdictions.

Under standard VAT rules, the transaction would be zero rated on leaving A’s jurisdiction and subject to a reverse charge entering B’s jurisdiction. If B is using a certified system, there should be no problem with the transaction. A certified system will always perform a required reverse charge regardless of the certification of the other party’s system. B’s VAT return will be properly prepared along with all related reports, and the funds will be properly remitted to the government. A problem might arise only when A is not using a certified system.

The following illustrations summarize these applications.

*Fact Pattern 1: A Certified; B Certified*

If A and B both use certified tax software systems, the zero rating and reverse charge will be properly made and reported and the VAT payment remitted to B’s government. That would be the outcome even if the transactions involved suspect classes of supplies (cellphones, computer chips, carbon permits, VOIP, etc.).

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52This was the approach Judge Lise Gaboury of the Court of Quebec took in the fraud case against the restaurant chain Casa Grecque. The fraud involved installing an automated sales skimming program called a sales zapper in the point-of-sale system (the networked electronic cash register). In the March 23, 2006, budget speech, the minister of revenue announced the adoption of an automated system [*module d’enregistrement des vents*] that would be voluntary until 2011. Judge Gaboury required all the Casa Grecque restaurants to adopt it as a condition of remaining in business. Revenue Quebec, “Des Restaurants de la Chaîne Casa Grecque Coupables de Fraude Fiscal” (in French only), available at http://www.revenu.gouv.qc.ca/eng/ministere/centre_information/communiques/ev-fisc/2006/10juillet.asp.
Fact Pattern 2: A Uncertified; B Certified

If A is not using a certified tax software system and B is, then B will reverse charge. The only question is whether A’s jurisdiction will allow zero rating. B’s certified system will perform a reverse charge. If A was engaged in the supply of a suspect industry, zero rating could be denied. (If not, zero rating might be allowed under traditional VAT rules.) The issue likely is whether A’s jurisdiction is willing to accept B’s certification as proof that A had fulfilled a due diligence obligation to verify that B was not participating in missing trader fraud. If so, A should be allowed to zero rate the sale.

Fact Pattern 3: A Certified; B Uncertified

If A is using a certified system and B isn’t, A’s system would recognize that and wouldn’t zero rate the transaction if it involved a suspect class of supplies. Instead it would impose the domestic tax. B would then be in a difficult situation. B’s purchases would be burdened with the VAT of another jurisdiction, and it would remain obligated to comply with the reverse charge in its own jurisdiction. Double taxation would result, unless B could obtain a refund in A’s jurisdiction (which is procedurally complex). B would most likely seek a domestic supplier, which would charge domestic VAT, or change its status by installing a certified tax software system. The latter is the desired result for the treatment of suspect classes of supplies.

Fact Pattern 4: A Uncertified; B Uncertified

If neither A nor B is using a certified tax software system, the question is whether the transaction is deemed to involve a suspect class of supplies. If A’s jurisdiction considers the trade in cellphones a suspect activity, it should make all cellphone transactions taxable at regular rates (domestic and cross-border). A will not be allowed to deduct VAT paid on cellphone purchases, and it will have to collect VAT on all cellphone sales. Also, B’s jurisdiction will require VAT to be collected under a reverse charge.

In a D-VAT regime that is extended throughout a federal system, it is expected that notifications of certified status between automated systems would be automatic and handled through a secure online connection. Dual notifications would be expected
under some conditions. All of that could occur almost instantly. There are various ways to do this, but the most proven and secure would be through the use of public key infrastructure (PKI). A’s system would access the public key associated with B and use it to confirm that B’s system was certified. A would then draft an invoice without VAT and forward it to B. That way A would know that B’s system would perform the reverse charge.

In one sense, this process is simply automated due diligence. In another, it is certified due diligence. For the sake of caution, it is expected that B’s certified system will perform a reverse PKI inquiry when it is notified that A’s system is checking for certification. B’s system would want to determine in advance that the invoice it’s receiving from A (without VAT) is correctly issued.

Conclusion

The recent appearance of MTIC fraud among tradable carbon permits and VOIP is a warning for the global VAT system. The size and scope of the fraud make it clear that it is a huge problem that is spreading. The speed at which it spreads is a reflection of the technology that makes it work. In tradable services, it has no boundaries.

Three technology solutions are presented here and summarized as follows:

- The RTvat is applied to all transactions in a VAT system. It changes the underpinnings of the VAT, moving it from an invoice system to a settlement system. The withholding-and-remit element of a VAT system has been effectively removed.
- VLN also applies to all transactions in a VAT system but leaves the basic structure of the VAT untouched. It simply adds an encrypted tracer code to every invoice.

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53PKI is an information technology infrastructure that enables users of a basically non-secure public network (such as the Internet) to securely and privately exchange data through the use of a public and private cryptographic key pair that is obtained and shared through a trusted authority. In this case, the trusted authority would be the member state that certifies the transaction tax software in the target entity.
The D-VAT accomplishes much of what the VLN does, but uses certified tax software. The D-VAT can be applied selectively to suspect classes of supplies. It's also voluntary (with several incentives to get businesses to sign up). It is the only solution that can be extended to cover B2C transactions.

If the United States is serious about adopting a VAT, it must consider VAT-related fraud. Congress would be wise to preempt the problem before the tax is ever enacted. Technology must be placed at the service of the tax collector, not the fraudster.
Technology: The Crucial Pillar of VAT Implementation

By Mark Houtzager

If a VAT or similar indirect tax were introduced in the United States, there would be much to discuss about how technology can support revenue officials, businesses, and taxpayers.

There are two ways in which technology affects VAT. The first, and what we will largely focus on here, is how taxpayers can apply technology to help calculate the tax due and file the necessary returns. The second is how technology can support revenue authorities in collecting the tax and auditing.

In recent years, several countries — particularly large European countries — have made significant strides in streamlining VAT audits, improving collections, identifying fraud, and simplifying filings. The 27 EU member states are working to synchronize their VAT returns. That will not only aid online VAT filing, it will also enable automatic exchange of VAT information between governments.

Taxpayers will be better off because they will be able to file any EU VAT return online from their home country, without interference from local fiscal representatives or filing agents. And taxpayers in some countries may soon be able to register as bona fide traders for VAT purposes. That status is premised on a special understanding between taxpayers and revenue authorities. The taxpayer will certify that its internal accounting system complies with all applicable VAT rules, in return for which the government will agree to conduct less intrusive online VAT audits. Bona fide traders must alert revenue officials if they detect accounting abnormalities that suggest VAT fraud by a
third party. Failure to live up to that disclosure responsibility could result in harsh penalties, including closure of the trader’s business and jail time.

Governments will be better off because most fraudulent schemes are based on the perception that governments don’t exchange tax information or do so in a manner insufficient to combat fraud. The covenant with bona fide traders will free up government resources to pursue fraudsters and their collaborators. Accordingly, technology will enable a significant change in how revenue authorities deal with businesses. For example, China, under its so-called Golden Tax Project, has applied technological solutions to aid government monitoring of taxpayer compliance to combat fraud.

There’s another important aspect of a VAT implementation that technology can support. Newly implemented VAT systems are prone to revisions, ranging from minor adjustments to 180-degree turns, regarding how rules are interpreted. The most recent VAT that was implemented, in Australia in 1999, underwent myriad changes, both large and small, during the five years following its introduction. Those changes are challenging to keep up with for both tax officers and taxpayers. If the accounting, billing, and auditing technologies can respond quickly to the changes, all parties involved will benefit.

**Tax Determination Software**

The way that U.S. businesses calculate their indirect taxes (sales and use taxes and some local taxes) is to some degree automated. Larger companies that operate in several states generally determine their indirect tax liability automatically. That is done within their accounting system or broader enterprise resource planning (ERP) system. Most ERP system providers, such as SAP and Oracle, provide some degree of tax automation.

Many companies also use third-party providers to help calculate and pay indirect tax. Several software providers sell “bolt-on” functionality that centrally maintains the rates of, and requirements for, tax liability. Examples are software from Vertex, Thomson Reuters, and ADP Taxware. And several providers offer implementation services for these bolt-ons to secure an efficient and compliant ERP system.
Most bolt-on providers have not only U.S. indirect tax functionality, but also indirect tax determination for non-U.S. jurisdictions — that is, their technology is capable of covering other countries’ VATs, goods and services taxes, and other consumption tax variants. In other words, these software packages already contain some VAT automation.

The ERP bolt-ons have a significantly longer track record in U.S. sales, use, and local taxes than in global VAT. But that’s fine for our purposes. VATs come in various styles and configurations, and any U.S. VAT would (hopefully) consist of a mix of the most positive characteristics. We are confident that bolt-on providers and other tax service providers, whether online or offline, will be able to develop appropriate software to support U.S. businesses once U.S. VAT implementation is announced.

That isn’t to imply that every taxpayer will require an expensive suite of software to support VAT determination. Most businesses should be able to address VAT within their own accounting system, without the need for an ERP bolt-on, because a federal VAT would likely apply the same way nationwide. There will be only a single VAT jurisdiction (the country as a whole) and tax determination will be relatively simple — not at all like the more than 1,500 sales and local tax jurisdictions that the country now has.

We also expect there will be only a few VAT rates: a standard rate (for run-of-the-mill domestic supplies of goods and services), a zero rate (at least for exports and potentially for other supplies as well), and a limited number of reduced rates (for supplies of specific goods and services). Some businesses will be providing VAT-exempt services, perhaps including financial services, education, or healthcare.

Sometimes VAT-exempt providers engage in the supply of taxable services. For example, an otherwise exempt healthcare provider may supply elective plastic surgery, which would be taxable for VAT. Those exempt businesses will have to be extra sensitive to VAT, not only when determining their output VAT liability, but also when determining the amount or percentage of input VAT that’s recoverable.

By and large, VAT compliance will be relatively simple and straightforward. If a business does not export goods or services,
the VAT export rules wouldn’t be applicable. Currently, roughly 300,000 U.S. firms export goods, and only 10 percent of them export goods to more than one country.¹ We therefore expect that most U.S. businesses will be perfectly able to address VAT through their own accounting system. Most accounting systems will require only a minor upgrade to deal with a U.S. VAT.

VAT & Invoices

There is one aspect of VAT that is not historically part of the current U.S. system of indirect taxes, and that is the importance of invoices. Under a VAT, the invoice is key for the seller because it determines his tax liability. And invoices are equally important to the buyer, because they trigger the buyer’s right to reclaim VAT. Every U.S. taxpayer’s accounting system should start addressing VAT invoices. That includes meeting the detailed invoicing requirements and rejecting a vendor’s invoice if it would disqualify the buyer from obtaining input VAT credit.

Most large U.S. businesses allow their customers to receive electronic invoices, referred to as e-invoices or paperless invoices. Those documents generally are a PDF file or a spreadsheet and are not, by default, protected against edits and alterations. Nor do they typically use some form of digital signature that certifies the origin and integrity of the electronic invoice.

Studies have shown that companies can save up to 75 percent of their invoicing costs by switching to electronic invoicing.² The benefits of electronic invoicing are clear. It is cost effective (no postage and paper) and environmentally friendly and prevents the errors associated with manual data entry (by the seller) and manual reentry of invoice data (by the buyer). It’s also more efficient — the trading parties can submit invoices directly from the billing system of the seller into the accounts payable system of the buyer. The approval process can be faster, with disputes and settlements easier to manage.

For decades the EU has been studying electronic invoicing in a tax environment. And even now EU officials have difficulty

settling on a single form of electronic invoice that can be applied throughout the bloc. The main objectives of EU-wide e-invoicing rules are to reduce the burdens on business, increase the use of electronic invoicing, support small and medium-sized enterprises, and help member states fight VAT fraud.

A digital signature will be a key driver for success of electronic invoices. The current EU proposal would require a direct link between a digital signature and business controls that creates a reliable audit trail between an invoice and a supply — and, by extension, an audit trail for VAT recognition (payable and recoverable) on the seller’s and the buyer’s sides.

Some form of digital signature would likely be required for electronic invoicing here as well. Although the EU has been deliberating over the legal framework for electronic invoices for some time, we do not consider digital signatures a significant roadblock for streamlining a company’s billing process. In this age of increased regulation for ERP systems and controls, digital signatures are a natural complement to any electronic invoicing system.

**VAT Filings**

In most countries, a business’s VAT return is typically filed quarterly, with larger firms being required to file monthly. Monthly filings could be optional for all businesses if the amount of input VAT exceeds the output VAT, which can occur when goods or services are exported. In those cases the taxpayer would prefer to file monthly to accelerate the VAT refunds.

A U.S. VAT should not require any other filings beyond the periodic VAT return. European governments need information regarding intra-EU flows of commercial goods and therefore require a statistical filing, the so-called IntraStat return. The IntraStat return seeks far more detailed data (individual prices, commodity codes, weights and measures, etc.) than the aggregate data that appear on the VAT return. It is unlikely that there would be anything comparable to that under a U.S. VAT.

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Most VAT returns for EU taxpayers are submitted online. Under a U.S. VAT, online filing would at least be an option. Revenue officials would likely want to encourage online filing by promising quick processing and accelerated refunds (if applicable), similar to the annual federal income tax filing or the electronic process that most states use for sales and local taxes. Accounting software or specific VAT determination ERP bolt-ons will aid online filing. Web-based software companies could also support online federal VAT returns, like the service that TurboTax provides for income tax returns.

The level of detail requested on a U.S. VAT return is based on the depth of data that the tax authorities require. The complex VAT returns of Germany and Belgium are well known. And on the other hand the Netherlands’ VAT return is simple and straightforward. It might make sense for U.S. tax authorities to initially demand more detail on VAT returns, with the possibility of simplifying the filings once taxpayers and revenue officials have grown accustomed to dealing with them.

We can envisage different filing requirements for larger and smaller businesses. In Australia, small businesses claimed that compliance requirements under GST implementation hit them harder than larger companies. It would be good to take these lessons to heart and see how the needs of smaller businesses can be considered. Allowing small companies to file annually is common in most VAT jurisdictions.

**Conclusion**

Technology will be widely used in any future U.S. VAT, and flexibility on both sides of the table will be critical to successful implementation. It wouldn’t be surprising if software vendors start preparing for a U.S. VAT once the long-term budget picture becomes clearer.

We disagree with the naysayers who claim that VAT would be an insurmountable administrative and compliance burden for U.S. businesses or a stab in the back of bona fide traders and service providers. Technological solutions won’t make compliance burdens disappear, but they can significantly ease the process.
Facilitating Better VAT Compliance

By Philip Robinson and Jeffrey Saviano

The balance of taxation around the world is shifting. With many governments in developed countries facing record budget deficits and high levels of unemployment, taxes on consumption are increasingly seen as playing an important role in the taxation mix. Already a number of countries have raised taxes on consumption, and it seems likely that more will follow a similar path over the next few years. Many economists believe that a greater focus on consumption taxes will help to stimulate growth because, unlike corporate income taxes, consumption taxes are viewed as having less of an impact on corporate profits and thus appear to have less of an impact on corporate investment decisions. As such, there is a strong possibility that the United States will consider a consumption tax as a means to reduce its heavy reliance on income taxes, both personal and corporate. Many economists believe the U.S. may wish to consider a VAT as a means to cut the federal deficit, while others believe a broad-based tax increase during a precarious recession rebound could stall recovery. One thing is certain: The debate will intensify during 2011.

Even if governments do not follow a policy of shifting the tax burden from income to consumption, taxes on goods and services will nevertheless play an important role in correcting the significant fiscal imbalances that have built up over the past few years. Consumption taxes are also vital to helping governments manage their cash flow effectively because they are collected throughout the calendar year, not just at year-end or quarter-end.

Consumption taxes include a number of variations such as VAT, goods and services taxes, and sales and use taxes (SUT). For ease of reference, in this article we will refer to these taxes collectively as VAT. Most countries levy some form of VAT, and
while the rules may vary, the compliance issues are broadly similar and apply across jurisdictions and tax types.

The immediate concern for multinational enterprises is how this increased focus on VAT compliance and enforcement will affect their businesses. Given the large number of transactions that they conduct and the global nature of their operations, MNEs already face a highly complex and challenging VAT environment. As governments around the world impose more stringent requirements, increase enforcement efforts, and apply legislative changes to strengthen their fiscal position, businesses are likely to face increased burdens in the form of higher administrative costs and stiffer penalties for errors. Moreover, as VAT obligations and complexities multiply, full compliance becomes more difficult to achieve, which means the likelihood of making errors and incurring penalties is even greater.

In many respects, taxpayers and tax administrations share a common goal. Both want a system of taxation that enables multinational VAT compliance to be managed effectively and efficiently. For governments, a fair and efficient system means that incidences of fraud decrease, while a growth-friendly tax environment will help stimulate the economy. MNEs will benefit from a reduced compliance burden, a decrease in tax risk, and a lower incidence of fines and penalties. And for both, scarce resources can be directed toward more constructive activities.

In a recently published paper, “VAT and GST: Multiple Burdens for Multinational Companies,” Ernst & Young examines the changing environment for taxes on consumption. Based on research covering the VAT systems in 90 countries and interviews with corporate tax directors and tax administration officials around the world, the report provides comments and suggestions that could help to ease the compliance burden and build better relationships between taxpayers and tax administrations.

The Business Burden

From a governmental viewpoint, VAT is a highly cost-effective form of taxation because the collection process is carried out by the businesses that provide taxable goods and services. The cost of administration falls largely on businesses, which must adapt
their commercial processes to ensure the tax is collected according to the rate, method, and timing set out by each tax administration.

For many MNEs, this is a frustrating situation. VAT compliance is an additional cost over and above what the company would spend for its own commercial purposes. Companies must establish, operate, and constantly review accounting processes to administer a tax that, in theory, they do not actually pay themselves. In essence, MNEs have become the unpaid tax collectors of the VAT system. While businesses also pay VAT on their purchases and may recover some or all of that input VAT from the government, this recovery can occur only if the company complies with fairly stringent rules established by the relevant governments. Therefore, companies must embed these intricate VAT rules into their accounting systems and processes to ensure they can appropriately recover input VAT, as well as administer VAT collections.

At the same time, allowing businesses the opportunity to collect and retain large amounts of tax can leave the system open to fraud and manipulation by dishonest traders. To protect their tax bases, tax administrations must protect their consumption tax receipts against systematic VAT fraud.

Although MNEs aim for 100 percent compliance — which we might term as always paying the right amount of tax, at the right time, to the right tax administration — meeting that goal can prove extremely burdensome in terms of company resources. The cost of compliance includes expenses incurred in obtaining information; training staff; managing VAT audits, inquiries, and disputes; the cost of financial penalties (which are not generally deductible against profits for direct, corporate income tax purposes); and the cost of VAT related to legitimate business expenditures that are not recovered (that is, in foreign jurisdictions).

One of the biggest compliance challenges for MNEs is capturing the information needed to complete their VAT returns accurately within tight deadlines. The nature of VAT effectively requires taxpayers to account for every business transaction accurately in real time, because the tax treatment of each supply of goods or services is decided when the supply occurs and must
be reported and accounted for on the VAT return shortly after the transaction. This necessitates the effective use of technology and well-designed business processes to capture the relevant data and ensure that the complex VAT rules are correctly applied to the transaction. For MNE taxpayers, this is a daily task that applies to large numbers of transactions, and many jurisdictions impose penalties for individual invoices that aren’t issued on time or that contain errors.

Filing VAT returns is another task that requires accuracy within a limited time frame. In general, the shorter the VAT reporting period, the shorter the filing deadline. And with countries around the world often stipulating slightly different timing, the filing process can prove extremely challenging for large organizations with complex business activities but limited resources.

The Ernst & Young report indicates that the diversity of obligations that MNEs must deal with around the world makes it more difficult to achieve full compliance. Few companies do business today in the same way and in the same markets as they did 10 or even five years ago. Business models have evolved and are constantly evolving. VAT systems often struggle to keep pace with globalization, because in most countries, the basic legislation was adopted many years ago, before the advent of e-commerce and when fewer companies engaged in cross-border trade.

In short, the volume of transactions that require effective VAT management is increasing, whether across multiple jurisdictions or within the same family of companies, and each change in how or where an MNE does business will have far-reaching implications for its VAT compliance. As businesses evolve, they must constantly review their VAT reporting obligations, including the impact on their financial condition and working capital requirements.

Tax administrators expect full compliance with their own tax requirements regardless of other countries’ rules and practices, and there is little harmonization between countries even within trading blocs such as the European Union. That places an additional burden on companies, because they must adapt
systems for multiple individual requirements that apply to essentially the same commercial processes.

Uncertainties over the specific requirements of tax systems within some jurisdictions add an additional layer of cost and complexity. For example, while VAT systems generally allow businesses to recover or deduct VAT paid on most legitimate business expenses, there are exceptions. Some countries may not refund VAT to nonresident businesses, may exclude some types of business expenses, or may have highly complex procedures for recovering charges. Also, there may be different rules that apply to some types of cross-border transactions, which means VAT may apply in more than one territory for the same transaction. In extreme cases, these uncertainties in the tax system can deter companies from making business investments or entering into strategic trading relationships.

Fast-changing VAT legislation, particularly at a time when governments are moving toward consumption taxes as a source of additional revenue, adds further complication. Keeping up to date with developments around the world is a full-time task and poses a major challenge for all global companies in meeting their real-time VAT reporting obligations. Legislative changes occur so quickly and frequently that companies need to allocate substantial resources to undertake a comprehensive review of all the possible effects to their global business. When changes do occur, the MNE must adjust its accounting processes quickly to ensure that it remains compliant and avoids penalties.

Besides shouldering the VAT collection obligation, businesses often must fund VAT payments in order to recover the tax from their customers. This factor, and the delays commonly experienced in receiving VAT credit refunds from tax administrations across multiple jurisdictions, can adversely affect cash flow.

Reducing the Burden

Given the compliance burdens imposed under a VAT system, it isn’t surprising that a survey of VAT professionals, directors, and officials produced a wish list of changes that would improve VAT compliance among MNEs. For the most part, these suggestions for change also are supported by the OECD’s taxation framework.
Neutrality

Business decisions should be motivated by economic rather than tax considerations. VAT compliance issues exert undue influence on those decisions. For example, factors related to VAT compliance, such as the desire to avoid foreign registrations or avoid incurring irrecoverable VAT, may deter a company from making a certain investment, or encourage activity that is less than optimal from a business standpoint. Changes such as the simplification of foreign VAT refunding procedures, the extension of arrangements for refunding VAT, and the harmonization of VAT rules for cross-border trade to avoid double taxation would be valuable steps toward creating a more neutral decision-making environment.

