Considerations for a Value-Added Tax in the United States

Testimony before the

Ways and Means Committee

United States House of Representatives

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Chairman Camp, Ranking Member Levin, and distinguished members on the Committee, thank you for the opportunity to testify today regarding considerations for a value-added tax in the United States.

The United States faces serious fiscal challenges over the next several decades as the federal deficit and debt are projected to rise to unsustainable levels. At the same time, many view the existing tax system as overly complex and an obstacle to economic growth. These issues have led to some discussion of a value-added tax (VAT) as a possible source of new revenue or as a replacement for a portion of the existing income tax.

Some view a VAT as a possible source of additional revenues to reduce the deficit and help stabilize the federal debt. Others view a VAT as means to help improve the competitiveness of the United States by providing revenue to permit a reduction in the corporate income tax rate or reduction in the scope of the income tax system.

Consideration of a VAT in the United States is not a new issue. More than 150 countries rely on VATs, and in these countries, VATs account for nearly one-fifth of total government revenue. VATs have been discussed and considered in the United States for more than four decades. Two recent proposals include the 6.5 percent VAT proposed by the Bipartisan Policy Center's Debt Reduction Task Force in November 2010 and the 8.5 percent VAT included in Congressman's Ryan's Road Map for America's Future released in January 2010.

A VAT in the United States would raise a number of issues and can have very different effects depending upon a number of key considerations. For example:

- Would the VAT be a replacement tax or an add-on tax?
- Which features of the income tax would be replaced by a replacement VAT?
- How would the revenue from an add-on tax used, to reduce the deficit, reform the tax system, or fund additional spending?
- Would the VAT apply broadly to consumption or are many consumption items excluded from the VAT base?

The answer to these questions will have a significant influence on the economic effects of a VAT. A broad-based VAT that replaces the worst features of the income tax has the potential to

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provide significant economic benefits. A VAT is fundamentally a tax on consumption and does not tax the return to saving and investment. The nation's output could be increased in the long-term by reducing the tax on saving and investment and by more even or economically neutral treatment of economic activity.

The revenue from an add-on VAT could be used to reduce the deficit, putting downward pressure on long-term interest rates as deficit-financed government spending is replaced with VAT-financed government spending, and deficits that would otherwise crowd out private saving are reduced. Lower long-term interest rates would reduce the borrowing costs for both households and businesses. However, the rise in prices that would accompany a VAT would also likely lower consumer spending and there is evidence that consumer spending and employment would be permanently reduced as compared to deficit reduction financed by a reduction in certain types of government spending.

A more narrow VAT base would require a higher tax rate to raise a given amount of revenue, which would reduce the potential economic benefits from a VAT. It is also important to observe that the VATs in most others countries and state sales taxes in the United States are generally not broad-based, and exclude significant amounts of consumption from the tax base through exemptions and preferential rates. Differential taxation of consumption under a narrow-based VAT can also have significant distortive effects on households' consumption choices that further reduce a VAT's economic benefits and adversely affect the sectors of the economy that are taxed.

Additionally, an add-on VAT, while possibly addressing the nation's long-term fiscal imbalance, would represent a new tax with additional compliance, administrative and other costs. Other important issues include how a VAT would be applied to financial services, whether small businesses would be exempt, and whether transition relief would be provided.

I have had the opportunity to consider value-added taxes from a number of perspectives, inside and outside of government, in the context of broad reform of the Internal Revenue Code as a replacement tax and as an additional source of revenue. Today I will start by focusing on the mechanics of a VAT and its potential economic benefits. Then I will focus on issues related to the design of the VAT base, the reliance on VATs in other countries, and potential compliance and other costs. Finally, I will discuss border adjustments and transition issues.

Mechanics of a VAT

A VAT is similar to a retail sales tax in that it applies to goods and services sold to consumers and, therefore, is a tax on consumption. The two taxes, however, have an important difference. A retail sales tax is collected once on final sales to consumers, while a VAT is collected at every stage in the production and distribution chain. Also, a VAT may have somewhat less evasion than a retail sales tax because all collection is not concentrated at the retail level.