Efficiency

Both taxpayers and tax administrators would benefit from a more streamlined and consistent VAT compliance environment across borders. The complexity of the current system means many organizations are using shared services centers to meet their multinational VAT obligations. While that may increase operational efficiency, it can also expose the company to tax risk. Greater harmonization and standardization of rules and reporting obligations would improve efficiency, as would greater consistency of treatment among EU countries and longer filing deadlines to allow taxpayers to get it right the first time.

Certainty and Simplicity

Highly complex VAT rules are counterproductive, as they make it harder for taxpayers to meet their obligations accurately. VAT rules should be simpler to understand, so that taxpayers can anticipate the tax consequences in advance of a transaction and know when, where, and how to account for tax. Individual tax administrations should communicate with taxpayers more frequently and effectively and consult more widely before making legislative changes. When legislative changes are made, administrations should give taxpayers sufficient notice so they can implement the necessary systematic upgrades. Clearer, more straightforward legislation, along with appropriate advanced rulings, would provide greater certainty and help protect governmental tax revenue.
Effectiveness and Fairness

Both taxpayers and tax administrations want a system that is fair and effective. There should be a framework in place to collect the right amount of tax at the right time, while minimizing the potential for tax evasion. Scrutiny of individual taxpayers should be proportionate to the risks involved, so that companies are not excessively penalized for trying to be fully compliant. A closer relationship between business and tax administrations, based on open disclosure, can be valuable in promoting a more constructive and effective approach.

Flexibility

Tax systems should be sufficiently dynamic and flexible to keep pace with new developments. When greater use of technology can help to make compliance more efficient, such as through the increased use of e-filing or electronic payment, administrations should take a pragmatic approach to embracing these innovations. At the same time, there should be an acceptance of alternative forms of documentation as evidence, such as commercial documents rather than formal invoices.

Improving Compliance

While the simplification and harmonization of VAT systems would reduce the burden on MNEs, there are practical steps that businesses themselves can take to improve compliance. For example, they can review, modify, and monitor VAT compliance processes; standardize return procedures and documentation; increase automation and oversight; improve staff training; monitor VAT changes; and outsource their compliance functions.

If a standard approach can be extrapolated globally to all business operations, benefits will include lower costs from economies of scale and consistency from operating one efficient system. Of course, MNEs must still deal with the portion of their tax operations that cannot be standardized and that relates to specific national rules for each country where they do business. That is where certainty from the tax authority is seen as particularly important.

MNEs must take their multinational VAT compliance obligations seriously and ensure that they remain a management
priority. Companies must build a culture in which compliance is seen as a fundamental obligation of every employee and must maintain clear communication between the tax function and lines of business. Such policies will help to manage risk and protect corporate reputation. On a global basis, MNEs should continue to devote resources to keeping abreast of developments that may affect their VAT positions, train staff, and adopt adequate VAT accounting processes and controls in recognition of the large volumes of VAT revenues that flow through their accounting systems.

MNEs must also ensure that there is continuity in their systems and processes to deal with organizational change. Problems often arise when businesses restructure, new information technology systems are implemented, or key staff leave. Companies should think through the implications of those changes and ensure that they occur with minimal disruption to their compliance obligations.

Establishing a better relationship between the MNE and national tax administrations can greatly increase certainty and help companies manage their level of tax risk effectively. Methods of strengthening relationships range from the informal to the highly formal and may include the use of binding rulings and taxpayer guidance, the adoption of new technology to allow taxpayers to fulfill their obligations remotely, and the allocation of designated tax inspectors. Many tax administrations will help educate taxpayers in order to assist them in developing sound systems and processes.

One recent trend that points to a greater openness and transparency between taxpayers and tax administrations is the development of enhanced relationship processes, such as the horizontal monitoring program in the Netherlands and the annual compliance arrangement in Australia. Not all tax administrations are willing to enter into this type of dialogue with taxpayers, but those that do are seeing great benefit from encouraging large taxpayers to adopt reliable processes and self-report errors in return for a lighter enforcement regime. Adopting a cooperative approach with taxpayers that demonstrate a willingness to take VAT compliance seriously allows tax
administrations to direct their scarce resources away from detecting errors to fighting and preventing organized VAT fraud.

**Where to Go From Here?**

Reputable businesses want to be fully VAT compliant, but complexities often make that difficult and costly. Reducing administrative burdens could improve VAT compliance for MNEs and free up the resources of tax administrations. Closer relationships between MNEs and tax authorities and continuing simplification and harmonization of VAT systems — especially within trading blocs such as the EU and the OECD — should facilitate consistent VAT compliance. Then, perhaps, achieving 100 percent VAT compliance may no longer be an unattainable goal.
VAT Treatment of Nonprofits and Public-Sector Entities

By Pierre-Pascal Gendron

This essay examines the treatment of nonprofit and public-sector entities under a stand-alone U.S. federal VAT based on the credit invoice method and the destination principle. The following definitions are used: Nonprofit entities include nonprofit organizations, charities, nongovernmental organizations, and other tax-exempt entities; public-sector entities encompass federal, state, and local governments, including all agencies and corporations.

Because many nonprofit entities qualify for an income tax exemption in the United States, it is important to clarify at the outset that a parallel exemption need not be the case a priori under VAT. With some important exceptions, the supplies (that is, sales of goods or services) rendered by nonprofit and public-sector entities under many VAT regimes around the world are generally exempt. That means those entities don’t charge VAT on supplies, but they aren’t entitled to a deduction or credit for VAT paid on purchases of goods and services necessary to deliver the supplies. For clarity here, supplies are often called outputs, while purchases are called inputs.

Under the alternative treatment — full taxation under a VAT — the supplies made by nonprofit and public-sector entities would generally be taxable like those made by any other business. Under the credit invoice method VAT, taxable supplies give rise to the right to deduct VAT paid on purchases incurred to render taxable supplies. There is no inconsistency between the VAT and

income tax treatment of such entities — that is, full taxation under the VAT is fully consistent with exempt status under the income tax. The former simply implies that VAT-registered entities in the nonprofit and public sectors (like VAT-registered businesses in any other sector) simply act as VAT collection agents for the government. Assuming away exemptions, and assuming that all participating entities are VAT-registered, nonprofit and public-sector entities would ultimately pay no VAT on inputs. Only final consumers and other nonregistered persons bear the burden of VAT in the end.

**Evaluation Criteria and Best Practices**

There are important departures from the full taxation model in traditional VAT regimes like those in place in the European Union. The VAT systems in Australia and New Zealand feature much broader bases; supplies made by entities in the nonprofit and public sectors are in most cases taxable, and entities are essentially treated just like any other business supplier. That is one reason why the VAT regimes of those two countries are sometimes referred to as a modern VAT, as distinguished from the European-style traditional VAT.

Canada’s VAT provides an interesting middle ground between those two models. While many supplies rendered by nonprofit and public-sector entities are exempt in Canada, some or all of the VAT incurred in the course of rendering exempt supplies is rebated later by the tax authorities.

As has been shown elsewhere,² there are no convincing conceptual or practical arguments to remove the activities of the nonprofit and public sectors from the VAT base. Arguments concerning income distribution, social objectives, or the difficulty of taxing the sectors don’t survive scrutiny when it comes to VAT. From the perspectives of efficiency, equity, and simplicity, the argument for full taxation is strong.

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²Most recently, supra note 1.
VAT systems in developed countries are a stable revenue source and can produce significant revenue if designed appropriately. For purposes of comparison, this discussion will focus on the distinction between exemption and full taxation of the sectors.

**Revenue Needs and Neutrality**

The exemption of nonprofit and public-sector entities in most countries breaks the VAT chain at the level of the supplier, meaning the nonprofit or public-sector entity becomes the last unit in the chain. Those entities are thus treated as if they were the final consumers of the supplies.

Like a true final consumer, the entity must absorb the VAT paid on purchases. In that situation, the VAT allows for revenue collection by falling on inputs, resulting in the same economic inefficiencies of a traditional retail sales tax. This sacrifice of revenue can be important because the services rendered by the public sector tend to be income elastic. Treating the supplier as the final consumer is also inconsistent with the overall concept of a broad-based consumption tax.

Also, if the goods and services provided by nonprofit entities or, especially, public-sector entities must compete with those provided by the private sector, private-sector entities may face unfair competition if they absorb VAT on purchases while public-sector entities can obtain funding from general government revenue that would cover VAT on purchases. Either way, the entity shifts the nondeductible VAT forward into higher prices or cuts profit. Competition between the public and private sectors would also be distorted if goods and services are exempt when supplied by the former but taxable when supplied by the latter. Again, the private sector will shift the tax forward or backward.

Two more problems arise with exemption. First, entities that make exempt supplies have an incentive to self-supply services internally, as they will not incur VAT on in-house labor services (because labor is untaxed under VAT), while they would incur VAT only if they were to outsource services. This is because outsourced services would generally be taxable. The exemption
is thus seen as penalizing outsourcing and reducing cost savings. In other words, exemptions distort production decisions.

The second problem is that exemptions of some goods and services often result in more exemptions to level the playing field. This has been referred to as exemption creep. VAT systems tend to evolve by increasing the number of exemptions beyond the initial list. The non-neutralities are eliminated when supplies made by nonprofit and public-sector entities are treated like any other supplies, as they are under New Zealand’s VAT.

Ease of Administrability

Exemptions raise thorny compliance and administrative issues. They require detailed classifications of goods and services so that VAT registrants and tax administrations can distinguish between exempt and taxable supplies. Also, registrants that make a combination of exempt and taxable supplies (like a hospital that delivers exempt medical services and taxable cafeteria or laundry services) must use allocation methods to apportion the VAT paid on purchases between exempt and taxable supplies. This apportionment is difficult and open to manipulation.

In Canada, nonprofit and public-sector entities eligible for the public services rebate must complete application forms that specify different rebate rates depending on the nature of the entity’s activities, sector, and province of operation. All of this complicates the job of both the registrants and the tax administration and increases compliance and administrative costs. Those costs can be minimized by minimizing the number of exemptions, which the full taxation model does best.

Another advantage of the full taxation model is that it keeps the VAT chain intact all the way to the final consumer or nonregistered person. Breaks in the VAT chain facilitate evasion and complicate compliance and administration. With an intact VAT chain, coordination of taxpayer audits is also increased.

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3 For a review of some international experiences, see Richard M. Bird and Pierre-Pascal Gendron, The VAT in Developing and Transitional Countries (New York: Cambridge University Press, 2007), chap. 7.
through easy cross-checking of revenue and expense figures in VAT and income tax returns. The credit invoice VAT method produces a good paper trail.

**Equitable Treatment**

Because the burden of the VAT under the full taxation model falls on the final consumer and nonregistered persons, registered businesses and registered nonprofit and public-sector entities should not, in principle, bear any tax. Tax preferences such as the widespread exemption of the supplies of nonprofit and public-sector entities and other sectors often lead to inequitable results. Again, this is especially true when the private and public sectors compete in supplying similar goods and services and private-sector supplies are taxable while public-sector supplies are not.

Under full taxation, supplies rendered by public-sector, nonprofit, and charitable entities that receive no grants would be treated like private goods supplies rendered by the private sector — the VAT would apply to the full amount of consideration. If grants are received by nonprofit and public-sector entities, and if the grants are linked directly to the supply of private goods by those entities, then the correct treatment for VAT requires an adjustment to the VAT base as follows. Grant amounts (on a per-unit basis) must be added to the consideration charged before calculating the VAT due. The purpose of this adjustment is to prevent an unfair price advantage for entities that receive grants over those that do not. Because public-sector, nonprofit, and charitable organizations often receive grants, this treatment ensures equality of treatment between the private sector and those entities.

For nonprofit entities and especially charities, the appeal of full taxation is that all VAT paid on purchases is credited. If an entity makes no taxable supplies during a given period, it should be entitled to a refund of its accrued VAT credits. That is important for entities that depend mostly on outside funding or donations to operate. The New Zealand VAT model is particularly straightforward in this respect since it treats all such entities as any other
registered business, although some minor administrative concessions (simplified accounting methods and lighter filing requirements) are available to ease the compliance burden of nonprofits and charities.

The VAT system is not a suitable mechanism to directly affect income redistribution or achieve social objectives. The primary objective of VAT is to raise revenue efficiently. Other mechanisms such as government transfers and expenditure policies are available to achieve distributional or social goals. The VAT is one of the most efficient taxes. Full taxation must be seen within the broader context of government and third-party funding of nonprofit entities and charities. Full taxation does not provide additional funding (via credits or refunds), but ensures neutral treatment of all entities subject to VAT, in accordance with the internal logic of VAT. Likewise, it is far from clear that exemptions benefit suppliers in the first place; they often don’t and even entail larger economic costs.

Special Features

Nil Consideration

Public-sector and nonprofit entities are sometimes involved in the supply of goods and services that are rendered to final users free of charge. In the public sector, examples of nil consideration include the supply of goods and services by governments in situations where it is not feasible to price the supplies. Typically this involves supplies for which there is little or no competition by the private sector. On the nonprofit side, for example, a church may collect donations both in cash and in kind and supply free clothes or toys to needy households. This raises the question of how to treat those supplies.

Conceptually, the proper VAT treatment of supplies made for nil consideration is to credit and refund all VAT incurred on purchases made by the supplier. Multiplying the positive VAT rate by a nil consideration yields zero revenue. This results in the same outcome as if the supplies were zero rated. (No VAT gets charged when supplies are zero rated and exempt, but a fundamental difference remains in that VAT on purchases gets credited when supplies are zero rated but not when they are exempt.)
mere transfer of funds by nonprofits and charities would not, in and of itself, be subject to VAT. The tax applies when value-added is created.

Government-to-Government Transactions

Under a strict interpretation of the full taxation model, a public-sector entity providing taxable supplies to another public-sector entity would charge VAT on the supplies. To the extent that the recipient of the supplies is engaged in making taxable supplies itself, it would be allowed to obtain credit for VAT paid. It’s clear, in the narrow example of supplies from one federal government agency to another, that those transactions will not be revenue productive.\(^4\) Charging VAT on such transfers is nevertheless desirable because it simplifies compliance and tax administration by minimizing exemptions and keeps the VAT chain intact so that goods and services that would ultimately reach final consumers would properly bear the VAT.

The Canadian system illustrates the flexibility that is possible under the VAT. The federal government is considered a single entity for purposes of the goods and services tax/harmonized sales tax, the Canadian VAT. The single entity includes all departments, branches, Crown corporations, and agencies. The federal government pays GST/HST on its taxable purchases and charges GST/HST on its taxable supplies. One important benefit of this system is that it greatly simplifies compliance for private-sector entities that deal with the federal government.

Transactions involving provincial governments are conducted in two ways. Some provinces have elected to pay GST/HST on their taxable purchases, while others do not pay GST/HST on their taxable purchases if they provide certification that the purchases were made with government funds. Under a federal-provincial arrangement with Québec — which has its own subnational VAT called the Québec sales tax (QST) — the federal government and its agencies and corporations are not required to

\(^4\) This point was recently made by Richard M. Bird and Pierre-Pascal Gendron, “Sales Taxes in Canada: The GST-HST-QST-RST ‘System,’” 63 Tax L. Rev. (3: 2010), pp. 517-582.
pay QST on their purchases, but the Québec government and its agencies and corporations must collect GST and QST on their taxable sales.

In the case of government agencies that make no taxable sales, it is possible to think of a system in which the agency is exempted from paying VAT on any purchases, possibly based on a certification model. This is akin to suspending VAT. From an administrative perspective, however, it is preferable for governments to pay VAT on taxable purchases and charge VAT on taxable supplies. Otherwise, complexity arises as government agencies and corporations need to be classified as taxable or outside the scope of VAT. In the European Union, public-sector activities that aren’t subject to VAT have led to considerable complexity and litigation.

States as Taxable Persons

According to the Canadian Constitution and federal-provincial arrangements, the federal government of Canada can require provincial and municipal governments to collect the GST/HST on its behalf. In the United States, constitutional limitations would prevent the federal government from requiring state governments to collect a federal VAT on its behalf. This limitation is serious, but it is narrower than it first appears for two reasons.

First, it would apply only to state and local governments (including their agencies). It would not appear to nonprofit and charitable organizations as long as they are not the responsibility of state or local governments. In principle, therefore, supplies made by such entities and the federal government could be subject to the full taxation model under VAT.

Second, state and local governments could be given the option to collect the VAT. If they do so, their supplies would be taxable, and the VAT paid on purchases made to render those supplies would be creditable. A local government that elected to collect the tax would pay VAT on purchases of city vehicles, but that

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5For a more detailed discussion, see Gendron, supra note 1.
VAT would be deducted from the VAT collected on local user fees and the proceeds from sales of goods in determining net VAT due.

If state and local governments refuse that option, their supplies would simply be exempt. No VAT would be charged on supplies, but VAT paid on purchases would not be creditable or refundable. As shown elsewhere, the existence of distinct state VATs is unnecessary for the solid functioning of a federal VAT with or without the option to collect the tax.6

Lessons for the United States

The economic and administrative case for full taxation under VAT of supplies made by public-sector, nonprofit, and charitable entities is strong. The system used in Australia and New Zealand is the best alternative. Under it, essentially all goods and services supplied by the sector are treated like any supplies from the private sector. There are few instances of zero rating or exemptions.

If the United States adopted a federal VAT, it would be well advised to get the design correct from the start and subject the public and nonprofit sectors to VAT, like under the Australia-New Zealand model, and ensure that the VAT system provides for the full taxation of those sectors (and others) as much as possible.  

6Bird and Gendron, supra note 4.
VAT Treatment of Charities and Public Bodies In the United Kingdom
By Debra Morris

This essay considers the VAT treatment of charities and public bodies in the United Kingdom. In general, the same legal principles apply to charities and public bodies as to commercial enterprises. But unlike with VAT-registered businesses, the purpose of charities and public bodies is not to make a profit or engage in commercial activities. Nevertheless, there is no general exemption from VAT for those entities. Sometimes VAT concepts are more difficult to apply to those groups than to businesses, for which VAT is already sufficiently complex.

The concept of a supply made in the course or furtherance of a business\(^1\) is usually straightforward in the case of most businesses, but it can be awkward when considering charities and public bodies and it has given rise to complex case law. VAT compliance is a considerable administrative burden for both charities and public-sector bodies, with each obliged to take steps to minimize VAT liabilities as much as possible. Consequently, both public bodies and charities usually have complex VAT accounting systems.

**Charities**

Many charities pay no VAT because they do not make supplies of goods or services, because they are not in business, or because their turnover is below the limit for registration.\(^2\) In the U.K., a body must register for VAT if it makes taxable supplies that exceed the annual VAT registration threshold — currently £70,000 — or if it is likely to do so within the next 30 days.\(^3\)

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1\(^{1}\) Value Added Tax Act 1994, s. 4.
2\(^{2}\) See, in general, HM Revenue & Customs Notice 701/1 (May 2004) on charities for guidance on VAT and charities.
A charity will have its primary activity set out in its statement of aims and objectives. Because those activities are often of a nonbusiness nature, they may well be outside the scope of VAT. If they fall within the definition of a business, some portion of a charity’s supplies may be either exempt from VAT, zero rated in accordance with Schedule 8 of the Value Added Tax Act 1994 (the act), or taxed at the reduced VAT rate of 5 percent.

Voluntary VAT registration can be beneficial in some cases, particularly when a charity receives zero rated revenues (for example, sales of donated goods). This allows VAT recovery on costs without any VAT being payable on revenues. Once registered, a charity must charge output VAT on the taxable supplies of goods and services and can recover the input VAT incurred on purchases relating to taxable (standard, reduced, or zero rated) supplies, but not exempt supplies. Charities are also unable to recover the VAT that they incur on purchases necessary to carry out their nonbusiness activities.

**Business Activity**

Business activities mainly take place when making supplies to other persons for any form of payment or consideration, cash or otherwise, that have a degree of frequency and scale and continue over a period of time. Many gray areas have arisen in determining what constitutes a business activity under the VAT regime.

For example, there may well be a business activity when charities receive funding (for example, from a local authority or other government body) and are required to perform services in return. A careful examination of the arrangements is required to

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5 See Value Added Tax Act 1994, Sched. 7A. The reduced rate applies to children’s car seats; contraceptive products; domestic fuel and power; installation of energy-saving materials; grant-funded installation or connection of heating equipment, security goods, and gas supplies; installation of mobility aids for the elderly; renovation and alteration of empty dwellings; smoking cessation products; residential conversions; welfare advice or information; and women’s sanitary products.
7 17.5 percent; Value Added Tax Act 1994, s. 2. This is due to rise to 20 percent in January 2011; Finance (No. 2) Act 2010, s. 3.
8 5 percent; Value Added Tax Act 1994, s. 29A.
determine whether VAT is chargeable on the value of the services. If it is, VAT recovery on the costs will also be possible if the supplies aren’t exempt. There is much case law dealing with whether a business activity has been undertaken for VAT purposes.

**Exempt Supplies**

Once the business activities of a charity are identified, it is necessary to establish whether any of its supplies fall within the exempt category. Those are services that are deemed necessary supplies so that it is considered in the public interest not to charge VAT. For those supplies, no VAT is chargeable, and they do not count toward the turnover threshold. Many charities are involved in these areas of work. If they are only making exempt supplies, there will be no requirement to register for VAT, no matter the turnover.

The public interest exemptions most likely to affect charities are set out in Schedule 9 of the act and are as follows:

- education;
- health and welfare;
- membership subscriptions to trade unions and professional and other public interest bodies;
- sports, sports competitions, and physical education services;
- fundraising events by charities and other qualifying bodies; and
- cultural services.