Net VAT revenue collected by the government is generally the difference between the gross tax on sales and gross credits for tax previously paid and may be only a small fraction of the gross cash flows involved.

Types of VATs that could be considered in the United States

Two types of VATs have been discussed in the United States: the subtraction-method VAT and the credit-method VAT, also known as the credit invoice-method VAT. The subtraction-method VAT has received attention in the United States, in part, because of its similarity to the current corporate income tax. The credit-method VAT, however, is used in virtually all 150 countries with a VAT. Japan is the only country that uses a subtraction-method VAT.[2]

Under a subtraction-method VAT (sometimes referred to as a "business activity tax" or "business transfer tax"), the tax base for each firm is receipts from sales of taxable goods and services minus purchases of taxable goods and services from other businesses.[3] Businesses aggregate their receipts, subtract permitted deductions and file a periodic return.

In contrast, under a credit-method VAT, the tax on intermediate inputs or production is eliminated differently. Instead of deducting purchases from other firms, each firm is fully taxed on its sales but also receives a credit for the tax paid by suppliers on the firm's purchases, as shown on the suppliers' invoices. Businesses remit tax on sales and claim refunds for tax previously paid. The credit method uses the invoices to show the VAT paid on purchases and charged on sales, which creates a paper trail that helps make the VAT more enforceable.

Both the credit-method VAT and subtraction-method VAT collect the same amount of tax overall and at each stage of production. Under the subtraction method, each firm subtracts its pretax purchases from its pretax sales and pays tax on the difference. Under the credit method, each firm subtracts tax previously paid when determining how much tax to remit to the government.

Although arithmetically equivalent in theory, the credit method, unlike the subtraction method, can result in over-taxation (tax cascading) if exemptions are provided before the retail stage. The exemption, in effect, breaks the VAT chain and increases the total burden on the final consumer good. In contrast, however, the subtraction method, unlike the credit method, cannot easily accommodate multiple tax rates which may help explain the prevalence of the credit method.

Comparison of a VAT base to the corporate income tax base

There are several important differences between the tax base of a VAT and the corporate income tax that help illustrate from where a VAT derives its potential economic benefits. These points are clearest with a subtraction-method VAT but also apply to a credit-method VAT.

First, under a VAT, businesses would not deduct wages or other worker compensation. Unlike under the corporate income tax, employee compensation is included as part of the VAT base and is therefore taxed. Economy-wide, roughly two-thirds of value added is actually workers' wages and other compensation. This is one reason why a VAT is generally thought to be regressive, meaning it is borne disproportionately by low-income and moderate-income households. A VAT is, in large part, similar to an employer tax on worker compensation.

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[2] Several countries have subtraction-method VATs at the regional level, in addition to their federal credit-method VATs. See Tom Neubig, Robert Cline and Estelle Dauchy, "Non-VAT taxes on value added: the European Union experience," Ernst & Young LLP *Tax Insights*, June 2010.

[3] The computation of VAT under a subtraction and credit method VAT and related issues are discussed in Robert Carroll and Alan Viard, "Value-added taxation: basic concepts and unresolved issues," *Tax Notes*, **(**March 1, 2010**)**, pp. 1117–1126, and Robert Carroll, "Value-added tax primer: What US companies should know about value-added tax," Ernst & Young LLP, May 2011.

Second, a VAT applies to all businesses, not just C corporations. The tax base would include the value added of all businesses, although many countries exempt small businesses from the VAT due to high compliance costs. In this respect, all businesses would be treated the same, although investor level taxes on capital gains and dividends and the associated double tax on corporate profits might well persist under an add-on VAT that retained the major features of the current income tax.