There are more exemptions for specific activities. The exemptions for education, sport, and cultural services apply when the supplier is an eligible body, the requirements of which differ from group to group and have been the subject of considerable litigation.9

**Zero Rated Supplies**

For zero rated supplies, VAT will not be added to the cost to the charity. Similarly, a charity making zero rated supplies will

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9See, for example, regarding the supply of education, research, or vocational training, the definition of an eligible body in Value Added Tax Act 1994, Sched. 9, group 6, para. 1, note 1.
not need to charge VAT on those supplies. However, it may recover input tax in relation to zero rated supplies. The zero rated supplies most likely to affect charities are set out in Schedule 8 of the act and include the following:

- talking books for the blind and handicapped and wireless sets for the blind;
- the construction of annexes used for a charitable purpose;
- alterations to protected buildings used by charities;
- the sale of goods donated to a charity;
- the donation of any goods for sale or export by a charity;
- the supply of any relevant goods to an eligible body\textsuperscript{10} that pays for them with funds provided by a charity or from voluntary contributions; and
- the supply to a charity providing care or medical or surgical treatment for human beings or animals, or engaging in medical or veterinary research, of a medicinal product or veterinary medicinal product when the supply is solely for use by the charity in that care, treatment, or research.

**Irrecoverable VAT**

U.K. charities complain bitterly about their VAT treatment, in particular the burden of irrecoverable VAT. They have managed to obtain only minor concessions\textsuperscript{11} to the VAT regime since its introduction in 1973. VAT rules, as they affect charities, are complex and cause many problems. According to the Charity Tax Group (CTG), the irrecoverable VAT burden for charities is estimated at £1 billion a year.\textsuperscript{12} The CTG campaigns on behalf of charities to seek changes in tax legislation and administration.

Studies in Denmark, Ireland, and the U.K. indicate that charities are paying around 4 percent of total expenditure on VAT.\textsuperscript{13} The burden is not spread evenly across the charitable sector. For example, Action for Blind People pays 5.8 percent of its total

\textsuperscript{10}Defined in Value Added Tax Act 1994, Sched. 8, group 15, note 4.
\textsuperscript{11}For example, in 2002 a package of VAT relief for charity buildings, including residential communal homes, was introduced.
\textsuperscript{12}See http://www.ctrg.org.uk/home.
\textsuperscript{13}See http://www.ctrg.org.uk/campaigns/VAT/.
expenditure on VAT. The increase in the standard VAT rate to 20 percent, effective from January 2011, will increase that burden by at least £150 million per year.\textsuperscript{14}

CTG is campaigning for a rebate to match the irrecoverable VAT incurred when the expenditure relates to charitable activities. The problem of irrecoverable VAT has become more severe in recent years as charities seek to widen their funding base to include more earned income and provide more services under contract. The move away from donations and grants to earned income has increased the circumstances in which charities incur VAT.

\textbf{Public Bodies}

Several different categories of public bodies are subject to VAT, and their ability to recover input VAT will be determined by reference to the category into which they fall. However, all public bodies must charge VAT on their business supplies.\textsuperscript{15} The public bodies that are affected by VAT include:

- government departments;
- local authorities and other “section 33” bodies;
- health authorities;
- nondepartmental public bodies;
- executive agencies and trading funds; and
- police authorities.

The normal VAT registration requirements apply to public bodies other than local authorities. With a local authority, if taxable supplies in the course or furtherance of a business are made, the local authority must register for and charge VAT, regardless of whether the value of the supplies reaches the normal VAT registration threshold.\textsuperscript{16}

\textsuperscript{14}Charity Tax Group press release, June 22, 2010.
\textsuperscript{15}See, in general, HM Revenue & Customs Notice 749 (April 2002) on local authorities and similar bodies for guidance on VAT and public bodies.
\textsuperscript{16}Value Added Tax Act 1994, s. 42.
While the act is domestic U.K. legislation, much of its scope is determined by EU VAT directives. Under European law:

States, regional and local government authorities and other bodies governed by public law shall not be regarded as taxable persons [that is, they do not have to charge VAT] in respect of the activities or transactions in which they engage as public authorities, even where they collect dues, fees, contributions or payments in connection with those activities or transactions.

Consequently, when public bodies carry out statutory functions, which are considered nonbusiness activities, they do not have to charge VAT. Case law has confirmed that those public bodies engage as public authorities when they undertake their duties under a special legal regime that applies to them and not to other bodies. HM Revenue & Customs recently reconsidered its interpretation of the phrases “bodies governed by public law” and “special legal regime” in light of recent case law. HMRC considers that a body will satisfy this criterion only if it is a public-sector body that forms a part of the U.K.’s public administration, such as a governmental department, a local authority, or a nondepartmental public body. Article 13(1) of the directive is not intended to enable other bodies to claim special treatment merely because they have delegated powers, are regulated in some way by the state, are funded by public money, or are subject to specific rules in the pursuit of their activities.

Several activities are also excluded from the scope of article 13(1). That article removes some activities from its application unless they are carried out on such a scale as to be negligible. Those are:

- telecommunications services;
- the supply of water, gas, electricity, and thermal energy;
- the transportation of goods;

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port and airport services;
- passenger transport;
- the supply of new goods manufactured for sale;
- some activities of agricultural intervention agencies;
- the operation of trade fairs and exhibitions;
- warehousing;
- activities of travel agents;
- activities of commercial publicity bodies;
- the operation of staff shops, cooperatives, and industrial canteens and the like; and
- some commercial activities of radio and television bodies.20

Guidance known as Treasury directions,21 published in 2002, provides a list of additional supplies that, when made by government departments, are deemed to be made in the course or furtherance of a business.

Also, under article 13, supplies will not be treated as being nonbusiness when it would lead to significant distortions of competition. The issue of public bodies and distortions of competition has recently been considered both in the U.K. courts and the European Court of Justice,22 in a test case that concerned local-authority-operated car parks. Car parking charges were imposed by the local authorities, but private-sector providers also supplied parking services.

The private-sector providers had to account for VAT, potentially putting them at a commercial disadvantage to the local authority providing the same service. The ECJ believed that the rule includes both actual and potential competition with an existing or would-be private trader, provided the possibility of a private trader entering the market is real. The ECJ ruled that for there to be significant distortions of competition, the effect must be “more than negligible.”

21Made under Value Added Tax Act 1994, s. 42(2).
22Revenue and Customs Commissioners v. Isle of Wight Council (C-288/07) [2009] 1 CMLR 4. The litigation, which is ongoing, has a long procedural history, dating back to 2000 and involving several decisions of the tribunal, the High Court, and, on reference to it by the High Court of questions of EU law, the ECJ.
The example of car parking illustrates the complexities in this area. When a public authority imposes charges for parking at meter bays on the public highway, including excess parking charges, it does so under statutory powers that only a public authority can exercise. This activity is nonbusiness. However, in providing off-street parking in garages, buildings, and open spaces, the authority is not acting under any special legal provisions that give it powers beyond those available to the private traders with which it is in direct competition, meaning that activity is business.

Recovery of Input Tax

While ordinarily no VAT is due on income received from exempt supplies or nonbusiness activity, no VAT recovery is possible on the expenditure incurred. Without special provisions, this could be problematic for public bodies, because they may make significant nonbusiness supplies. Public bodies, including local authorities, are therefore subject to a special regime that entitles them to recover VAT incurred when engaged in nonbusiness activities. It relates back to an original commitment that VAT would not be a burden on local authorities pursuing their statutory functions.

Under this special regime, while local authorities do not charge VAT on income received from nonbusiness activities, they can still recover all VAT incurred on expenditures in pursuing those activities. Local authorities can normally recover all the VAT that they incur under the special partial exemption regime for section 33 bodies. That is on condition that VAT on costs relating to exempt business supplies is not more than 5 percent of all VAT incurred. If that limit is exceeded, none of the VAT is recoverable. This 5 percent test is therefore very important for local authorities.

A separate, less extensive recovery mechanism exists for other public bodies that do not fall within the section 33 regime. It

\[23\] See HM Revenue & Customs Notice 749, para. 5.8.7
\[24\] Under Value Added Tax Act 1994, s. 33.
\[25\] This 5 percent limit was removed in tax years 2008 and 2009 but is now fully implemented, requiring careful monitoring by local authorities.
enables government departments and health service bodies\textsuperscript{26} to recover some input tax attributable to supplies they receive for nonbusiness activities.

The application of the VAT rules to public bodies is complicated, as evidenced by the amount of case law in the area. Careful consideration is required in all transactions to determine whether VAT is chargeable and recoverable.

**Conclusion**

This short essay cannot do justice to the complexities that arise for both charities and public bodies when considering the application of VAT to their activities. The area is governed by extensive legislation, case law, and HMRC guidance, which interested readers are invited to examine. The lesson for Americans considering a VAT regime is that careful thought must be given to the treatment of charities and public bodies, and the issues are likely to be far more complex than one might imagine.

\footnote{Defined in Value Added Tax Act 1994, s. 41.}
The EU VAT Experience: What Are the Lessons?

By Ine Lejeune

Introduction

VAT is a significant and increasingly prevalent form of consumption tax, representing a major source of revenue for governments around the world. The contribution of VAT to total government revenue is increasing rapidly. VAT systems have been implemented in 156 countries, and seven more are considering implementing a VAT by 2013. Major VAT reforms are on the way in India and China. Figure 1 on the next page shows the VAT regimes around the world.

The VAT was conceived by a German businessman in 1920 and first implemented in France in 1954. In the late 1960s, when the European Union consisted of only six member states and 188 million citizens, the VAT was introduced by the First Directive and the Second Directive to replace national turnover taxes. As part of the EU’s acquis communautaire, VAT is now imposed in the entire internal market of 27 member states, and 501 million citizens are familiar with it.

The VAT has become a cornerstone in the EU’s tax and economic system. It contributes to a nondistortive trade policy and respects the fundamental freedoms of the EU: the free

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1As used in this article, the term VAT includes all forms of the tax, including the goods and services tax.
3Belgium, France, West Germany, Italy, Luxembourg, and the Netherlands.
Figure 1. VAT/GST Regimes Around the World

PricewaterhouseCoopers Global VAT/GST map

Source: November 2009 PwC analysis.
### Figure 1 (continued).

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<tr>
<td>Canada</td>
<td>Slovenia</td>
<td>Grenada</td>
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</tbody>
</table>

Source: November 2009 PwC analysis.
movement of goods, capital, and persons. Recently, an increased shift to VAT has been suggested both to reduce national budget deficits\(^7\) and to meet the EU’s Lisbon objective of raising the average labor participation rate.\(^8\)

### The Global Shift to VAT

Statistics show rapidly declining corporate income tax rates throughout the EU and other global economies, while standard VAT rates have increased.\(^9\) As a consequence, VAT revenue is increasing as a percentage of total tax revenue. We may therefore conclude that the global revenue balance is shifting away from corporate income taxes in favor of VAT. Table 1 shows that VAT is a significant percentage of total tax revenue in OECD countries.

![Table 1. VAT/GST as a Percentage of Total Revenue](image)

<table>
<thead>
<tr>
<th>Year</th>
<th>OECD Europe</th>
<th>OECD America</th>
<th>OECD Pacific</th>
<th>OECD Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1965</td>
<td>22%</td>
<td></td>
<td></td>
<td>12%</td>
</tr>
<tr>
<td>1970</td>
<td>20%</td>
<td></td>
<td></td>
<td>14%</td>
</tr>
<tr>
<td>1975</td>
<td>18%</td>
<td></td>
<td></td>
<td>12%</td>
</tr>
<tr>
<td>1980</td>
<td>16%</td>
<td></td>
<td></td>
<td>12%</td>
</tr>
<tr>
<td>1985</td>
<td>14%</td>
<td></td>
<td></td>
<td>12%</td>
</tr>
<tr>
<td>1990</td>
<td>12%</td>
<td></td>
<td></td>
<td>12%</td>
</tr>
<tr>
<td>1995</td>
<td>10%</td>
<td></td>
<td></td>
<td>12%</td>
</tr>
<tr>
<td>2000</td>
<td>8%</td>
<td></td>
<td></td>
<td>12%</td>
</tr>
<tr>
<td>2005</td>
<td>6%</td>
<td></td>
<td></td>
<td>12%</td>
</tr>
<tr>
<td>2006</td>
<td>5%</td>
<td></td>
<td></td>
<td>12%</td>
</tr>
</tbody>
</table>

As one of the most broad-based taxes, VAT is a key revenue generator for all governments in the EU. In the current economic climate, and with high government deficits, several governments

---


\(^8\)Lang, Mez and Kristofferson, IBFD, *Value-Added Tax and Direct Taxation*, 2009, p. 73.

are looking to increase the share of VAT as part of total taxes collected (Table 2, on the next page).  

Two approaches are used to achieve this. First, countries have increased their VAT rates. Over the past two years across the EU, 12 countries have increased their standard VAT rates. However, the U.K. first lowered its standard VAT rate from 17.5 percent to 15 percent from December 2008 until January 2010. As of January 4, 2011, the standard VAT rate in the U.K. will increase to 20 percent. Poland and Portugal will also increase their standard rates for 2011. Table 3 shows the evolution of the standard VAT rates in the EU over the past three years.

Those VAT rate increases are usually combined with a reduction of income tax rates. Over the last two years, seven EU member states cut their corporate income tax rates (Czech Republic, Greece, Hungary, Luxembourg, Slovenia, Sweden, and the U.K.). Several countries have reduced their statutory rate of personal income tax (Bulgaria, Czech Republic, Hungary, Lithuania, Romania, Slovenia, and Slovakia). The increased VAT revenue has also been used by some governments to reduce social security contributions payable by employers or employees (Bulgaria, Hungary, Germany, and Sweden).

The second approach that governments take is to improve VAT collection. The VAT gap has been a problem in the EU. The European Commission studied the gap in 25 member states and estimated it at €106.7 billion in 2006. (Bulgaria and Romania had not yet entered the EU; the study also excluded Cyprus.)

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Table 2. VAT as Percent of GDP in the EU

Table 3. The Recent Trends in Changes of the Standard VAT Rate in the EU

The member states are individually acting to reduce their VAT gaps in different ways. One way is to improve their auditing through increased reliance on electronic auditing and advising or requiring taxpayers to have or submit standard audit files for tax (SAF-T), as recommended by the OECD. That is being done in Portugal and Luxembourg effective in January 2011. Another way is to introduce voluntary compliance programs and tax control frameworks, as in the Netherlands. Finally, penalties for noncompliance are being increased in the U.K.

EU-wide action and cooperation between member states to combat fraud are aided by the creation of the EuroFisc. As part of its new VAT strategy, the European Commission will soon propose more measures to reduce both the VAT gap and the costs of collection and enforcement.

Designing a Best Practice VAT

When designing a best practice VAT, a balance must be found among the objectives of three stakeholders: the government, businesses, and citizens.

The government’s aim would be to increase its budget, allowing it to invest in the country (infrastructure, healthcare, education, etc.) and to attract and retain businesses while creating new jobs and securing existing ones. Businesses act as unpaid tax collectors in a VAT system. They want to compete globally and deliver a sustainable profit without risking violating the VAT rules. Citizens, as the final consumers, are looking for a fair tax

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OECD, “Guidance for the Standard Audit File — Tax (SAF-T),” http://www.oecd.org/LongAbstract/0,3425,en_2649_33749_34910278_1_1_1_1,00.html.


Figure 2. VAT/GST Win-Win Taxation Model

Governments
- Revenues
- Business attraction and employment

Businesses
- Sustainable global profit
- Total risk management

Use of technology to reduce cost of collection

Equitable/Efficient

Citizens
- Long term future and employment
- Non-regressive and fair
that is not regressive or inflationary. Citizens also expect the revenue to be invested by the government to provide long-term benefits such as jobs.

To maximize the revenue collected and reduce compliance costs, technology is required.

**OECD Principles and IMF Recommendations**

To assess the EU VAT system, we will use three benchmarks: OECD principles, IMF recommendations, and PwC’s experience in implementing and reforming VAT systems.20

The OECD21 proposed the following principles:

<table>
<thead>
<tr>
<th>Table 5. OECD Principles</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Principles</strong></td>
</tr>
<tr>
<td>Neutrality</td>
</tr>
<tr>
<td>Efficiency</td>
</tr>
<tr>
<td>Certainty and Simplicity</td>
</tr>
<tr>
<td>Effectiveness and Fairness</td>
</tr>
<tr>
<td>Flexibility</td>
</tr>
</tbody>
</table>

20PwC has used its experience in designing and implementing VAT systems and in reform programs in 37 of 71 countries that used external advisers around the world. PwC has delivered more than 20 studies on VAT to the European Commission.

The IMF has also recommended some best practices\textsuperscript{22} to be used in VAT design, as follows:

- a single rate rather than multiple rates;
- a single, relatively high threshold regarding turnover;
- a broad base with minimal exemptions to avoid distortion of purchase (input) decisions and to provide transparency;
- use of the destination principle whereby exports are zero rated and imports are taxed;
- use of the invoice credit method whereby output VAT remitted is reduced by input VAT paid on purchases and imports; and
- the timely provision of input credits for the purchase of capital goods.

The IMF\textsuperscript{23} experience demonstrates that VAT implementation is an opportunity to significantly improve overall tax administration, such as by:

- introducing a function-based organization and integrated tax administration starting with the integration of VAT and income tax;
- ensuring coordination between VAT, income tax, and customs agencies with unique taxpayer identification numbers;
- introducing modern procedures based on voluntary compliance;
- implementing self-assessment, whereby taxpayers declare and pay taxes based on their own calculations subject to the possibility of an audit by the tax authorities;
- implementing effective audit programs based on risk-based analysis selection methods;
- issuing prompt refunds of excess input VAT to taxpayers.

**The EU Legal Framework**

Before describing the key features of the EU VAT system, we will review the legal framework and overall functioning of the EU VAT.


VAT in the EU is regulated by a council directive. Any changes to the regime require a unanimous decision by the 27 state secretaries of finance. The VAT directive is an EU legal instrument. Directives are binding and must be implemented in the member states’ domestic legislation. However, each state has a choice regarding the method of implementation. The European Court of Justice has the power to ensure that the EU legislation is applied in accordance with the treaty establishing the EU and provisions of the European Community institutions.

The ECJ rules on cases referred to it under two procedures. Under the first, it hears cases to decide whether member states have failed to fulfill treaty obligations (the infringement procedure). These actions are usually initiated by the European Commission, although they can also be initiated by another member state. Action can also be taken by the commission under a complaint made by any interested party. Under the second procedure, the ECJ hears cases referred to it by national courts (preliminary rulings) requesting an interpretation of the EU legislation. Once the ECJ has ruled on a case referred to it, its ruling will be binding in all member states.

Over the past 40 years, 449 VAT cases have been referred to the ECJ. As of 2010, 43 are pending. Table 6 on the next page shows the number of ECJ judgments and pending cases on major VAT topics from 1970 through June 2010.

ECJ case law has been instrumental for an EU-wide harmonized interpretation of VAT rules. However, differences in national legislation and practices and the large number of VAT cases referred to the ECJ indicate that the system is inefficient and fails to provide certainty.

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242006/112/EC (the VAT directive) of Nov. 28, 2006, on the common system of value added tax. Since then there have been several changes. The latest non-official consolidated version was available in April 2010 at http://ec.europa.eu/taxation_customs/taxation/vat/key_documents/index_en.htm.


Table 6. Overview of ECJ Decisions on VAT in the Period 1970-2010

<table>
<thead>
<tr>
<th>Year Period</th>
<th>Taxable Person</th>
<th>Taxable Supply</th>
<th>Place of Supply</th>
<th>Taxable Amount</th>
<th>Exemptions</th>
<th>Deduction</th>
<th>Liability</th>
<th>Abuse of rights and fraud</th>
<th>Special Arrangements</th>
<th>VAT Free</th>
<th>Other</th>
<th>Pending cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>1970-1979</td>
<td>70</td>
<td>60</td>
<td>50</td>
<td>40</td>
<td>30</td>
<td>20</td>
<td>10</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1980-1989</td>
<td>70</td>
<td>60</td>
<td>50</td>
<td>40</td>
<td>30</td>
<td>20</td>
<td>10</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1990-1999</td>
<td>70</td>
<td>60</td>
<td>50</td>
<td>40</td>
<td>30</td>
<td>20</td>
<td>10</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2000-2010</td>
<td>70</td>
<td>60</td>
<td>50</td>
<td>40</td>
<td>30</td>
<td>20</td>
<td>10</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Best Practice

Here we benchmark some of the key features of the EU VAT system using the above OECD and IMF criteria and lessons learned by PwC, together referred to as best practice.

Taxable Persons

Definition

The concept of taxable person\(^{27}\) is important in ensuring that the VAT is broad based, proportional, nondistortive, and efficient. The VAT directive defines a taxable person as “any person that independently carries out in any place any economic activity, whatever the purpose or results of that activity.”\(^{28}\) The economic activities are all activities of producers, traders, and persons supplying services. Mining, agricultural activities, and activities of professions are included. Member states have implemented this definition differently. Legislation varies in Belgium, Finland, Italy, Latvia, Portugal, Sweden, and the U.K.

In practice, problems have arisen in defining when an economic activity makes a person qualify as taxable (for example, preparatory activities or feasibility studies before launching a business). Other issues brought before the ECJ and dealt with in several member states concern the treatment of holding companies\(^{29}\) and of governments and their agencies.\(^{30}\)

Pure holding companies and governments are treated mostly as nontaxable persons for VAT purposes. Should that be revisited, the EU concept of taxable person would be in line with best practice.

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\(^{27}\)Also further in the text, business or company.


\(^{29}\)ECJ Case C-291/07 (Kollektivavtalsstiftelsen TRR Trygghetsrådet), a pure holding company is not qualified as a taxable person for VAT purposes; ECJ Case C-60/90 (Polysar), a financial holding company is not an entrepreneur for VAT purposes.

\(^{30}\)ECJ Case C-102/08 (Salix), according to the VAT Directive, article 13, “States, regional and local government authorities and other bodies governed by public law shall not be regarded as taxable persons in respect of the activities or transactions in which they engage as public authorities . . . . However, when they engage in such activities or transactions, they shall be regarded as taxable persons in respect of those activities or transactions where their treatment as non-taxable persons would lead to significant distortions of competition.”
Registration Thresholds

A taxable person must be registered for VAT purposes. A registration threshold is used to relieve some taxpayers of this requirement, which can create a disproportionate compliance and administrative burden for taxpayers with low turnover. If the turnover is equal to or higher than the threshold, VAT registration is required. Businesses with a turnover below the threshold can opt for registration. A high threshold reduces fraud and the number of taxpayers that must register and comply and that need auditing.

The VAT registration threshold among EU member states varies, from zero to €80,000. The thresholds in the EU are very low compared with those in countries that have more recently introduced a VAT. Some member states use different thresholds for different business sectors. The thresholds in most member states do not apply to non-established companies that must register for VAT (Bulgaria, Cyprus, and the U.K. are exceptions).

The thresholds in the EU do not meet the OECD and IMF criteria and are neither efficient nor effective. A consistent threshold for all member states set at a high level would be best practice.

Taxable Transactions

Only taxable transactions can be subject to VAT. There are four taxable transactions:

- supplies of goods;33

---

31The VAT threshold in Singapore is SGD 1 million (approx. €540,000), http://www.iras.gov.sg/irashome/default.aspx.
33VAT directive, article 14, supply of goods: “shall mean the transfer of the right to dispose of tangible property as owner.
In addition to the transaction referred to in paragraph 1, each of the following shall be regarded as a supply of goods:
(a) the transfer, by order made by or in the name of a public authority or in pursuance of the law, of the ownership of property against payment of compensation;
(b) the actual handing over of goods pursuant to a contract for the hire of goods for a certain period, or for the sale of goods on deferred terms, which provides that in the normal course of events ownership is to pass at the latest upon payment of the final installment;

(Footnote continued on next page.)
• intra-Community acquisitions;\textsuperscript{34}
• imports;\textsuperscript{35} and
• supplies of services.\textsuperscript{36}

All supplies provided by a taxable person for consideration that are not taxable as one of the first three categories (supplies of goods, intra-Community acquisitions, or imports) are considered services. The EU definitions bring all transactions into their scope, creating a broad-based VAT, which is a best practice.

**Place of Taxation**

The EU VAT applies to all consumption in the EU, as a broad principle, and it is levied according to the destination principle. Supplies of goods from other EU member states to businesses and nontaxable legal persons are zero rated and subject to VAT in the EU member state of arrival. Shipments of goods to non-EU countries and supplies made outside the EU are not subject to EU VAT. This rule works well for the supply of goods.

(c) the transfer of goods pursuant to a contract under which commission is payable on purchase or sale.

3. Member States may regard the handing over of certain works of construction as a supply of goods.

\textsuperscript{34}VAT directive, article 20, intra-Community acquisition of goods: “shall mean the acquisition of the right to dispose as owner of movable tangible property dispatched or transported to the person acquiring the goods, by or on behalf of the vendor or the person acquiring the goods, in a Member State other than that in which dispatch or transport of the goods began.

Where goods acquired by a non-taxable legal person are dispatched or transported from a third territory or a third country and imported by that non-taxable legal person into a Member State other than the Member State in which dispatch or transport of the goods ends, the goods shall be regarded as having been dispatched or transported from the Member State of importation. That Member State shall grant the importer designated or recognised under Article 201 as liable for payment of VAT a refund of the VAT paid in respect of the importation of the goods, provided that the importer establishes that VAT has been applied to his acquisition in the Member State in which dispatch or transport of the goods ends.”

\textsuperscript{35}VAT Directive, article 30, importation of goods, “shall mean the entry into the Community of goods which are not in free circulation within the meaning of Article 24 of the Treaty.

In addition to the transaction referred to in the first paragraph, the entry into the Community of goods which are in free circulation, coming from a third territory forming part of the customs territory of the Community, shall be regarded as importation of goods.”

\textsuperscript{36}VAT Directive, article 24, supply of services, “shall mean any transaction which does not constitute a supply of goods.”
For the international trade of services, the destination principle is applied differently across jurisdictions. In some cases it leads to double or involuntary nontaxation.

In the EU on January 1, 2010, some new place of supply rules for services were introduced, also referred to as the VAT package. As a general rule, cross-border services between businesses are now taxed where the business customer is established. That was done to simplify and apply the destination principle more broadly to services in line with best practice.

Exemptions

Probably the most complex issues in the EU VAT system concern exemptions and the right to deduct input VAT.

Exemptions With Right of Deduction

The directive provides that activities like exportation, some transport services, international transport, services by intermediaries, some international trade transactions, and supplies by tax-free shops are zero rated. In many situations, those rules are difficult to apply for businesses, and they are applied differently among member states, which runs counter to our best practices. Such treatment is complex, fails to provide certainty, and results in high compliance costs.

Exemptions With No Right of Deduction

Activities in the public interest like medical services, education, not-for-profit activities, insurance and reinsurance, financial activities, and special investment funds are in principle exempt from VAT without the input credit. In these cases the supplier will not need to charge VAT on sales out, but the input VAT incurred on purchases of goods and services for running the business cannot be recovered. In many cases the exemptions were introduced to reduce the regressivity of VAT.

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38 VAT Directive, articles 135-137, exemptions.
39 This is the general rule. There are exceptions and options provided to the member states to apply VAT to the supply, such as for the sale of land and buildings and leasing or letting of immovable property. VAT directive, exemptions, articles 135-137.
Much litigation has arisen due to the wide range of exemptions and different interpretations by EU member states regarding the criteria for determining whether a transaction is subject to an exemption. From 2000 to 2009, 57 of the 204 VAT cases referred to the ECJ (28 percent) involved an exemption matter, as shown in Table 7 on the next page.

The EU VAT has a relatively narrow tax base because of the prevalence of these exemptions without a right of deduction. Across the EU, the amount of consumption subject to VAT, per country, averages 52 percent of GDP. In New Zealand, by contrast, the percentage is 105 percent.40

Where the input deduction is denied, the nondeductible VAT becomes a cost to the provider of the supplies of goods or services. That cost is then passed on to the consumers in a phenomenon referred to as cascading. A study that PwC performed for the European Commission41 showed that the EU VAT treatment was hurting the global competitiveness of EU-based industry.

VAT exemptions without a right of deduction are not harmless; they create distortions and uncertainty and keep the EU VAT system from being broad-based and neutral to business. And regressivity is not solved efficiently because the measures don’t target the low-income wage earners. The prevalence of such VAT exemptions cannot be considered a best practice.

VAT Rates

The VAT directive provides42 that the standard VAT rate must be between 15 and 25 percent. Each member state may choose its

40OECD, Consumption Tax Trends (Paris: OECD, 2008) pp. 66-67, the VAT revenue ratio = (VAT revenue)/([consumption - VAT revenue] x standard VAT rate). However, in making comparisons with other OECD VATs that do not include public-sector bodies within their scope, it is necessary to exclude New Zealand’s departmental GST (which produces no net revenue to government). If the GST is excluded from the calculation of the old C-efficiency ratio, the New Zealand C-efficiency ratio is reduced by about one-third.


### Table 7. Number of Cases Referred Between 2000 and 2009* (Including Infringements) Related to Exemptions

<table>
<thead>
<tr>
<th>Exemptions</th>
<th>Number of cases referred between 2000 and 2004*</th>
<th>Number of cases referred between 2004 and 2009*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical Care</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coal Sharing</td>
<td></td>
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<tr>
<td>Welfare</td>
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<td>Education</td>
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<tr>
<td>Sport</td>
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<tr>
<td>Financial</td>
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<tr>
<td>Gambling</td>
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<tr>
<td>Immovable</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disposal of Goods</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Miscellaneous</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


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standard rate. A reduced VAT rate of at least 5 percent can be enacted for supplies of goods and services referred to in an exhaustive list in the VAT directive. Only Denmark applies a single standard rate of 25 percent; all other countries apply one or more reduced rates. Some countries have negotiated zero rates when they joined the EU (for example, the zero rate for children’s clothing in the U.K.\textsuperscript{43} or a reduced rate for wines produced on an agricultural holding by the producer or farmer in Austria\textsuperscript{44}).

Differences in standard VAT rates create problems for businesses operating in multiple EU member states. Multiple rate structures within a country are an even bigger hurdle. Multiple rates are driven by social and economic concerns. They are one of the means used to solve the regressivity of the VAT. It is considered socially beneficial to tax luxury goods at a higher rate than necessities because it avoids placing a heavy tax burden on low-income groups. However, members of the high-income group also benefit from the lower VAT rates when they purchase necessities. Therefore, it’s preferable to reduce the regressivity of VAT using other targeted measures. Those might include lowering income taxes and employee social security contributions or providing family allowances. This has been successfully applied by New Zealand when GST was introduced and more recently when the VAT rate was increased by a reduction of the personal and corporate income tax rates.\textsuperscript{45}

Apart from the fact that lower rates are not the best means to mitigate regressivity, a multiple rate structure increases complexity and costs for businesses and creates economic distortions. It

\textsuperscript{43}VAT Directive, article 114, “Member States which, on 1 January 1993, were obliged to increase their standard rate in force at 1 January 1991 by more than 2 percent may apply a reduced rate lower than the minimum laid down in Article 99 to the supply of goods and services in the categories set out in Annex III. 1. The Member States referred to in the first subparagraph may also apply such a rate to children’s clothing and children’s footwear and housing.”

\textsuperscript{44}VAT directive, article 119, “Austria may apply a reduced rate to wines produced on an agricultural holding by the producer-farmer, provided that the rate is not lower than 12 percent.”

\textsuperscript{45}OECD, \textit{Tax Notes International}, Sept. 20, 2010, “An International Perspective on VAT,” by Alain Charlet and Jeffrey Owens, p. 952, “the basic personal income tax rate is cut from 12.5 percent to 10.5 percent, and the top rate from 38 percent to 33 percent. The corporate income tax rate is changed from 30 percent to 28 percent.” www.oecd.org/dataoecd/47/45/46073502.pdf.
also leads to disputes with the tax authorities on the correct application of the different rates. For example, electronic books are subject to the standard VAT rate, but paper books may be subject to a reduced rate. In France a piece of chocolate may be subject to either the standard rate (19.6 percent) or the reduced rate (5.5 percent depending on its composition, and sometimes its dimensions). One recent ECJ case examined the VAT rates applicable to the sale of a racehorse (subject to the standard rate) and the sale of a horse used for agricultural production (subject to the reduced rate).\textsuperscript{46} Nine cases on VAT rates\textsuperscript{47} are pending before the ECJ as of this writing.

That is why a single VAT rate (other than the zero rate for exports) is considered a best practice. Many countries that recently introduced VAT have opted for a single rate, such as Australia, Lebanon, Singapore, and Thailand.\textsuperscript{48} The lessons learned from the EU experience show that a moderate single VAT rate taxing a broad consumption base with very limited exemptions is far better than applying a high standard rate with many exemptions and multiple rates. The latter design — the norm in the EU — does not meet OECD or IMF criteria and is not a best practice.

Right to Deduct Input VAT

VAT should not be a cost of doing business. Businesses collect the VAT but are not the end consumers. The neutrality of VAT is guaranteed by granting businesses a right to deduct input VAT. For businesses that are VAT registered in the EU member state where the input VAT is paid, the right to deduct input VAT is exercised via their VAT return. For businesses that are not VAT registered in the EU member state where the input VAT is paid, the deduction is, in principle, granted through a refund procedure.

\textsuperscript{46}ECJ Case C-41/09 of Oct. 5, 2010, \textit{European Commission v. Kingdom of the Netherlands}.
\textsuperscript{48}Lang, Melz and Kristofferson, IBFD, \textit{Value Added Tax and Direct Taxation}, 2009, p. 84.
To exercise the right to deduction, a business must be able to prove that it incurred the VAT for business purposes and that it has a purchase invoice or the necessary import documentation.

At first sight, the right to deduct input VAT meets all OECD criteria. But EU member states can, to an extent, restrict the deductibility of VAT on expenditures such as those for entertainment or luxuries.\(^49\) And some tax authorities take a formalistic approach in granting the input VAT deduction. They refuse the deduction if required invoice details are missing, even if the business can prove the purchase took place so that the transaction cannot be said to be fraudulent. These restrictions and the form-over-substance approach often taken by tax authorities do not meet the benchmarks of neutrality, simplicity, and certainty.

**Compliance Requirements**

The compliance requirements are broadly defined in the VAT directive. The details are mostly left to the member states, such as:

- How can a VAT registration be obtained?
- What is the required content of a VAT return?
- What are the deadlines for filing VAT returns?
- When are payments due?
- How would the government refund VAT when input exceeds output due?

All these rules vary among member states. The complexity increases the cost of compliance and hurts businesses regardless of a firm’s size and how many member states it operates in. Table 8 shows how long it takes a case-study company to prepare and file a VAT return and make the related payment in different member states.\(^50\)

The VAT directive includes no common rules for statutes of limitation, audits, investigations, and enforcement measures in

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Table 7. The Time to Comply With VAT for Economies in the EU, Excluding Malta
(Prepare/File VAT Return and Pay VAT Due, If Any)

<table>
<thead>
<tr>
<th>EU Economies</th>
<th>Hours to comply</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finland</td>
<td>50</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>200</td>
</tr>
<tr>
<td>France</td>
<td>250</td>
</tr>
<tr>
<td>Estonia</td>
<td>300</td>
</tr>
<tr>
<td>Ireland</td>
<td>350</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>200</td>
</tr>
<tr>
<td>Italy</td>
<td>250</td>
</tr>
<tr>
<td>Sweden</td>
<td>300</td>
</tr>
<tr>
<td>Cyprus</td>
<td>350</td>
</tr>
<tr>
<td>Denmark</td>
<td>200</td>
</tr>
<tr>
<td>Germany</td>
<td>250</td>
</tr>
<tr>
<td>Lithuania</td>
<td>300</td>
</tr>
<tr>
<td>Netherlands</td>
<td>350</td>
</tr>
<tr>
<td>Romania</td>
<td>200</td>
</tr>
<tr>
<td>Austria</td>
<td>250</td>
</tr>
<tr>
<td>Slovenia</td>
<td>300</td>
</tr>
<tr>
<td>Latvia</td>
<td>350</td>
</tr>
<tr>
<td>Greece</td>
<td>200</td>
</tr>
<tr>
<td>Spain</td>
<td>250</td>
</tr>
<tr>
<td>Hungary</td>
<td>300</td>
</tr>
<tr>
<td>Belgium</td>
<td>350</td>
</tr>
<tr>
<td>Portugal</td>
<td>200</td>
</tr>
<tr>
<td>Poland</td>
<td>250</td>
</tr>
<tr>
<td>Slovak Republic</td>
<td>300</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>350</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>200</td>
</tr>
</tbody>
</table>

Source: PwC — “Paying taxes 2010.”
the case of noncompliance involving penalties and criminal sanctions. Those are left to the discretion of the member states. Invoicing rules are an exception, as they have been defined at the EU level. Regarding the contents of an invoice, the VAT directive requires minimum details for all member states. The EU has made significant progress by implementing the two invoicing directives.\textsuperscript{51} It’s expected that by January 1, 2013,\textsuperscript{52} e-invoicing and e-archiving rules will be simplified to allow further cost reduction for businesses.

A harmonized “compliance” model within the EU would provide for the best practices of efficiency and effectiveness and considerably reduce compliance costs.

Conclusion

The revenue balance is shifting to VAT, both in the EU and globally. When introducing a VAT regime, policymakers should find a balance between the interests of government, businesses (the unpaid tax collectors), and citizens. Also, a VAT design should meet best practice standards. Important lessons can be learned from reviewing the EU VAT system, which has existed for more than 40 years.

The EU VAT system has many strengths and meets best practice standards regarding the definition of taxable person, the scope of application of VAT to all transactions, and the place of taxation. It also results in high tax revenue to governments, but revenue isn’t maximized.

The EU VAT is applied on too narrow a base. That is mainly due to the exclusion of most activities of governments, their agencies, and many public interest activities (medical care, education, not-for-profits, and financial institutions). Multiple rate structures and nonharmonized compliance and enforcement rules create unnecessary complexity, uncertainty, and inefficiencies. The figure on the next page shows where we believe the EU VAT system fits on the best practice scale.


\textsuperscript{52}For more details, see the PricewaterhouseCoopers publication “Global E-Invoicing and E-Archiving: Increasing Efficiency and Reducing Costs,” https://globalvatonline.pwc.com.
Figure 3. Impact of Design of the VAT/GST Law

Narrow Base
- Narrow definition of taxable person
- Low registration threshold
- Multiple rates
- Many exemptions
- Many zero-rated supplies

Broad Base
- Wide definition of taxable person (including government bodies)
- High registration threshold
- Single rates
- Minimal exemptions
- Minimal zero-rated supplies

Source: PwC research. © 2010 PricewaterhouseCoopers Tax Consultants bcvba. All rights reserved. ‘PricewaterhouseCoopers’ refers to PricewaterhouseCoopers Tax Consultants bcvba in Belgium or, as the context requires, other member firms of PricewaterhouseCoopers International Limited, each of which is a separate and independent legal entity.
The European Commission is working hard to develop a new VAT strategy that harmonizes and simplifies VAT rules while also combating VAT fraud. A green paper on the topic was issued in December 2010. If, based on lessons learned in the EU and other regions, the strategy is directed at moving closer to best practices, that can bring great benefits to governments, businesses, and citizens. However, those benefits must be clearly identified before the 27 EU member states unanimously agree to improve the VAT system.
VAT Lessons From Canada

By Martin A. Sullivan

Newsflash: It is possible in the real world to enact a value added tax that will modernize an aging tax system, promote competitiveness, and reduce a spiraling budget deficit — without unduly burdening low-income families or creating a stealthy “money machine” that finances big government. Make no mistake: A VAT would be immensely unpopular with almost every segment of the public. But responsible liberals and conservatives (that is, those running the government) can support a VAT once they finally realize the alternatives are worse.

Canada’s experience might be a preview of VAT possibilities in the United States. Our neighbor to the north has a European-style VAT, officially known as a goods and services tax. Unofficially, it is called the “go south tax” or the “gouge-and-screw tax.” The federal tax rate is 5 percent. Provinces with more than four-fifths of Canada’s population have — or will soon have — their own VATs that piggyback on the federal GST. Provincial rates are currently between 7 and 8 percent. To reduce the burden on low-income families, there are refundable tax credits as well as exemptions for necessities.

The Canadian story has four parts:

(1) Conservatives introduced the VAT. In September 1984 Brian Mulroney united Canada’s fractious conservatives and gave them their first general election victory in 13 years. It was the largest parliamentary majority in Canadian history. A priority for the new prime minister was to repair Canada’s relationship with the United States. Six months after the election, he was singing “When Irish Eyes Are Smiling” with Ronald Reagan on a Quebec City stage. Mulroney shared the Gipper’s views on national security and free trade, and the two became fast friends. Running on his record of support for the North American Free Trade Agreement, in 1988 Mulroney led conservatives to their first national reelection victory in a century.
Concerned about industry’s competitiveness and an unyielding budget deficit, Mulroney proposed a 9 percent VAT on goods and services in 1989. The tax would replace the clunky old 13.5 percent tax imposed on sales by manufacturers. The Mulroney proposal sparked instant controversy and met a tidal wave of public opposition. But with party discipline unlike that in the United States, Mulroney got approval in the House of Commons. (The one dissenting conservative was thrown out of the party.) Passage in the liberal-dominated Senate was secured only after Mulroney used an obscure constitutional provision that allowed him to appoint eight senators on a temporary basis. The 7 percent VAT finally passed after a two-month filibuster by Liberals. It went into effect on January 1, 1991.

Contributing to the Canadian VAT’s unpopularity was its visibility: Tax and before-tax prices are separately stated on receipts and invoices. Because of the VAT as well as a number of scandals, Mulroney’s popularity plummeted. He resigned in June 1993. The election in September 1993 was a bloodbath for conservatives. Mulroney’s Progressive Conservative Party, which had won 211 seats in 1984 and 169 seats in 1988, was obliterated in 1993, winning a mere two seats in the House of Commons. It would be 12 years before the conservatives returned to power in the form of the new Conservative Party under the leadership of current Prime Minister Stephen Harper.

(2) Liberals broke their promise to replace the VAT. Before the 1993 election, the Liberal Party detailed its policy proposals in a 100-plus-page “Red Book” (considered by some to be a precursor of sorts to Newt Gingrich’s 1994 Contract With America). In it the party vowed to replace Canada’s hated VAT: “A Liberal government will replace the GST with a system that generates equivalent revenues, is fairer to consumers and to small business, minimizes disruption to small business, and promotes federal-provincial fiscal co-operation and harmonization.” Liberal Jean Chrétien became the new prime minister in November 1993. He made numerous unambiguous announcements of his intentions. For example, on May 2, 1994, he said about the GST: “We hate it and we will kill it.”

The Chrétien promise turned out to have all the staying power of George H.W. Bush’s 1988 “read my lips” pledge. After much
study, the Liberal government decided to keep the tax. On April 23, 1996, Finance Minister Paul Martin (who would be prime minister from 2003 through 2005) made it explicit: “We made a mistake. It was an honest mistake. It was a mistake in thinking we could bring in a completely different tax without undue economic distortion and within a reasonable time period.”

(3) Provinces harmonized with the federal VAT. Canada’s national VAT has a variety of implications for provincial consumption taxes.

- **Quebec.** Because of its strong separatist movement, Quebec often has unique arrangements with the federal government. When the GST was introduced, Quebec negotiated a deal in which its provincial government would administer and collect the federal VAT along with its own VAT (known as the QST, the Quebec sales tax). The QST rate, currently 7.5 percent, is scheduled to increase to 8.5 percent in January 2011 and to 9.5 percent in January 2012.

- **Atlantic provinces, Ontario, and British Columbia.** In 1997, at the urging of the Liberal government, three of Canada’s Atlantic provinces — Nova Scotia, New Brunswick, and Newfoundland — dropped their own sales taxes and replaced them with a single federal-provincial harmonized sales tax collected by the federal government. The current HST rate in these provinces is 12 percent (5 percent federal and 7 percent provincial). Nova Scotia has announced its intention to raise the rate to 14 percent in 2010. Both Ontario and British Columbia replaced their provincial sales tax with an HST effective July 1, 2010. The rate in Ontario, Canada’s most populous province, is 13 percent (a 5 percent federal portion and an 8 percent provincial portion), and British Columbia’s is 12 percent (5 percent federal and 7 percent provincial).

- **Other provinces.** Traditional retail sales taxes remain in Prince Edward Island, Manitoba, and Saskatchewan. Neither Alberta nor any of Canada’s three territories have their own retail sales taxes or VATs.

As a result of changes in Ontario and British Columbia, approximately 85 percent of Canada’s population will have provincial VATs in 2010.
(4) Conservatives reduced the VAT rate. As federal budget deficits changed to surpluses, Harper became prime minister in January of 2006. During his election campaign, Harper vowed to reduce the VAT rate. He followed through on his promise and reduced the rate from 7 percent to 6 percent in July 2006 and to 5 percent in January 2008. In the October 2008 national elections, Conservatives increased their seats in Parliament from 124 to 143 (out of 308).

**Lessons**

*Burden on the poor.* A major objection to a VAT is its potentially disproportionate burden on low-income households. The VAT is a tax on consumption, and consumption as a percentage of income is generally larger for the poor than the rich. Around the world, this problem is usually addressed by exempting (more technically, by zero rating) necessities. For reasons of simplicity and efficiency, experts strongly prefer the use of refundable income tax credits to offset the burden of a consumption tax. Canada uses both zero rating and income tax credits. There are lots of technical issues about exactly how to measure the degree of regressivity of any VAT plan. The central point here is that the Canadian experience shows that the tools are available to relieve as much burden on the poor as necessary.

*Conflict with the states.* The Canadian provinces have harmonized their sales tax with the federal VAT at their own pace and on their own terms. The obvious advantages of harmonization are simplification for taxpayers, reduced administrative costs, and the economic efficiency and competitive benefits of a broader tax base. In general, business strongly supports harmonization. But provinces have exercised their option to diverge from federal law where the inherent advantages of harmonization were outweighed by political considerations and cultural differences. Canadian provinces may have a different tax base than the federal tax, different rates from each other, or different administration, or they may not impose any provincial VAT at all. If the U.S. government adopted a VAT, the states would have an economically attractive option not currently available to them.

*Stealth tax/money machine.* Most conservatives argue that a VAT would be a powerful and hidden revenue generator that would
result in higher overall taxes and allow a large increase in the size of government. Here is some typical commentary:

Handing Washington a whole new source of revenue would be akin to giving keys to a liquor store to a bunch of alcoholics. It would permanently slow economic growth and lower the standard of living for generations of Americans to come. It would also be a bottomless well for Congress to go back to each time it wants more of our money to pay for new spending programs. Once a VAT is in place, turning back the growth of government will be next to impossible, and the efforts of President Obama and his congressional allies to recast the nation into a full state of dependency on Washington will be complete. [Daniel J. Mitchell, “VAT Attack,” New York Post, Apr. 8, 2010.]

Most of its burden is borne by consumers. They file no VAT returns, so its stealthiness delights the political class, which can increase it in small, barely noticed increments, with every percentage point yielding another $100 billion. [George Will, “The Perils of the Value-Added Tax,” The Washington Post, Apr. 17, 2010.]

A VAT is likened to a “national sales tax,” so once in place, most Americans would barely notice it — just as they barely notice state and local sales taxes. [Robert Samuelson, The Washington Post, Apr. 21, 2010.]

And then there is the amendment offered by Republican Sen. John McCain of Arizona, approved by the Senate on April 15. The text in its entirety reads:

It is the sense of the Senate that the Value Added Tax is a massive tax increase that will cripple families on fixed income and only further push back America’s economic recovery and the Senate opposes a Value Added Tax.

Canada’s experience is exactly the opposite of what these quotations forecast for the United States.

In Canada the VAT is highly visible. As already noted, Canadians pay VAT with each purchase, and the amount they pay is shown at each visit to the checkout counter. In fact, by replacing the truly hidden manufacturing sales tax, the Canadian VAT
VAT Has Not Been a 'Money Machine' for Canada

<table>
<thead>
<tr>
<th>Year</th>
<th>Provincial Revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td>1986-1987</td>
<td>13.5</td>
</tr>
<tr>
<td>1987-1988</td>
<td>14.1</td>
</tr>
<tr>
<td>1988-1989</td>
<td>14.3</td>
</tr>
<tr>
<td>1989-1990</td>
<td>14.5</td>
</tr>
<tr>
<td>1990-1991</td>
<td>14.8</td>
</tr>
<tr>
<td>1992-1993</td>
<td>15.0</td>
</tr>
<tr>
<td>1993-1994</td>
<td>15.6</td>
</tr>
<tr>
<td>1994-1995</td>
<td>16.0</td>
</tr>
<tr>
<td>1995-1996</td>
<td>15.8</td>
</tr>
<tr>
<td>1996-1997</td>
<td>14.6</td>
</tr>
<tr>
<td>1997-1998</td>
<td>14.4</td>
</tr>
<tr>
<td>1998-1999</td>
<td>14.7</td>
</tr>
<tr>
<td>1999-2000</td>
<td>14.9</td>
</tr>
<tr>
<td>2000-2001</td>
<td>15.0</td>
</tr>
<tr>
<td>2001-2002</td>
<td>15.6</td>
</tr>
<tr>
<td>2002-2003</td>
<td>16.0</td>
</tr>
<tr>
<td>2003-2004</td>
<td>15.8</td>
</tr>
<tr>
<td>2004-2005</td>
<td>15.3</td>
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<tr>
<td>2005-2006</td>
<td>15.1</td>
</tr>
<tr>
<td>2006-2007</td>
<td>14.4</td>
</tr>
<tr>
<td>2007-2008</td>
<td>14.1</td>
</tr>
<tr>
<td>2008-2009</td>
<td>15.0</td>
</tr>
</tbody>
</table>

made taxation more transparent. Canadians are reminded of the VAT not only when they are shopping, but also when they get their news, as the tax is frequently the subject of high-profile political debates at both the federal and provincial level. The VAT’s visibility is probably the main reason Harper proposed reducing the VAT rate (and not income tax rates) during the 2004 election.

As you can see from the figure, the introduction of a VAT in Canada has not led to any burst in overall taxation. The figure shows that federal revenues as a share of GDP and total (federal and provincial) revenue as a share of GDP have remained fairly steady since the introduction of a VAT in 1991. In the four years before introduction of the VAT, federal revenues averaged 17.3 percent of GDP. In the four years after, they averaged 17.6 percent of GDP. From 2000 through 2008, federal revenues averaged 16.3 percent of GDP.

**Challenges**

The Canadian experience confirms every politician’s instinct that supporting a VAT is career suicide. For a VAT to become law in the United States, we need a more enlightened public or more courage from our politicians. It is hard to be optimistic on either of those counts.

But, as much as they would like to, politicians cannot always give the people what they want — especially when resources are scarce. Economics and arithmetic do frame debates, and if you do the economics and the arithmetic, the case for a VAT is compelling. The alternatives are drastic cuts in government spending, higher taxes on corporate and personal income, or spiraling government debt. The first is unrealistic. The second is a poor fit for an increasingly global economy. The third is a journey into an abyss of unknown depths.

It is easy to oppose the VAT with slogans and sound bites. The message is political candy: We want to prevent tax hikes. But this is a long-term debate. Ultimately for the message in the rhetoric to survive, it must be retrofitted into rational analysis. And that means a detailed budget plan that tames the deficit without a VAT. That’s the unenviable task conservative economists now face. In the meantime, don’t believe the doomsday rhetoric. Look
at the VAT with an open mind, and use Canada’s experience as a starting point for what an American VAT might look like.
How Australia Got a VAT

By Susan C. Morse

Susan C. Morse is an associate professor at the University of California Hastings College of the Law. This project was supported by a Hackworth Grant from the Markkula Center for Applied Ethics at Santa Clara University. Many thanks to Neil Warren and Richard Eccleston for helpful discussion and review; to participants in the April 2010 Northern California Tax Roundtable and to Chris Evans, Kathryn James, Rick Krever, and Dale Pinto for useful comments and references; and to Erin Phillips and Gadi Zohar for able research assistance.

Australians, like Canadians and New Zealanders, call their VAT a goods and services tax, or GST, but their GST fits the VAT mold: it is a credit-invoice method, destination-based consumption tax with fairly limited tax base exclusions.1 Although all OECD countries aside from the United States have value-added taxes, external pressures like those resulting from preconditions for European Union membership2 or for financial support from organizations such as the World Bank or International Monetary Fund3 have played a role in many countries’ VAT enactment

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1See Liam Ebrill, Michael Keen, Jean-Paul Bodin & Victoria Summers, The Modern VAT 2 (2001) (defining a VAT). This paper uses the term tax base “exclusion” to mean “a situation in which the rate of tax applied to sales is zero, though credit is still given for taxes paid on inputs” which is called “GST-free” in Australia and “zero-rated” elsewhere. This contrasts with “exemption” or, in Australia, “input-taxed” treatment, which means a situation in which “tax is . . . not charged on outputs, [but] tax paid on inputs cannot be reclaimed.” Id. at 3.

2See European Economic Community First VAT Directive (Apr. 11, 1967) (“Member States shall replace their present system of turnover taxes by the common system of value added tax . . .”).

stories. In other cases, an unusual exercise of executive authority or extreme fiscal crisis helped make it happen.

Australia is interesting because its GST came about through a more conventional political process. John Howard, the conservative Liberal National Party coalition (LNP Coalition) Australian prime minister from 1996 to 2007, made the GST a central plank in his policy platform in the 1998 national election and oversaw its enactment in 2000. Its implementation is the most recent in the OECD and included a federal solution. And the GST-enacting LNP Coalition government retained power for seven years after the legislation passed.

(In Australia, two major political blocs dominate politics at the national level. The Liberal and National parties in practice are a permanent center-right coalition between the Liberal Party, which focuses more on urban interests, and the National Party,

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7See David Adams, Staying On, in Howard’s Fourth Government 263, 282 (Chris Aulich & Roger Wettenhall, eds., 2008) (noting Howard’s mostly superior performance in public opinion polls until he “met his electoral match” in Labor’s Kevin Rudd in 2007). By some measures, the GST is popular too. In an informal online poll conducted by the Sydney Morning Herald in June 2010, 84 percent of the 3432 recipients responded to the question “Do you think the GST has been beneficial to Australia’s economy?” with the answer “Yes, it simplified the tax system across the country” rather than “No, it made the cost of many goods and services prohibitive.” See Poll, available at http://www.smh.com.au/opinion/politics/if-its-tax-reform-you-want-try-the-gst-20100622-yvg.html#comments (last visited June 25, 2010). However, the Australian Democrats, some of whom supported a GST with improved distributive qualities, thus permitting the reform package to pass the Senate, were “decimated” in subsequent elections. See Kathryn James, An Examination of Convergence and Resistance in Global Tax Reform Trends, 11 Comp. Tax L. & Culture 475, 479 (2010).
which draws its base from rural regions.\textsuperscript{8} The LNP Coalition maps most closely onto the Republican Party in the United States, and the Labor Party corresponds most closely to the U.S. Democratic Party.\textsuperscript{9}

This paper discusses four components of the Australian story:

1. framing the GST as a relatively efficient tax;
2. building an interest group coalition;
3. emphasizing efficiency while addressing regressivity in the political and legislative process; and
4. the use of a side payment to solve the challenge of coordination with the six states and two territories, or, collectively, the states.

A Relatively Efficient Tax

In 1972, LNP Coalition Prime Minister William McMahon called for a study of Australia’s tax system. The 1975 Asprey Report resulted.\textsuperscript{10} In its early sections the report considered the ideal tax system without reference to existing particulars of the Australian tax law. Based on the principles of “equity, simplicity and efficiency”\textsuperscript{11} it compared the two extremes of “a single broad-based tax on goods and services” and an income and capital tax system. It called the consumption tax alternative superior on simplicity and efficiency grounds, but inferior on equity grounds. This draws on the empirical consensus that consumers bear the burden of a well-designed VAT,\textsuperscript{12} and the

\begin{footnotesize}
\begin{itemize}
\item \textsuperscript{8} See \url{http://lnp.org.au/} (setting out a joint platform) (last visited July 27, 2010).
\item \textsuperscript{9} See Judith Brett, Australian Liberals and the Moral Middle Class From Alfred Deakin to John Howard 176-77 (2003) (noting Liberal’s relative commitment to “individualism” and Labor’s relative commitment to “collectivism”).
\item \textsuperscript{10} See James, supra note 6, at 327 (noting that the Asprey Report was the first official consumption tax recommendation in Australia).
\item \textsuperscript{11} K.W. Asprey & Ross Waite Parsons, Australia Commonwealth Taxation Review Committee, Full Report ¶ 3.27 (1975).
\item \textsuperscript{12} See, e.g., Charles E. McLure, The Value-Added Tax: Key to Deficit Reduction? 45-46 (1987) (noting that in Denmark and Norway, where a VAT did not replace other taxes and where therefore data were cleaner, consumer prices rose upon enactment); Michael Smart & Richard M. Bird, The Economic Incidence of Replacing a Retail Sales Tax by a Value-Added Tax: Evidence from Canadian Experience 35 Can. Pub. Pol’y 85, 95 (2009) (concluding based on event study following some Canadian provinces’ replacement of retail sales taxes with value-added taxes, that changes in taxes related to the transition were fully shifted (and perhaps in some cases over shifted) to consumers).
\end{itemize}
\end{footnotesize}
related view that a VAT is relatively efficient in a global economy if the location of consumption is relatively inelastic.13

The report recommended starting with a consumption tax and solving the problem of regressivity with “an income tax and a capital tax with high minimum exemption limits that effectively confined their impact to the upper end of the scales of income and wealth” plus “grants...to deal with vertical and horizontal equity at the other end.”14 In particular, it expressed a strong preference for a VAT relative to the existing cascading and differential Wholesale Sales Tax (WST), a multirate consumption tax paid by businesses through the wholesale level on sales of most goods, but not services.15 The suggested approach reflects a certain throw-up-the-hands approach to distributive justice:16 the authors conceded the persuasiveness of the distributive case at either end of the wealth or income spectrum, but considered that in the “middle band” covering most Australians, the population “will accept as fair and convenient an approximately proportional taxation system.”17

13See, e.g., James R. Hines Jr. & Lawrence H. Summers, How Globalization Affects Tax Design, 23 Tax Pol'y & Econ. 123, 126 (2009) (“In a globalizing world, expenditures have relatively clear geographic associations, reducing the potential for international tax avoidance and generally reducing the mobility of the tax base compared to alternatives such as personal income taxes or source-based business taxes such as the corporate income tax.”). The point about globalization is distinguishable from, but not inconsistent with, the optimal taxation idea that a consumption tax is preferable to an income tax because it avoids taxing capital income and thus avoids distorting taxpayers’ choice between present and future consumption. See, e.g., Joseph Bankman & David A. Weisbach, “The Superiority of an Ideal Consumption Tax Over an Ideal Income Tax,” 58 Stan. L. Rev. 1413, 1422-30 (2006) (discussing double distortion argument and possibility of addressing redistributive concerns through the consumption tax structure). There are also political economy considerations relevant to the use of a VAT in addition to an income tax base. See, e.g., Neil Brooks, An Overview of the Role of the VAT, Fundamental Tax Reform, and a Defence of the Income Tax 597, 607-08, in GST in Retrospect and Prospect, supra note 5 (raising the possibility that the “[h]aving lower rates of tax and two tax bases will lead to less political pressure for special treatment”).

14See Asprey & Parsons, supra note 11, at ¶¶ 5.2-5.7.

15See id. at ¶¶ 27.27 & 27.28 (identifying WST disadvantages of favoring goods with a relatively large “proportion of...value... added at the retail level” and impracticality of taxing services at the wholesale level); ¶¶ 27.31, 27.38 & 27.39 (recommending a VAT as the best broad-based consumption tax option); Neil Warren, Tax Facts Fiction and Reform 32, 35 tbl. 2.2 (2004) (describing narrow base and multiple rate structure of WST).

16Cf. Eccleston, supra note 6, at 59 (noting that the Asprey committee did not receive political input relating to the “normative objectives of tax reform”).

17Asprey & Parsons, supra note 11, at ¶¶ 4.37 & 4.38.
The Asprey Report received support from both the LNP Coalition and Labor. The Labor government in office in 1975 when the report was released did little with it, but an unsuccessful consumption tax proposal surfaced in 1980-1981 under the LNP Coalition Fraser government, in which Howard was the Treasurer. Then, the reformist Hawke Labor government presented a retail sales tax proposal as the leading option in a comprehensive tax reform package draft prepared for a prominent tax summit with stakeholder groups in 1985. But base-broadening fundamental income tax reform prevailed instead.

In 1991 the LNP Coalition attempted to win leadership of the government from the Labor party with a comprehensive economic reform platform called “Fightback!”, which advocated a 15 percent “food in” GST and outlined a comprehensive package of offsetting personal income tax cuts and compensation measures including family allowance and pension and welfare increases. Fightback! had business support, but the LNP Coalition faced significant political pressure from “politically savvy yet fiscally irresponsible” promises made by Paul Keating, the Labor Prime Minister, to match Fightback!’s income tax cuts without imposing a GST. In 1992, the LNP Coalition revised Fightback! by removing food from the base and proposing smaller reductions to the

19 See Eccleston, supra note 6, at 69 (describing Howard’s “open commitment to broadening Australia’s consumption tax base in order to provide income tax relief”); James, supra note 6, at 330 (recounting several Howard efforts to push consumption tax reform in the Fraser government).
20 The Hawke government’s proposal for a 12.5 percent retail sales tax was aired at a stakeholder summit promised in the 1984 election and was championed by Paul Keating, then the Treasurer. At the summit, a central business group refused to support it reportedly in part because of accompanying proposals to tax fringe benefits, while union and welfare groups refused to accept it based on regressivity and inflation problems. See Eccleston, supra note 6, at 90-91; James, supra note 6, at 334-35 (noting business support for a consumption tax but opposition to any direct tax increases and welfare group opposition to consumption tax). The 1980s tax reform materially changed the Australian income tax, including by enacting a capital gains tax and fringe benefits tax, thus significantly expanding the range of income subject to tax. See Richard Vann, Australia, 3, 7 in Comparative Income Taxation: A Structural Analysis (Hugh J. Ault and Brian J. Arnold, eds.) (3d ed. 2010).
21 See Eccleston, supra note 6, at 104 (describing Fightback! I).
22 See James, supra note 6, at 337.
top income tax rates to make up lost revenue. But the LNP Coalition still lost — a surprising result given the serious economic recession presided over by the Keating government.

After the election, the Keating government’s 1993-1994 budget quickly made it clear that the promised income tax cuts would be rolled back and a budget deficit offset by “a $3 billion increase in the WST tax and alcohol, fuel and tobacco excises” — taxes which were more regressive and less efficient than the GST proposed by the LNP Coalition in the election. Welfare groups’ realization, in the aftermath of the 1993-1994 budget, of the possibility of even higher, less efficient taxes or inadequate funding for social welfare programs in the absence of consumption tax reform has been called an example of “active learning by key interest groups in the Australian tax policy process.”

Even though neither party mustered a successful consumption policy proposal in the 20 years following the release of the Asprey Report, a common analytical framework had taken root. The VAT option was understood as a better tax from an efficiency perspective, certainly compared to the WST and in some views compared to the personal income tax, but a worse tax from a regressivity perspective. “Efficiency” meant at least two different things: nondistortionary to trade and economic productivity, and therefore better for business competitiveness; and also less susceptible to tax planning and politically motivated base erosion, and therefore better for ensuring revenue stability for social

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23See Eccleston, supra note 6, at 115-16 (describing Fightback! II).
24Sources refer to an “unloseable election” given “a Prime Minister who was responsible for the worst recession since the war.” Brett, supra note 9, at 182; see also Eccleston, supra note 4, at 78 (noting Labor’s “superior political strategy and leadership”); James, supra note 6, at 336 (noting 17 percent interest rates, 11 percent unemployment and “record levels of foreign debt”).
25See Eccleston, supra note 6, at 123-24 (describing Keating tax increases once in office). The failure of the 1985 reforms to achieve revenue neutrality contributed to the deficit situation. See James, supra note 6, at 335.
27See Eccleston, supra note 6, at 48 (noting WST’s narrow base, its exclusion of services, its taxation of business inputs, its multiple rate structure and its complex exemption rules); Warren, supra note 15, at 35 tbl. 2.2 (showing different rates under WST); 37-38 & fig. 2.1 (showing that the GST’s replacement of the WST reversed the trend of declining consumption tax contribution to tax revenue).
welfare programs. This idea of the GST as an efficient tax with a regressivity problem would frame the ultimately successful effort, powered by interest groups as well as politicians, to enact a GST over the five years from 1996 to 2000.

Forging an Interest Group Coalition

In 1996, under Howard’s leadership, the LNP Coalition re-claimed the Australian government on a platform that did not include any reference to the GST. Howard emphatically distanced his party from the issue. He replied as follows to a reporter who asked him if he would propose a GST:

Howard: “No, there’s no way that a GST will ever be part of our policy.”

Journalist: “Never ever?”

Howard: “Never ever. It’s dead. It was killed by the voters in the last election.”

Yet in 1998 Howard led his party to victory in a parliamentary election presented as a referendum on the GST.

In the intervening two years, there developed a fascinating interest group discussion about the GST quite independent from government. One main player was the Australian Council of Social Service (ACOSS), the “peak” council of Australia’s “community services and welfare sector.” Another was the Australian Chamber of Commerce and Industry (ACCI), which has “more than a century of history serving the interests of business.” Business groups such as the ACCI supported the GST,

28 See Warren, supra note 15, at 81 (2004) (“The economic case for a GST rests on two main attributes: revenue raising ability and its neutrality properties. Having a broad base, the GST has significant revenue raising potential at relatively low rates and secondly, it has the ability to ensure cross-border trade is free of tax based distortions.”).


30 See id., at 273 (“Well, here it is...here’s the new policy. If you don’t like it you can throw us out,’ and they almost did.”) (quoting treasurer Peter Costello’s recollection of the 1998 election).


32 See http://www.acci.asn.au (last visited June 21, 2010). ACCI collects and disseminates data on business activity, develops and distributes issue papers and various other (Footnote continued on next page.)
and the discussion convinced ACOSS to accept the idea of a GST, subject to appropriate compensation to address regressivity and inflation.33

ACCI appears to have devoted substantial energy to this issue in large part because, consistent with business groups’ support of Fightback!, it believed in the GST as a better tax policy alternative for business, particularly compared to the WST. ACCI’s view, like the LNP Coalition’s, highlighted the competitive economic efficiency of a GST for a small global economy. ACCI argued that the GST would affect business decisions and resource allocation less than other alternatives, including the WST.34

Why did ACOSS come to the table? Social welfare leaders recognized that the excise and WST increases adopted by the Keating Labor government in 1993-94 were even more regressive than a GST.35 And concerns about revenue security for social welfare programs, developed over years of observing budget policy and communicating with Labor and LNP Coalition governments, also appear to have motivated ACOSS participation.36

Personal willingness to engage in genuine discussion of the issues must also provide part of the answer. One commentator writes simply that “Graeme Samuel, president of [ACCI], expressed support for the introduction of the GST and persuaded...
Robert Fitzgerald, president of [ACOSS], to support it.”37 Another observes that “key business and welfare leaders such as Graeme Samuel and Michael Raper [later president of ACOSS] actively played the role of policy entrepreneurs mobilizing a cross-class coalition for tax reform.”38

On October 3-5, 1996, ACOSS and ACCI held a Tax Reform Summit. “Parliamentarians and public servants were not invited.”39 Following the summit, a Tax Reform Forum that the two groups formed went on to hold tax reform roundtables in the subsequent year. These efforts provided opportunities for both the business interests and the welfare interests to articulate their concerns and priorities. The joint press release that emerged from the summit, for example, articulated seven tax reform criteria.40 It implicitly expressed support for a broad-based consumption tax by recommending “[b]roadening the tax base by removing unjustifiable gaps, biases and distortions . . . in each of the following areas: income, assets and consumption” and “the integration, extension or abolition of existing narrowly-based taxes.”41 It also called for increased progressivity, simplification and integration of national and state taxes, as well as a sustainable plan to raise adequate government revenue.42 The discussions reportedly generated policy benchmarks including the belief that a 15 percent rate was too high to permit adequate compensation.43

ACCI and ACOSS continued to articulate different agendas following their cooperative meetings. ACCI emphasized the ways in which the 1996 summit and roundtable discussions supported consumption tax reform. In a policy paper released about a year after the 1996 summit it said that “productive

37 Id. at 149.
38 Eccleston, supra note 4, at 83.
40 These were equity, efficiency, adequacy, simplicity, transparency, cost minimization and minimal incentive for tax avoidance. See Joint Statement from Graeme Samuel, President, ACCI and Robert Fitzgerald, President, ACOSS (Oct. 5, 1996) (hereinafter Joint ACCI-ACOSS statement).
41 Id.
42 See id.
43 See Harrison & Stretten, supra note 39.
business plays a vital role in creating wealth, tax revenue and employment, and that the tax system [particularly the WST and high individual income tax rates] is limiting productivity.”44 It wrote that ACOSS “recognise[d]” the productivity issue.45

Perhaps so, but ACOSS had not conceded its concerns over the regressivity of a consumption tax, including the regressivity of inflationary effects and the importance of income tax reform. In a contemporaneous paper ACOSS stated that it had “neither advocated nor rejected a GST. . . . The impact of any GST proposal would be determined not only by its precise nature (such as the rate and coverage) but also by the total package of which it is part.”46 AC OSS expected part of that package to consist of fully offsetting cuts in other consumption taxes, in addition to inflation-offsetting increases in social security payments. Its position was that any income tax cuts should be funded by base-broadening measures applicable to wealthy individuals and businesses.47

Addressing Regressivity

Despite a continued divergence of views after the 1996 summit, interest group agreement on a policy framework provided Howard with a substantive starting point and political cover for making GST reform his issue again.48 Economic growth and a

45 See id.
46 ACOSS, Tax Reform Pack (September 1997).
47 Davidson, supra note 33 (noting ACOSS’s emphasis on income tax base broadening as part of the package, which was not in ANTS, though ANTS did include a few items such as taxing trusts like corporations).
48 Howard’s earlier support for consumption tax reform provides one explanation for his support of the GST as good policy, see supra note 19, but the story does not appear to be that of a strong executive spending his political capital. Howard may have had little to lose in choosing the GST as the centerpiece of his platform. According to one account his popularity rating was 20 percent in 1997 while the GST’s was 59 percent. See Eccleston, supra note 18, at 299. See also James, supra note 6, at 341 (“Sensing the mood for change, Howard hoped to use his career-long commitment to broad-based consumption tax reform to salvage his declining credibility on a range of economic, political and social issues.”).
strong fiscal position also helped pave the way to reform. In August 1998, Treasury released the white paper titled “A New Tax System” and generally known as ANTS, which included the 10 percent GST that was largely enacted in 1999. Tax reform was the central policy question in the October 1998 parliamentary election, a narrow LNP Coalition success. After the election, the LNP Coalition controlled the House of Representatives but not the Senate, where it was a few votes short of the number necessary to pass the tax legislation.

ANTS emphasized the capacity of the GST to stimulate economic growth. In particular, ANTS noted Australia’s status as a relatively small open economy and the discriminatory pricing problems presented by the cascading and unevenly applied WST to Australian exporters and producers of goods for domestic markets in which importers also competed. The public relations and advertising efforts mounted by the LNP Coalition and

49See James, supra note 6, at 342 (noting the relatively good state of the Australian economy).

50ANTS also included other items such as an overhaul of the business tax payment system which instituted uniform taxpayer numbers, monthly or quarterly payments and a single tax return used for different taxes owed regularly by businesses. See Tax Reform, Not a New Tax a New Tax System: the Howard Government’s Plan for a New Tax System 133-46 (Aug. 1998) (hereinafter “ANTS”); Warren, supra note 15, at 17 (describing tax administration reforms).

51See Tom Allard, Democrat Deal Clears Way of Tax Inquiry, Sydney Morning Herald, Nov. 25, 1998, at 5 (reporting the necessity of either Democrat or independent support for the GST measure in the Senate).

52For example, of the 14 reasons offered as to “[w]hy a new tax system is a clear national priority for Australia” in ANTS, 8 are best described as economic reasons. The document argues, for example, that the tax system should “reward growth and employment” and “avoid exemptions and loopholes that distort investment decisions and consumer choice.” Three of the 14 statements make general assertions about the outdated state of the Australian tax system, one mentions the federalism problem of “revenue security” for the states and territories, and two focus on simplicity and/or administrability. In addition, two statements mentioned the goal of fairness in connection with other stated priorities. ANTS, supra note 50, at 4-5. A large literature considers GST administration and compliance. See, e.g., Cedric Sandford, Minimising the Compliance Costs of a GST, in Tax Administration: Facing the Challenges of the Future (Chris Evans & Abe Greenbaum eds. 1998). For a view challenging the assertion that the GST achieved massive simplification and tax administration improvements, see Stewart Karlinsky, Dale Pinto & Jeff Pope, “Top 10 Myths of a Consumption Tax System,” Tax Notes, July 25, 2005, at 453.

53See ANTS, supra note 50, at 7-8 (“Australia’s exports and import-competing goods and services have to bear the burden of wholesale sales taxes which cascade throughout the production and value-adding processes, while no such burden is applied to the traded goods and services sectors of our competitors. . . . The choice of business (Footnote continued on next page.)
Howard’s government also reflected its belief in the competitive efficiency of the GST, though at least some communications also permitted the interpretation that ANTS would provide the benefit of greater efficiency as social welfare groups saw it — in other words, greater revenue-raising efficiency through a broader, more secure and better administered tax base.

Almost two years elapsed between the release of ANTS in August 1998 and the entry into force of the negotiated GST tax package on July 1, 2000. That time saw three successive public relations challenges: to win the October 1998 parliamentary election on a platform dominated by the GST issue; to support a legislative compromise resulting in GST enactment in June 1999; and to smooth the public acceptance of the GST in advance of its implementation in 2000. The legislative negotiations certainly involved considerable detail, and the outreach and educational programs designed to enable taxpayers to comply with the new law deployed familiar tax administration tactics, including public rulings, fact sheets, Web-based advice and in-person “advisory visits.”

But perhaps the most striking aspect of the public relations effort was the Howard government’s ability to package its complex tax reform plan in a simple, aspirational, and somewhat ambiguous efficiency concept. Of the September 1998 “launch” of the LNP Coalition election platform, one commentator writes:

Howard led with the tax package, asking voters to see the national interest ahead of personal doubts and fears. This reflected a recognition that the detail of the package was

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structures and investment is all too often determined by variations in taxation treatment rather than by the underlying profitability of the investment.”)

54See Ross Peake, Senate Approves GST, Finally, Canberra Times, June 29, 1999, at A3 (reporting passage of GST on June 28, 1999).

55One commentator put the total cost of education and advertising in connection with the GST at about AUD 350 million and the cost of the “chains” campaign at AUD 46 million. See Ross Gittins, Beware the Chain Reaction, Sydney Morning Herald, June 21, 2000, at 21.

56Michael D’Ascenzo, Commissioner of Taxation, Australian Taxation Office, Australia’s Approach to GST Administration, Speech Before Twenty Years of GST: The Best Path Forward Conference (Nov. 16-18, 2006). See also, e.g., Benjamin Haslem, Tax Office Draws GST Line Through Food, The Australian, June 15, 2000, at 1 (reporting release of “500-item” “definitive GST food guide”).
now damaged goods. The policy was now being sold as a test of political courage and forward thinking.  

Another commentator writes that “[s]ensing the mood for change, Howard hoped to use his career-long commitment to broad-based consumption tax reform to salvage his declining credibility on a range of economic, political and social issues.”  

The 2000 “Chains” advertising campaign also managed to transcend detail. It had a slogan: “Tax Reform: Because We Shouldn’t Hold Australia Back”; a song, the licensed Joe Cocker number, “Unchain my Heart”; and “emotive image[s]” of “people being freed from hefty chains.” The campaign “sold the concept rather than the details about the tax,” leaving out regressivity and inflation and emphasizing efficiency and simplicity. It received criticism as “feel-good” advertising lacking “hard information,” and the opposition Labor Party objected that taxpayers had inappropriately funded political propaganda. Nevertheless, it appears at least that the campaign was an effective “attention grabbing strategy” — a compliment which few tax administration communication efforts can claim. And it captured the key idea of GST efficiency, however the audience chose to understand the point.

ANTS paid some notice to concerns about regressivity. It proposed to raise approximately AUD 42 billion annually through the 10 percent GST (which contributed the lion’s share, AUD 32 billion), an increase in tobacco excise taxes, some income

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58 See Sally Young, A History of Government Advertising in Australia, in Government Communication in Australia (Sally Young, ed. 2007).
60 Andrew McKenzie, Kiwi Tax Lesson Lost in Telling, The Australian, June 20, 2000, at 22.
61 Cf. Gittins, supra note 55 (stating that the Chains campaign “describe[d] all the nice bits and ignore[d] all the nasty bits”).
63 Benjamin Haslen, Labor’s Reaction is Legal Warning, The Australian, May 29, 2000, at 8.
64 Michael D’Ascenzo speech, supra note 56.
tax base broadening, and administrative improvements. It planned to spend most of the revenue on replacing other indirect taxes: AUD 18 billion on WST repeal; AUD 7 billion for the repeal of state-level business franchise fees functionally similar to excise taxes; and AUD 5 billion on the repeal of inefficient state-level business taxes such as stamp duties, financial transaction taxes and accommodation or “bed” taxes. But it also allocated AUD 12.5 billion to personal income tax cuts, more heavily weighted toward the upper end of the income spectrum than social welfare groups preferred; AUD 2.5 billion to increased and better-designed family welfare payments; and AUD 2 billion to increased payments to pensioners. Government revenue reductions were anticipated at about AUD 5 billion annually.66

The opposition Labor Party adamantly opposed ANTS. But ACOSS — typically Labor’s political ally — instead chose to seek additional offsets to regressivity.67 And the pivotal debate in the Senate with the Australian Democrats featured a similar exercise.68 The Democrats,69 led by Meg Lees, had nine Senators after the 1998 election (though two eventually declined to support the GST measure).70 Lees was willing to negotiate. Her strategy, like the ACOSS approach, was to accept the GST and extract distributive improvements to offset the regressivity of the package, including the regressive impact of the inflation expected to result

66See ANTS, supra note 50, at 34-35, 67, 86-89, 100-04. Figures are given for 2001-2002 and usually rounded to the nearest AUD 1 billion. Various changes to excise taxes other than tobacco were undertaken to maintain the price of taxed goods (such as beer, wine and luxury cars) at the same level. See Warren, supra note 15, at 88-89.


68Cf. James, supra note 6, at 322 (noting that the Australian Senate had “evolved to become a powerful house of review”).

69The Australian Democratic Party has been described as a breakaway party from the LNP Coalition following a 1977 split and professes a “social liberal” philosophy of “free enterprise, justice and compassion governed by independent democratic institutions.” See Åron Paul & Luke Miller, The Third Team: A Brief History of the Australian Democrats After 30 Years 5 (2007) (paraphrasing speech by founder Don Chipp).

70See Ross Peake, Lees Puts Down Party Revolt on GST, Canberra Times, June 21, 1999, at A3 (reporting that the GST had split the Democrats and that two Democratic Senators would vote against the bill).
The Democrats’ achievements in this respect included excluding basic food from the GST base, increasing the compensation paid to pensioners, and decreasing the reduction in personal income tax rates for upper-income taxpayers, as well as reducing certain fuel rebates on environmental grounds.72

A Senate Select Committee played a key part in the effort to evaluate the distributive justice of the tax package.73 Composed of seven members — three from Labor, three from the LNP Coalition, and one Democrat74 — it undertook to evaluate the economic efficiency, inflation and wealth distribution results of the proposed GST reforms. ANTS already included GST-free treatment for health and medical care and services, education, childcare, charitable activities and religious services,75 and, consistent with Democrat priorities, the committee received explicit instructions to consider excluding from the tax base “the necessities of life (such as food, clothing, shelter and essential services).”76

The committee’s work included a modeling exercise led by academic economists, which considered ten different variations...
of the plan. One key finding explained that if the tax plan excluded food from the taxable base, “the estimated [inflation] impact of [the tax package] (2.7 percent) would be cut to 1.6 percent.” The report concluded that “low income households would be the main beneficiaries from the exclusion of food from the GST.” The report also stated a preference for a “the food in/compensation up approach” rather than a “food out/tax up approach” — in other words, for a plan that included food in the GST base and compensated by increasing transfer payments. Targeted grants beat tax base exceptions because they cost less, as no benefits are extended to higher-income taxpayers and administrative costs are lower.

Yet the food exclusion approach prevailed, instead of a more Michael Graetz-style plan that might have traded increased income tax progressivity and transfer payments. There appear to be at least two reasons for this. First, the food exclusion issue had high political salience. One pair of poll questions circulated in May 1999 revealed 40 percent support and 51 percent opposition for a GST without a food exclusion and 52 percent support and 39 percent opposition for a GST with a food exclusion.

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77 See Select Committee Main Report, supra note 74, at §§ 2.22, 2.25. The report was published as Neil Warren, Ann Harding, Martin Robinson, Simon Lambert & Gillian Beer, Distributional Impact of Possible Tax Reform Packages, in Select Committee Main Report, supra note 50, Appendix IV 445-508.

78 The inflation adjustment was less than the anticipated GST rate of 10 percent in part because offsetting reductions in prices resulting from WST repeal were also expected.

79 See Select Committee Main Report, supra note 74, at § 2.48.

80 Id. at §§ 2.56, 2.61.

81 See Warren, supra note 15, at 93 (noting that upper-income households benefited considerably more in absolute dollar terms from the food exemption than lower-income households); see also Hearings of Senate Select Committee on a New Tax System, April 8, 1999, at 2382-83 (“There is enormous consistency from economists that food should be kept in and that compensation is the way to handle that. It is nearer. It is more efficient in economic terms in that sense. . . . [B]ut it is just not fair. We say the price you have to pay is a little uneasiness, a little less of that so-called efficiency around the fringe.”) (testimony of Michael William Raper, President of ACOSS). Cf. Louis Kaplow, The Theory of Taxation and Public Economics 122-148 (2008) (criticizing differential commodity taxation).

82 Michael Graetz, 100 Million Unnecessary Returns (2008) (proposing to offset the regressivity of a VAT by eliminating the personal income tax for families below a high exemption threshold such as annual income of $100,000, subject to developing a different EITC delivery mechanism).

Second, social welfare interests believed that a food exclusion would endure, while compensatory measures in the form of higher transfer payments or personal income tax relief would be more vulnerable to erosion for political economy reasons in the future — as had happened in New Zealand.

As a result of compromises struck with the Senate Democrats, the exclusion of basic food and other smaller additional exclusions from the GST base cost about AUD 3.8 billion annually. Increased compensation payments cost about AUD 500 million annually and various environmental provisions, GST administration costs and other miscellaneous provisions cost about AUD 400 million. These were paid for by an approximately AUD 1.2 billion reduction in personal income tax cuts, by increases in fuel levies of about AUD 700 million, and by a postponement of plans to repeal certain state levies in the amount of about AUD

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84 See Hearings of Senate Select Committee on a New Tax System, supra note 81, at 2369 (“We have always argued that no government can guarantee the security of the compensation package.”); 2379 (“[T]here should not be a central flaw in the package which relies heavily on fragile compensation. Take out the flaw in the first place and compensate the other necessities of life in an adequate way. That is our position.”) (statements of ACOS president Raper). See also Select Committee Main Report, supra note 74, at § 2.62 (quoting Ann Harding as saying that if the “compensation package will be eroded over time,” “that does call into question the whole food in food out issue, because option 7 was predicated on the assumption that you would try to buttress the compensation package at the bottom end with more generous compensation and that that compensation would be maintained through time”).

85 See Davidson, supra note 33 (noting ACOS concern with the durability of compensation given the rollback of regressivity offsets in New Zealand); Hearings of Senate Select Committee on a New Tax System, supra note 81, at 2359 (statement of ACOS president Raper that after the initial enactment of the GST in New Zealand, GST rates went up and transfer payments were cut).

86 The lower income tax brackets were enacted as proposed — 17 percent for income AUD 6001 — AUD 20,000, and 30 percent for income AUD 20,001 — AUD 50,000, which represented a reduction from 20 percent applicable to a rough equivalent of the first bracket and 34 percent (up to AUD 38,000) and 43 percent (thereafter) applicable to a rough equivalent of the second bracket. The higher brackets showed less relief for upper-middle and upper-income taxpayers than ANTS. In particular, the rate applicable to the bracket of income between AUD 50,001 and AUD 60,000 increased from 40 percent to 42 percent, and the highest rate of 47 percent applied starting at AUD 60,001 rather than AUD 75,001. See Anne Daly, Unfinished Business: Reform of the Tax System 209, 213, in Howard’s Second and Third Governments (Chris Aulich & Roger Wettenhall, eds., 2005).
2.3 billion annually, although others were abolished on schedule.87 Government forecasts showed that the net result of the tax package would be an additional revenue loss of about AUD 500 million annually.88

According to one analysis, the final legislative package gave material benefits to low-income taxpayers (for example, a 3 percent gain in disposable income for a single taxpayer at the AUD 10,000 annual income level) and upper-middle-income taxpayers (a 5 percent disposable income gain for a single taxpayer at the AUD 55,000 annual income level), but extended few benefits to lower-middle-income taxpayers (AUD 20,000-25,000) and only modest gains to upper-income taxpayers (for example, a 1 percent disposable income gain for taxpayers with about AUD 140,000 in annual income).89 The overall distributive impact of the GST reform is, however, a subject of some debate. Because the GST was partly deficit-financed, the question of who bears the burden of post-enactment changes in the tax and transfer system is connected to the adoption of the GST.90 In addition, the experience of certain groups of taxpayers is affected by the particulars of applicable transfer and tax changes.91

87See D.J. Collins, The Impact of the GST Package on Commonwealth-State Financial Relations 26-27 (2000) (noting that accommodation and gambling taxes were abolished as of July 1, 2000; financial institutions duty and stamp duties on quoted marketable securities as of July 1, 2001, and debits tax as of July 1 2005; others including stamp duties on credit, installment purchase, rental, lease agreements and mortgage and other loan agreements were postponed).


89See Ann Harding, Neil Warren, Martin Robinson & Simon Lambert, The Distributio- nal Impact of Year 2000 Tax Reforms in Australia, 7 Agenda 17, 25-26 (2000). Other reports also suggest that the distributive impact of the reforms is somewhat lumpy. See Daly, supra note 86, at 217 (describing Treasury research results that “show considerable variation between different family types”).

90See, e.g., Davidson, supra note 33 (noting deficit financing of the GST and the possibility of future cuts in transfer programs); James, supra note 6, at 345 (arguing that higher GST revenue than expected has permitted income tax cuts under subsequent Howard governments which favored high income taxpayers).

91One question is whether compensation for pensioners was adequate. See Harding et al., supra note 89 (noting that a flaw in ANTS that would have “rendered meaningless” increased compensation for pensioners was fixed in the final package); Davidson, supra note 33 (arguing that “some households with non-average savings and expenditure patterns will be worse off”). Another question is whether the transfer (Footnote continued on next page.)
Paying Off the States

In Australia, constitutional law limits the taxing jurisdiction of the six states and two territories. Commonwealth policy with roots in a 1942 law effectively removed the power to levy an income tax from the Australian states by conditioning federal grants on states’ agreement not to impose income tax, and a specific constitutional provision prohibits state imposition of customs and excise duties. This custom and excise prohibition was interpreted in 1997 to block franchise fees, structured as ad valorem charges on alcohol, tobacco or fuel sales, that approximated consumption taxes and raised about AUD 5 billion annually for the states. After this decision, states’ and localities’ tax jurisdiction was limited to payroll, property, capital transfer and a few other miscellaneous categories of taxes.

Yet states are responsible for significant spending commitments. The result is “vertical fiscal imbalance”: the states spend more than they collect, while the Commonwealth collects more than it spends. In 1997-1998, the states relied on the federal government to fund about 40 percent of their spending. This system increases effective marginal tax rates at certain critical points for low-income families. See Daly, supra note 86, at 218. There are also horizontal equity issues. See Harding et al., supra note 89, at 30 (noting disparities including that “families with children generally do better than those without” and that “age pensioners with substantial non-pension income make larger gains than those fully dependent on social security”).

92 See Warren, supra note 15, at 32-33 (noting that the states and territories have lost “more and more of their taxing powers”); Vann, supra note 20, at 5 (noting broad High Court interpretations).

93 See Ha v. New South Wales, 189 C.L.R. 465, *49-61 (Austl. 1997) (rejecting argument that excise should be more narrowly interpreted in the context of a concern about uniform tariffs as a tax that discriminated between domestically produced goods and imports); see also Cheryl Saunders, The High Court: Section 90 and the Australian Federation, in Reshaping Fiscal Federalism in Australia (Neil A. Warren ed. 1997) 31, 32-37 (describing the tax at issue in Ha, “set at 100 percent of the value of [tobacco] sales in the relevant period” and explaining the constitutional issue of the definition of excise tax).

94 See Warren, supra note 15, at 56-57 (outlining state taxing jurisdiction).

95 See Owen E. Hughes, Australian Politics 279 (3d ed. 1998) (noting states’ status as employers and their capital investment); see also id. at 281 (noting political accountability problem with vertical fiscal imbalance).

96 See Collins, supra note 87, at 36-37 (providing figures for vertical fiscal imbalance ratios for national, state and local governments).
gave the national government a strong negotiating position in its
effort to persuade the states to sign onto the federal GST plan.

The Commonwealth secured the support of the states with a
side payment. In particular, it agreed to transfer all of the revenue
from the GST to the states in exchange for their agreement to
forgo almost AUD 20 billion annually in federal grants that had
previously closed vertical fiscal imbalance gaps. The 1999 GST
law incorporates by reference an agreement reached by Howard
and the eight leaders of the states in September 1998 and signed
in June 1999. That agreement, in turn, provides for the transfer
of all GST revenue to the states, the elimination of other sources
of Commonwealth support, and the guarantee of revenue com-
mensurate with earlier revenue streams; and for the repeal of
certain state taxes, together with the commitment of the states
and territories to not “reintroduce similar taxes in the future.”
Revenues are divided among the states annually according to
certain “horizontal fiscal equalization” principles, which natu-
really prompt significant ongoing debate.

Under the same agreement, variations from the 10 percent GST
rate and some GST base changes require unanimous consent of
the state governments. But the national government still
appears to hold the upper hand. In 2010, for example, Kevin
Rudd’s Labor government developed a plan to transfer 30

97 See ANTS, supra note 50, at 84-85, 104.
98 See A New Tax System (Goods and Services) Tax Act 1999 § 1.3 (providing
Parliament’s “acknowledgment” that legislation would be introduced to provide the
GST revenue to the states and administer the GST consistent with the agreement reached
between the commonwealth and the states and territories).
99 See Intergovernmental Agreement on the Reform of Commonwealth-State Rela-
tions ¶¶ 5, 10 (1999) (hereinafter “Intergovernmental Agreement”). Appendix B of the
agreement provides that the division of revenue will be based in part on population and
on “health care grant” needs. Appendix C addresses minimum revenue commitments
for an initial transition period. See supra note ?? for a summary of the state tax repeal
agreements.
100 See Collins, supra note 87, at 42-54 (describing multifactor analysis used by the
Commonwealth Grants Commission); James, supra note 6 at 345 (arguing that the GST
did not give the states needed tax jurisdiction). See, e.g., Rick Wallace, Boom States
Accused of Waste, The Australian (Oct. 5, 2009) (reporting that officials of Victoria and
New South Wales accused resource-rich Western Australia and Queensland of “squan-
der[ing]” mining revenue and then expecting GST revenue from consumption in other
states to balance their budgets).
changes to the GST base require majority approval under the agreement.
percent of GST revenue and 60 percent of the responsibility for public hospital funding to the Commonwealth. Seven of eight states went along, after receiving the persuasion of some extra grant funds. The path to resolution of Western Australia’s objections was not clear, even as it agreed to continued discussion with the national government.102

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Australia’s path to GST enactment rested on an analytical framework that cast the GST as an efficient tax with regressivity problems. Business groups like ACCI articulated their interest in efficiency from a global competitiveness perspective, while at least some social welfare groups, through ACOSS representation, showed more interest in revenue-raising efficiency. But there was enough common ground to support an interest group coalition, which permitted Prime Minister John Howard to return consumption tax adoption to the center of the LNP Coalition party platform.

In the political and legislative process, ACOSS and the minority Democrats focused attention on offsetting the regressivity of a GST. The final package included increased transfers to pensioners, adjusted personal income tax rate schedules and the exclusion of basic food from the GST base. The food exclusion was thought to have the advantages of political salience and durability relative to personal income tax cuts or increased transfer payments. Finally, the reform included an agreement that transferred all GST revenue to the states in exchange for their repeal of certain taxes and in lieu of previously extended Commonwealth financial support — a fiscal federalism development facilitated by the Australian constitutional framework, which reserves most taxing jurisdiction to the national government. ■

102 See Peter Hartcher, Anatomy of the Rudd Health Deal, *Sydney Morning Herald* (Apr. 24, 2010) (describing Kevin Rudd’s persuasion of the state leaders, with the exception of the Liberal leader of Western Australia, with whom he was still in discussions); Malcolm Farr, Kevin Rudd to Hold Plebiscite if Premiers Reject Health Reforms, *The Australian*, Apr. 19, 2010 (reporting that the government would respond to sustained resistance from state leaders by holding a popular plebiscite like that used to select a national anthem, though such a plebiscite would apparently not have the binding force of law).
Japan’s Consumption Tax: Lessons for the United States
By Paul Previtera and Brandon Boyle

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With the Congressional Budget Office projecting a $1.3 trillion deficit for 2010,¹ the U.S. government is now considering all possible means to increase revenue. The choices it faces are limited: It can reduce spending, increase taxes, or try something new.

President Obama’s economic stimulus package makes it unlikely that the government will substantially reduce spending soon. As a result, debate over whether the United States should introduce some form of VAT has been intensifying.

The introduction of a VAT in the United States, when coupled with spending cuts and reform of the tax code, could lead to the elimination of national budget deficits. Alan Greenspan has called the VAT the “least worst” way to raise revenue.²

Although many agree on the beneficial impact that the introduction of a VAT would have — the Congressional Research Service has estimated that each percentage point of a VAT would raise about $50 billion each year — Congress has yet to be convinced, highlighting the politically sensitive nature of the tax. Given its recent spending patterns and limited revenue sources, the United States may soon have little choice but to follow in the footsteps of every other OECD member state in implementing a VAT.

Japan was in a similar position in 1989. Faced with declining tax revenue resulting from the bursting of an economic bubble,

the Japanese government introduced its own version of a VAT. The tax had almost universal support among Japanese business analysts, economists, and bureaucrats. The public, however, strongly opposed it. Its opposition was fueled by privacy concerns, political scandals, and the apparent wastefulness of government expenditures. The government’s battle to introduce the VAT claimed several political careers, including those of some prime ministers. Since its introduction, though, Japan’s VAT has generally been regarded as a success. It now accounts for approximately 20 percent of the country’s overall tax revenue, while creating minimal economic distortions.

Given the similarities between where Japan stood in 1989 and the current fiscal climate in the United States, a closer look at Japan’s VAT may provide some insight on the strategies and methods that U.S. policymakers might use in rolling out a similar tax regime.

**Japan’s CTAX Explained**

Japan’s VAT is known nationally as the federal consumption tax (herein CTAX). It was introduced in 1989 and replaced several other indirect and excise taxes. The initial CTAX rate was 3 percent, the lowest of any VAT system in the world. The rate has been increased only once, in 1997, to its current rate of 5 percent.

Unlike most other VATs, Japan’s CTAX has a single flat rate. The government resisted the temptation to implement preferential or zero rates in categories of goods and services like healthcare and food. The primary benefit of the single-rate structure is that it significantly reduces complexity. Policymakers also believed multiple rates would encourage tax avoidance as taxpayers would try to replace taxable goods with nontaxable goods.

The CTAX functions as a typical VAT in that it’s levied on the consumption of goods and services at all stages of the supply chain, from manufacturing and importation to wholesaling and retailing. Each business in the supply chain collects a 5 percent CTAX from the purchasers of its goods or services, and in turn pays a 5 percent CTAX to each business from which it purchased goods or services. Businesses are responsible for administering
the tax (remitting payments to the government), but are not ultimately liable for paying it. As with other VAT systems, the end-user is left footing the bill.

For example, a shoe retailer in Tokyo purchases a pair of shoes from a wholesaler for ¥105 (¥100 for the shoes plus ¥5 CTAX). The retailer then sells the shoes to a customer for ¥210 (¥200 for the shoes plus ¥10 CTAX). Because the retailer has collected more tax than was paid to the wholesaler, the retailer is required to pay that excess (¥10 minus ¥5) to the tax authorities. The wholesaler is also required to pay the ¥5 in CTAX it collected from the retailer, less applicable credits.

The CTAX is not limited to corporate entities. In principle, it applies to any business entity or individual that makes taxable supplies of goods or services in the course of doing business in Japan. Those taxpayers may include sole proprietors, corporations (both domestic and foreign), associations, foundations, and the government itself.

In the case of imports, the party responsible for importation (that is, removing the imported goods from a bonded warehouse) is deemed a consumer/taxpayer, whether it is a sole proprietor, corporation, or end consumer. Nonresidents with CTAX obligations and without a fixed place of business in Japan must appoint a tax representative to handle CTAX administration.

**Tax Base**

Japan’s CTAX is different from many other VATs in that it has a broad base with few material exemptions. At its most basic level, CTAX is levied on the following two categories of transactions: goods transferred or services performed within Japan and goods imported into Japan. The approach is simple. The tax base for the transfer of goods and provision of services is the price charged. For imported goods, the tax base is the total of the cost, insurance, freight, customs duties paid, and excise taxes paid.

Tangible assets are subject to CTAX if legal title passes in Japan, while intangible assets incur CTAX if the intellectual property being transferred is registered in Japan. Intellectual property transactions for which registration is not required, such as copyright, are subject to CTAX if the licensor’s head office is in...
Japan. While the treatment of services is less clear, CTAX generally does not apply on services performed for parties located outside Japan.

CTAX also does not apply to the following:
- ownership, transfer, or leasing of land;
- financial transactions conducted in Japan;
- medical care;
- education;
- registration or licensing fees charged by governmental bodies;
- services performed in an international context, including international postal money transfers, communications, and foreign currency transactions; and
- exported goods.

Given that the policy goals of CTAX were simplicity, equity, and neutrality, Japan was careful not to implement a tax that imposed unacceptably high compliance costs on small businesses. Because compliance costs will undoubtedly be an issue for U.S. taxpayers, it’s worth highlighting a number of CTAX features designed to minimize the burden on small businesses.

**Small Taxpayers**

A simplified system for calculating the amount of CTAX to be credited is available to taxpayers whose taxable sales during the base period (defined as two fiscal years prior to the current fiscal year) do not exceed ¥50 million. For those taxpayers, the CTAX credit is calculated as a percentage of the CTAX payable on total taxable sales. This is a much simpler method of calculating CTAX credits than requiring businesses to perform a transaction-by-transaction calculation. The applicable percentage can vary from 50 to 90 percent, depending on the taxpayer’s status. An enterprise with taxable base-period transactions not exceeding ¥10 million is exempt from paying CTAX, although it may elect to file CTAX returns if it is owed a refund.

**Nontaxable Purchases**

CTAX paid on taxable purchases is, in principle, deductible against CTAX collected on taxable sales. However, because of the risk that taxpayers might claim credits on a nontaxable transaction, rules apply to restrict taxpayers’ ability to use these
deductions. Under the partial exemption rule, if the amount of nontaxable sales exceeds 5 percent of total sales, one of two alternative methods must be used to calculate the available CTAX credit.

**Invoicing**

Under Japan’s CTAX legislation, a taxable entity is not required to provide a tax invoice to purchasers of taxable supplies. That is unique, especially compared with traditional credit invoice VAT systems common across Europe. The lack of an invoicing requirement highlights the priority given to ensuring compliance requirements are kept to a minimum. Rather than being forced to create separate financial records, taxpayers need only produce documentation typically kept for income tax purposes (bills, receipts, etc.) to support their CTAX position. A potential drawback is the difficulty in distinguishing between taxable and nontaxable transactions, which can provide taxpayers with opportunities to claim credits on purchases from exempt businesses. However, the CTAX’s broad base, limited exemptions, and single rate significantly reduce the extent of the problem.

**Filings and Payments**

CTAX returns are filed annually. The returns are due within two months of the end of a corporation’s fiscal year. For individuals, the return is due by March 31 of the year following the end of the calendar year. An interim return covering the first six months of the current year will be required if the amount of CTAX paid in the previous year exceeded ¥600,000. The interim return must be accompanied by a payment equal to half the previous year’s CTAX liability. Payments may also be required during the current year, depending on the amount of CTAX paid in the prior year. For example, if the prior year’s tax liability exceeded ¥60 million, monthly payments in the current year are required. If the previous year’s tax liability was between ¥5 million and ¥60 million, three interim payments are required.

**Lessons for America**

Since the CTAX was implemented just over 20 years ago, coping with it has become second nature to many Japanese and
foreign businesses, largely because of its simplicity. Like with the simplified system for small taxpayers noted above, many of the concessions now available to taxpayers have been scaled back from their generous levels when the CTAX was first introduced. The result was a rapid and widespread acceptance of the new regime, which allowed the CTAX to be implemented in a relatively short period of time.

When considering implementation of the CTAX, the Japanese government recognized that a key area of concern for the public would be its effect on small businesses, and in particular the compliance burden. As a result, the CTAX included several features designed to minimize adverse consequences on those firms. To overcome opposition, the government ran an extensive public relations campaign emphasizing the low rate, broad base, and minimal compliance requirements. That approach, which also included coordination with business and trade groups, helped the tax avoid becoming a political football rife with compromises and concessions that would negate its potential benefits.

Concurrent with the introduction of the CTAX, the Japanese government took measures to deal with arguments commonly raised by opponents of the VAT in other jurisdictions. To combat the argument that the CTAX would be regressive and hurt low-income earners, the government lowered individual income tax rates, particularly for low-income taxpayers. Another common anti-VAT argument is that an initially low rate will increase over time and fuel public spending. In fact, the CTAX has increased only 2 percentage points over a 20-year period.

Over the last few years, however, there have been several proposals to increase the CTAX rate. Given Japan’s growing deficit and aging population, a rate increase seems imminent. The latest proposal is to double the rate from 5 percent to 10 percent. If it’s approved, Japan would still be left with one of the lowest VAT rates in the world. The minimum VAT rate permitted in the European Union is 15 percent.

Conclusion

As the United States grapples with whether to introduce a VAT, there are some valuable lessons to be learned from the
Japanese experience. Japan’s approach was simple but effective: Build support by educating the public and implementing a simple, low-tax system with a broad base.

The government’s focus on reducing the compliance concerns of small and medium-size taxpayers was a key to winning over a skeptical public. The United States should recognize that political horse-trading on the fundamental elements of a VAT will significantly undermine the tax’s ability to deliver the benefits experienced by many other VAT jurisdictions.

Japan’s recent debate about a potential rate increase underscores the extent to which the CTAX has become integrated into the business culture. With an honest debate, the United States might reap similar benefits.
China’s VAT Experience
By Xu Yan

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The People’s Republic of China introduced the VAT as part of a general tax reform initiative in 1994.¹ The tax can be viewed as one element of China’s “open door” economic reforms. Although China borrowed many basic principles from the European VAT, the Chinese VAT has evolved differently. It has been used both as a fiscal stabilization device and as an incentive mechanism for business locations and activities.

This article provides an introduction of the Chinese VAT and describes the features of the tax before the reforms that came into force in 2009. It also looks at tax evasion in the application of the credit invoice method and the problems caused by the system’s lack of neutrality. It concludes with a discussion of recent reforms and several unresolved problems.

China’s VAT Family

In December 1993 the P.R.C. State Council promulgated three related tax measures: the VAT, the business tax (BT), and the consumption tax (CT). The laws took effect on January 1, 1994. Together these three taxes form China’s VAT family. The P.R.C. Ministry of Finance promulgated implementation rules in accordance with the State Council’s law.

The VAT applied to the sales of most goods, but only to some services — for example, services involving the provision of labor.

¹China’s VAT has its source in the Resolution on Various Issues Concerning the Building of the Socialist Market Economy, passed by the Central Committee of the Communist Party of China on November 14, 1993.
The BT applied to most services not covered by VAT. These services include transfers of intangible assets and immovable property. The impositions of VAT and the BT are mutually exclusive. The same transaction cannot be subject to both taxes. VAT and the BT together have roughly the same scope as a classical European-style VAT. The CT applied to, very often, goods such as cigarettes, wine, and expensive jewelry. These items are subject to the CT in addition to VAT.

China’s VAT family replaced a cascading wholesale turnover tax² and was considered an improvement in terms of removing

²The cascading effect was the major shortcoming of the old Chinese turnover tax. The turnover tax was imposed on the gross value without allowing the deduction of taxes paid on inputs. Consequently, consumer prices are increased through the business cycle. For example, a manufacturer purchases raw materials (input) worth CNY 500 and pays tax of CNY 50 at the rate of 10 percent. Since he is not allowed to deduct the input tax, he will add CNY 50 to the cost of input. If the cost of his labor and service and other (Footnote continued on next page.)
tax distortions and providing a stable revenue source. The three-part tax system has become a major revenue source. In 2007 revenue from VAT was about CNY 1.5 trillion, or 33.9 percent of China’s total tax revenue. Figure 1 shows the importance of China’s VAT revenue since the system was implemented.

The VAT is administered by the State Administration of Taxation (SAT), and the VAT regulations are uniformly applied across the country. VAT revenues collected are split 75/25 between the central and local governments.

VAT applies at a standard rate of 17 percent. The reduced rate of 13 percent applies to basic staples or household necessities such as food, fuel, electricity, books, newspapers and magazines, and agricultural products. A zero rate applies to export goods, except for those stipulated by the State Council.

There are two categories of VAT-liable persons under China’s VAT system, and a taxpayer’s status may affect his VAT liabilities. The first category, general taxpayers, is defined as firms with substantial annual sales and an accounting system sophisticated enough to enable tax officials to accurately determine outputs and inputs for VAT purposes. The revenue thresholds are CNY 1 million in production-type sales or CNY 1.8 million in nonproduction-type sales.

The second category, small-scale taxpayers, includes firms with relatively small or infrequent taxable sales and incomplete accounting records. They are charged VAT based on a simple computation that precludes any right to deduct VAT paid on inputs.

General taxpayers may deduct inputs unless they: (1) fail to maintain a sound accounting system, (2) otherwise cannot provide accurate tax information on inputs and outputs, or (3) have sales revenue exceeding the threshold but fail to apply for formal designation as a general taxpayer for VAT purposes.

expenses to produce a commodity using the raw materials is CNY 450, which includes his profit (added value), the value of his product becomes CNY 1,000. The tax on his sale is CNY 100 at 10 percent, which contains the input tax of CNY 50 that has already been taxed at the time of purchasing. Thus, the tax of CNY 5 is paid again on the tax of CNY 50 paid earlier. Double taxation and tax on tax result, causing the cascading. The product may also be used as an input for manufacturing other products, exacerbating the effect.
The VAT rate permitted as an input deduction does not always match the VAT rate paid on the purchase. The amount of a taxpayer’s deduction could be capped depending on the category of good or the time of input purchase.

Computation methods for the VAT for the two types of taxpayers are summarized in the table below.

<table>
<thead>
<tr>
<th>Computation of VAT Payable</th>
<th>Method</th>
<th>VAT Payable</th>
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<tbody>
<tr>
<td>I</td>
<td>General taxpayers</td>
<td>Output VAT - Input VAT&lt;sup&gt;a&lt;/sup&gt; (purchase invoice must be certified by the tax authority)</td>
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<tr>
<td></td>
<td>(general computation)</td>
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<tr>
<td>II</td>
<td>Small-scale taxpayers</td>
<td>Sales amount x rate (no input credit)</td>
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<tr>
<td></td>
<td>(simple computation)</td>
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<sup>a</sup>VAT regs, article 4. According to articles 5 to 7 of the VAT regs, output VAT = current taxable sales x applicable VAT rate. According to articles 8 to 10 of the VAT regs, input tax = costs of eligible goods or services purchased in current period x applicable deduction rate for input VAT.

The Chinese VAT has some differences compared with a classical European VAT. First, it is not a true broad-based tax because it applies only to tangible goods and a limited range of services.

Second, it is production based rather than consumption based. Purchases of capital goods such as equipment and fixed assets sometimes aren’t permitted to form the basis of an input deduction. This feature was adopted primarily to address fiscal problems facing both the central and local governments in the early 1990s<sup>3</sup> and because inflation had to be constrained.

Third, the tax is not consistently charged and collected on all transactions by businesses throughout the production and distribution process. Differentiation between general and small-scale taxpayers results in inconsistent treatment. Even among general taxpayers, disparities in VAT payment and deduction rates exist for different sectors. The 1994 VAT regulations did not allow for deduction of input tax on capital investment. Capital-intensive industries would suffer a comparatively higher VAT burden than labor-intensive industries.

<sup>3</sup>Studies showed that between 1978 and 1995 total government revenues in China fell from over 34 percent of GDP to less than 12 percent of GDP.
Finally, China’s VAT is not neutral in that it is formally administered on a destination basis, though rebates of input taxes are variable by sector and commodity. Border adjustments were also used for stabilization purposes. Like most other countries, China normally uses zero rating for exports, but the government frequently adjusts the rates at which input taxes are credited or rebated on exports.4

In theory, neutral refunds should be equal to the domestic VAT paid for the exported goods. In practice, VAT refunds for exported goods are determined by the government, which has become difficult because there was a significant difference between the statutory and effective VAT rates under the production-based VAT system. The government may increase the refund amount when it attempts to encourage exports but reduce it to avoid conflicts with foreign trade partners.5 This has made the VAT on exports nonneutral and an instrument of trade policy (typically in the textile and clothing sectors).

The 1994 VAT law requires businesses to apply for a special VAT invoice (SVI) in all commercial transactions in China. The amount of input VAT that the taxpayer pays for the purchase of input goods can be used as a tax credit to offset the sales VAT (output VAT). This credit is available only if input VAT payments can be verified by SVIs received from the input seller (or by the special receipt for the payment of import VAT obtained from Customs).

To qualify for input VAT credits for purchased goods, the purchaser must ask the seller to issue an SVI as opposed to an ordinary commercial invoice.6 The seller should issue SVIs

4In the first year of the VAT, much of the claimed 1994 rebates had to be deferred because of rapid export growth and fraudulent invoices and rebate claims. Over the next two years, the government budget still didn’t allow for the requested rebates, so the rebate rates were changed.

5VAT refunds on exported goods and the VAT exemption on importation of capital equipment were often subject to official adjustments. The government has issued a number of circulars on this. Normally, most taxpayers must pay the VAT for VAT goods first and then can claim VAT refunds from the tax authorities based on the exported goods declaration certified by Customs. The procedures for, and assessment of, VAT refunds are complicated and sometimes adjusted.

6The ordinary commercial invoice is used for supplies that are not for VAT purposes, that is, supplies that are not subject to VAT regulations and rules.
indicating the amounts and the output tax separately. When the supply of goods or taxable services is made to consumers, the supply is VAT exempt, and when the supply of goods or taxable services is provided by small-scale taxpayers, ordinary commercial invoices, not SVIs, should be issued.

The SVIs are controlled by the SAT. All taxpayers must purchase the tax invoices from their local tax bureau. While general taxpayers can usually purchase both SVIs and ordinary commercial invoices for their own use according to the type of goods sold and the tax status of the buyer, small-scale taxpayers cannot purchase SVIs for their own use. If a small-scale taxpayer wants to sell goods to general taxpayers, he may ask the governing tax authority to issue the SVI on his behalf, and it is provided to the buyer.

Qualified users of SVIs cannot always issue SVIs when they are selling a consumer good or a non-VAT item. SVIs cannot be used for the following:

- the sale of goods or the supply of taxable services to small-scale taxpayers;
- the sale of goods exempt from the VAT;
- the sale of goods or taxable services to final consumers;
- the sale of specific types of goods in the retail sector (such as cigarettes, wine, food, clothing, shoes, hats, and cosmetics);
- the sale of export goods or taxable services for consumption outside the P.R.C.;
- the use of goods for nontaxable items (such as using stock-in-trade for the construction of own assets);
- the use of goods for collective or personal consumption;
- the supply of goods at no consideration (a gift); and
- the provision of nontaxable services (except for those subject to the VAT in mixed sales).

In those circumstances, sellers must issue ordinary commercial invoices.

For sales of goods, VAT services, and non-VAT services (that is, mixed sales), sellers must maintain separate accounts for those activities lest their sales of non-VAT services be subject to the VAT and the tax rate levied on the nontaxable services be the highest applicable. For mixed sales, only those who engage in production, wholesale, or retail of goods, and are concurrently tied to
nontaxable services, are liable for VAT. Business tax (not VAT) is levied on mixed sales made by other entities and individuals.

For transactions in which intermediate or nonconsumer goods are involved, SVIs serve both as evidence of VAT payment and as the ordinary commercial invoice. An SVI contains some items not found on an ordinary commercial invoice, such as the rate and amount of VAT payment and the registered tax numbers of the supplier and purchaser. The unit price and total price indicated on an SVI exclude the VAT, while those on an ordinary commercial invoice include the VAT.

SVIs are the only document used to assess VAT due, input VAT deduction, or export VAT refunds.

**Practical Problems**

Although the VAT has been the most important revenue source for the government in recent years, revenue losses from it are substantial. Some studies estimate that about 55 percent of VAT revenue is lost to tax evasion and weaknesses in tax administration, particularly through the control of SVIs and related fraud.7

In theory, a paper trail exists that tax authorities can follow to track VAT paid at all stages of production and distribution until the taxable goods or services are purchased by the final consumers. The reality is more complicated. When forged or fraudulent invoices are used to improperly claim an input VAT refund, the amount refunded may be limited only by the claimant’s greed.

Although SVIs are printed exclusively by an authorized agency in accordance with a form designed by the SAT, and only those invoices can be used to claim VAT refunds, verifying the authenticity of the invoice is difficult. When input tax is paid in one region and a refund is claimed in another region, because the tax authorities in the two regions do not have integrated processing systems, forged or fraudulent invoices may not be detected. Forged VAT invoices, invoices for fictitious transactions, the

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illegal sale or purchase of SVIs, and failure to report VAT by not issuing invoices to purchasers are common means of evading the tax.

To reduce VAT evasion, the SAT has recently focused on controlling invoices from the beginning of the process. The control measures include the mandatory use of state-regulated computerized cash registers by retailers, the use of an SVI antifraud control system to print and verify SVIs, and improvements in the networking of tax offices to allow invoices issued in different locations to be cross-checked. However, these measures will likely have minimal impact on most businesses that conduct cash transactions. Even though forged SVIs can sometimes be detected, fraudulent claims of input VAT for transactions that did not take place or that took place with smaller amounts than the amount claimed are difficult to detect. Although a primary goal of making SVIs mandatory is to bring the disorganized record-keeping practices of Chinese businesses under the control of the government, the achievement of that goal seems a long way off.

Another problem is the nonallowance of deductions of input VAT for purchases of capital assets, which is at odds with international practice. The production-based VAT has a relative advantage. It prohibits the deduction of input VAT for purchased capital assets, leading to a relatively broad tax base, which can ensure more tax revenue for the government. However, the input VAT that must be capitalized adds to the cost and sale price of manufactured goods within the production and distribution chain. This can lead to duplicated VAT levies through the supply chain in the entire business cycle, and it increases the tax burden on enterprises in general. It also penalizes the purchase of assets by a business and, more broadly, penalizes capital-intensive production techniques.

Although the standard tax rate is 17 percent, the effective tax rate may amount to 23 percent after converting the production-based VAT into the consumption-based VAT. This lack of credits for input VAT for capital assets has also created problems. In

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8The SVI antifraud control system refers to the computer management system that manages VAT invoices by using special equipment and applying digital ciphering and electronic storage technology. The State Council approved its use nationwide.
view of the regional disparities in production, this type of VAT penalizes the noncoastal regions because their business tends to be labor intensive while business in the inland regions is capital intensive. This production-type VAT has suppressed technological advancement and economic growth in the country, further reducing the competitiveness of Chinese enterprises in international markets.

Also, the VAT applies at multiple rates and is subject to various adjustments. That has reduced the uniformity of VAT treatment and the consistency of input deduction at each stage of the production and distribution process and has led to unequal tax burdens among VAT payers. Limits are placed on export VAT refunds. Unlike the conventional credit-invoice VAT, export VAT rebates are unrelated to input taxes paid on materials, and the allowable refund rates are occasionally changed by the government. This ad hoc approach may help with international trade and with increasing government revenue, but it makes tax burdens unequal.

Another problem is that not all sales of goods and services are subject to the same tax since goods and limited services relating to the sales of goods are subject to the VAT while most services are taxed by the BT. This has cut off the input VAT deduction chain from the flows of services in the business cycle, and it has become impossible to fully reflect the value added processes in the cycle. Unlike the VAT, the BT does not allow for the deduction of input tax from output tax. Thus, the largest advantage of a credit-invoice-based VAT system (that is, cross-checking input and output VAT) is removed under the Chinese VAT and BT regulations.

Further, with the growing integration of business activities, the distinction between the supply of goods and the supply of goods and services.
services has become blurred. More enterprises engage in diversified economic activities that include mixed supplies of goods and services across traditional industrial and commercial lines. The VAT system could hardly prevent enterprises from engaging in tax arbitrage to minimize their tax burdens. And the coexistence of parallel taxes with varied tax rates on the turnovers of service leads to tax evasion or abuse. The BT is a local tax, and revenue from it goes to local governments, while the VAT is administered by the central tax authority and most VAT revenue goes to the central government.

Also, China’s tax administration has long relied on manual operations for collection, refunds, and auditing. The administration lacks efficiency and accuracy in monitoring tax payments. The tax authorities are unable to cross-check detailed information on VAT payers on all of their transactions because of problems with the use of SVIs and inconsistent application of the VAT. Relying solely on SVIs for VAT imposition and auditing doesn’t allow for reliable controls. Fraud and evasion have reduced government revenue. Complexity and vagueness in the VAT regulations allow for arbitrary decisions in the enforcement of the tax, providing incentive to evade the tax and inviting corruption.

 Unsolved Problems

The government began a pilot program in three provinces — Heilongjiang, Liaoning, and Jilin — in January 2004 to evaluate the VAT. The program covered eight industrial sectors. It was extended to 26 cities in the central region in July 2007 and to parts of the Inner Mongolia Autonomous Region and the areas hit by the Wenchuan earthquake in July 2008.11

Based on those programs, the State Council approved an overhaul of the VAT law, along with revisions in the BT and CT regs, as part of a large stimulus package before the end of 2008. The MOF and SAT then published revised rules for VAT, the BT, and the CT that took effect January 1, 2009.

The most significant change is that registered general taxpayers may deduct input tax on purchases of equipment and other non-real-property fixed assets.\textsuperscript{12} If the fixed assets used in items subject to the VAT are also used in items not subject to the VAT, VAT exemption items, collective welfare, and personal consumption, the input VAT is still creditable. However, it is not clear how the input tax credit should be attributed to a taxable item.

This change only partially transformed China’s production-type VAT into a conventional consumption-type VAT in that capital investments in real and tangible property are not creditable in the production and distribution process. The term “real property” has been clarified to mean property that is immovable or whose nature or shape will be changed after movement, including buildings, structures, and other land attachments. Real property that is newly built, rebuilt, expanded, repaired, or decorated by a taxpayer should be considered a real property project under construction. A right of deduction for input tax on non-real-property fixed assets is a major step in rationalizing the Chinese VAT system.

Other revisions in the VAT are worth noting.

First, the annual sales thresholds for qualifying as a general VAT payer have been reduced from CNY 1.8 million to CNY 800,000 for commercial enterprises and from CNY 1 million to CNY 500,000 for industrial enterprises. That means some previous small-scale taxpayers may be included in the category of general taxpayers so that they can receive the input deduction benefit. The practice of dividing small-scale taxpayers into commercial and industrial types and applying different tax rates has also been repealed, mainly because it was difficult for the authorities to clearly define the type of small-scale taxpayers performing real economic activities. The VAT rate for small-scale taxpayers in all industries is now reduced and standardized to 3 percent. This may help equalize the tax burden between general

\textsuperscript{12} The term fixed assets should include machinery; transport vehicles; and other equipment, tools, and apparatus for production and operation use that have a life of more than 12 months. Fixed assets do not include motor vehicles, motorcycles, boats, or yachts that are subject to consumption tax and are for private use.
and small-scale taxpayers and advance small and medium-size enterprises’ development as well as increase employment.

Second, preferential treatment of VAT exemptions on some imported equipment and VAT refunds on the purchase of domestically produced equipment by foreign investment enterprises have been ended. This was in conformity with the transition from a production-based VAT into a consumption-based VAT. The VAT exemption for imported equipment was provided to encourage some domestic industries to expand the use of foreign investments and to introduce advanced technology. However, the broad scope of the exemption discouraged innovation and didn’t help develop the domestic manufacturing industry. It also created unequal tax burdens among foreign and domestic enterprises because the scope of the exemption for domestic enterprises was narrower than that for foreign enterprises. Since the reform now allows for the deduction of input tax on the purchased equipment, the exemption for imported equipment was no longer needed. The same is true for the VAT refund for domestically produced equipment.

Third, the VAT rate for mineral products was raised to 17 percent from the prior rate of 13 percent. Since the reform provides an input tax credit for purchased equipment for general taxpayers, including mining enterprises, the tax burden on mining enterprises would have decreased. To equalize the tax burden, standardize the VAT system, and promote energy conservation, the government returned the tax rate for mineral products, including metal and nonmetal mineral products, to the standard rate of 17 percent.

Fourth, there were changes regarding some mixed sales activities and all composite sales activities. For mixed sales, the taxpayer who supplies self-produced goods and concurrently provides construction services should separately account for its sales amount of goods and the turnover of non-VAT services. The VAT should apply to the sales of goods, while the BT applies to the provision of non-VAT services. If necessary, the tax authority may determine the sales amount of the goods. For composite sales, the previous rule was that if a taxpayer failed to separately account for the sales amount of goods or taxable services and the turnover of items not subject to the VAT, VAT would be charged
on the whole transaction. Under the revised VAT rules, the tax authorities may determine the sales amount of goods or taxable services. Therefore, the taxpayer pays VAT and BT separately according to the prices determined by the tax authority. This would help eliminate the double taxation problem caused by the old rule.

The BT treatment of cross-border services will be similar to the Chinese VAT, which uses destination taxation regarding the cross-border flow of goods (that is, taxing imports but exempting exports). The change in the BT rules was also made to mixed sales and composite sales activities to comport with the change in the VAT rules as noted above. The major changes under the new CT regime include the changes to CT policies provided in various tax regulations promulgated during the past 15 years to help the CT conform to changes in the VAT and the BT. The revisions seem to indicate policymakers’ willingness to consider the eventual merging of the current VAT, BT, and CT into a single, standard VAT regime.

But, as SAT officials explained, the recent reform in China’s turnover tax system is limited. The deduction for input VAT on the purchase of fixed assets doesn’t apply to real property and intangible property, though their values may be included in fixed assets for accounting purposes. Also, small-scale taxpayers cannot benefit from the transition to the VAT since their input VAT on the purchase of fixed assets is still not creditable. The BT will eventually be replaced with the VAT, and full deductions will be allowed.

VAT remains the largest revenue source for the government. The government estimated a loss of revenue of CNY 120 billion in 2009 from the changes. An important and sensitive issue is intergovernmental fiscal reform, specifically the fiscal and political relationship between the central and local governments. Currently, most sales of services are subject to the BT instead of the VAT, and the revenue goes to local governments. The BT has been the largest revenue source for local governments, and replacing it would cause a substantial loss of local revenue.

Also, the Chinese tax administration is divided between the state administration (central) and the local administration. The local administration collects the BT. If the VAT were to include
the tax base of the BT, the need for local administration becomes questionable. A full right of deduction, if it extends to the entire production and distribution process regardless of taxpayer status and type of supply, would greatly affect government revenue but increase fairness. Many believe it would be better to phase in a purely consumption-based VAT to minimize any adverse impact on the government’s tax revenue as well as government relations.13

In 1994 the SAT began the Golden Taxation Project,14 a nationwide tax database connecting databases run by public finance departments, banks, customs authorities, securities exchanges, and large enterprises. This network was to be in full operation by 2005, so that tax authorities could monitor taxpayers’ transactions beyond what has been based solely on the SVIs and thus reduce tax evasion from the illegal use of SVIs. Although the technological improvement is commendable and of great help in preventing SVI abuse, the best way to fight VAT evasion and abuse is to change the current VAT to a pure one so that the tax authorities can cross-check input and output VAT at each stage of production and distribution of goods and services.

Conclusion

VAT regimes are widely accepted because the VAT is good at raising revenue — revenue increases with economic growth but is still comparatively stable in economic downturns. And VAT revenue can be earmarked to fund specific public entitlements such as universal healthcare, education, and pensions. This justifies the tax’s regressivity.

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Unlike the European VAT, the Chinese VAT covers only goods and a few services. It is not neutral because it does not tax only the value added at each stage of production and distribution. It does not provide for the full right to deduct input tax throughout the supply chain. And it does not guarantee the full implementation of zero rating on exported goods.

Although the Chinese VAT has efficiently raised revenue and promoted economic development, many policy and operational challenges remain. Recent reforms have attempted to address some of these challenges, but much broader reform is needed if the VAT is to realize its true potential in China.
The Political Pathway: When Will the U.S. Adopt a VAT?

By Reuven S. Avi-Yonah

“Those who fear a VAT have little reason to worry — the votes aren’t there.” — Peter Orszag, speaking as director of the White House Office of Management and Budget, 2010

“There’s no way that a GST will ever be part of our policy. Never ever.” — John Howard, speaking as prime minister of Australia, 1996

At the moment, as indicated by the quote from former OMB Director Peter Orszag, the political prospects for a VAT seem dim. After all, on April 15 the Senate passed by a 83-15 vote an amendment offered by Sen. John McCain, R-Ariz., stating, “It is the sense of the Senate that the Value Added Tax is a massive tax increase that will cripple families on fixed income and only further push back America’s economic recovery, and the Senate opposes a Value Added Tax.”

And yet the very passage of that resolution indicates that the VAT is a live political option. Politicians don’t waste their time voting against unnecessary, dead-on-arrival policies.

The reason the VAT is on the table is also stated in the referenced article by Orszag: “Although hardly anyone wants to admit it, we’re not going to solve our budget deficit unless revenue is part of the equation.” And while in the short term it may be possible to address the deficit by raising income tax rates (Orszag suggests letting all the Bush tax cuts expire in 2013), in the long term it doesn’t seem plausible that we can raise

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3156 Congressional Record S2351 (Apr. 15, 2010).
4Orszag, Id.
sufficient revenue that way to pay for Medicare, Medicaid, Social Security, interest on the national debt, and defense and some discretionary (but politically popular) spending. In fact, sometime around 2042, spending on the entitlement programs alone is projected to consume all federal revenues, leaving nothing for any other purposes.\(^5\)

Nor do I believe it is politically possible to rein in the growth of the entitlement programs sufficiently to dispense with the need for a VAT. The best chance to do that was healthcare reform, but it was missed because the reform did nothing to address the core incentives of both patients and doctors to order more procedures, since the doctors are still paid by procedure and the patients do not bear anything like the full cost.

It seems to me that the question isn’t whether the United States will adopt a VAT, but when and under what circumstances. There are two likely scenarios to consider.

**The High Road: Presidential Leadership**

The commonly told story about VAT is that every government that adopts it gets booted out of office in the next election — although the winners in the subsequent elections never repeal it. The most infamous instance is Canada, where Brian Mulroney’s conservatives went down from a governing majority to two seats in Parliament. (The Conservative Party is back in power now, but that’s no consolation to the politicians who lost their jobs a generation ago.)

But it doesn’t have to be this way. Mulroney mismanaged the introduction of the VAT and had to appoint extra senators to get it through the legislature.\(^6\) A much better example is John Howard in Australia. After famously making his “never ever” statement, Howard campaigned on the need for VAT in 1998,

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won narrowly, and was able to get the reform enacted by forging an unusual coalition of labor groups (concerned about cuts in welfare spending) and business groups (concerned about competitiveness). He was then reelected twice.

Can that happen here in America? It is hard to imagine President Obama, or any future U.S. presidential candidate, running for office on a platform that includes raising taxes. But suppose Obama was reelected in 2012. At that point, he could spend his new political capital on getting a VAT enacted without fear of having to run again.

The task would require leadership and skill in forging coalitions. Progressives would need to be persuaded that using a regressive tax to fund redistributive programs like Medicare, Medicaid, and Social Security is not a betrayal of their ideals. Rebating revenues to the poor will help. Conservatives would have to be persuaded that adopting a VAT will increase America’s competitiveness, which can be achieved if the VAT revenue is used in part to cut other taxes (such as the corporate income tax). The states would have to be persuaded that a federal consumption tax will not cut into their revenue base. Perhaps some portion of federal VAT revenue must be allocated to the states.7

The task would be difficult, but not inconceivable. Nor would it be harder than, for example, passing healthcare reform.

The Low Road: Response to a Crisis

The more plausible option is a crisis. In 2012 the Treasury Department will need to sell 30-year bonds maturing in 2042. Yet by 2042, Medicare, Medicaid, and Social Security will consume all federal revenues, leaving nothing to pay the investors.

At some point — not necessarily in 2012, but certainly in this decade — I believe those investors may balk. Then, interest rates will go up, the dollar will go down (because investors fear the

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7This was the solution in Australia. In Canada the provinces had the option to harmonize their retail sales taxes with the federal VAT, but few did so until recently. Nevertheless, the Canadian example proves that a federal VAT can coexist with states’ retail sales taxes. See Avi-Yonah, supra.
Federal Reserve System will just print money to pay the high interest costs), and the U.S. will face a Greek- or Argentinean-style fiscal crisis.

At that point, Democrats and Republicans will unite in passing the VAT, just like they united to pass the equally unpopular bank bailout in 2008. There will be no more palatable choice, because it will be harder to sufficiently raise the income tax (which the Republicans will block) or cut entitlements (which is anathema to the Democrats).

The problem with this “crisis” scenario is that there will be no time to plan intelligently, and things will get messy. That is why Professor Charles McLure and I in 2009 organized the American Tax Policy Institute’s conference “Structuring a Federal VAT.” The idea was to bring the best expertise in ahead of time so that when the crisis hits, a blueprint will already be in place.8 This volume from Tax Analysts is another contribution to that effort.

Personally, I don’t like this crisis option and hope it won’t happen. But regardless of whether we take the high road or the low road, it is hard to see how the U.S. can avoid joining the other OECD countries — and almost every other country in the world — in adopting a VAT. The question is no longer whether, but when and how.

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8See the papers from the conference in the Tax Law Review (2010).
## Appendix

### Consumption Taxes Around the World

<table>
<thead>
<tr>
<th>Jurisdiction</th>
<th>VAT or GST (Standard Rate)</th>
<th>Alternate Consumption Tax</th>
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## Consumption Taxes Around the World *(continued)*

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## Consumption Taxes Around the World (continued)

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<td>Tuvalu</td>
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## Consumption Taxes Around the World (continued)

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<tr>
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<tr>
<td>Yemen</td>
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<tr>
<td>Zambia</td>
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</tr>
<tr>
<td>Zimbabwe</td>
<td>15%</td>
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</tbody>
</table>

\(^a\) Aggregate VAT rate (federal plus local) varies by region [Brazil].  
\(^b\) Subnational VAT or sales tax may apply at provincial level [Canada].  
\(^c\) VAT implementation pending [Malaysia, Seychelles, Syria].  
\(^d\) Sales taxes apply at state level [United States].  
Information obtained from public sources; updated January 2011.
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