Third, under a VAT, businesses deduct all purchases from all other businesses. This means that businesses' write-off or expense all investment immediately. This includes not only all equipment but also buildings and other structures. A VAT allows a full deduction for the cost of new investment and then taxes the return to this investment over its life. This feature has the effect of removing the tax on the economically important portion of the return to investment, which encourages additional capital formation as compared to the income tax, and is a major source of a VAT's economic benefits.[4]

It is important to note that the current U.S. income tax includes provisions that move in the direction of a VATs treatment of investment.[5] Accelerated depreciation, for example, reduces the cost of capital for new investment and moves towards the immediate deduction for all new investment provided under a VAT. Further, certain other investments, such as those made by certain small businesses, already receive full expensing, which is the same treatment under a VAT. In this respect, the current U.S. income tax is not a pure income tax, but a hybrid consumption-income tax with some VAT-like features.

Fourth, income and expenses related to financial intermediation are often excluded from the VAT base. This means that companies neither include interest income nor exclude interest expenses from net income for VAT purposes. This feature of a VAT can have large effects on the VAT remitted by firms active in financial intermediation or heavily reliant on debt financing. Moreover, a VAT that disallows interest deductions and provides expensing for new investment may increase the cost of capital for highly leveraged firms as compared to the current income tax. Also, a VAT that replaced the income tax or provided a means to reduce the corporate income tax would result in more even treatment of debt and equity finance.

Fifth, firms with little or no income tax liability may have substantial VAT liability and vice versa. The VAT base, in simplest terms, is defined as receipts less purchases from other businesses and could be quite large even if a firm is not currently profitable. For example, a firm with large interest expenses might be unprofitable but may pay substantial VAT. Alternatively, a firm that is profitable from an income tax perspective might have little or no VAT (or even be in a refund position) if it is making large capital purchases. Because capital expenditures are expensed, they can drive VAT liability down in anticipation of future profits.

Finally, VATs are typically border adjustable, with exports exempt but imports taxable. While, as discussed below, adjustments in exchange rates likely mitigate the aggregate effects of border

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[4] It is important to note that even though a VAT allows businesses to expense all new investment both income taxes and VATs continue to tax a significant portion of the return to investment. An income tax taxes the full return to an investment, while VATs only relieve from tax a portion of the return – what economists call the "normal return" to an investment or the minimum required return that investors demand to forgo current consumption. Returns that exceed this minimum required return – supra-normal returns – continue to be taxed under a VAT.

[5] These issues are also discussed by U.S. Department of the Treasury, Office of Tax Policy, *Approaches to Improve the Competitiveness of the U.S. Business Tax System for the 21st Century*, December 2007, p. 28. (http://www.treas.gov/press/releases/reports/hp749_approachesstudy.pdf).

adjustments on the U.S. balance of trade, VATs can have near-term and potentially longer-lasting effects on companies and industries.

The combination of these points suggests how some businesses might be affected by a VAT. If a firm's value added arises primarily from workers' contribution to production, that firm will tend to remit more VAT than a firm that has substantial investment in equipment and structures (i.e., tangible property). Labor-intensive firms, such as personal service companies, will remit more VAT than capital-intensive firms, such as manufacturing companies.

Comparison of value-added to corporate profits

As shown in Table 1, value added is considerably larger than corporate profits, the basis for the corporate income tax. The larger size partially reflects the fact that about two-thirds of value added reflects workers' wages. Thus, labor-intensive companies and industries would generally pay more VAT than capital-intensive industries and more than they would in corporate income tax. There are also special issues that would arise for certain industries and sectors, such as financial services and the flow-through or non-corporate sector.

If VAT revenue were used to lower the corporate tax rate (i.e., with a partial replacement VAT), the effects of the lower corporate tax rate could benefit many firms. Firms with substantial foreign operations might see their competitive position improve relative to foreign firms, as the U.S. corporate rate becomes more closely aligned with the international norm.

Table 1. Composition of corporate profits and valued added, by US industry, 2007

	Corporate Profits		Value Added*	
Private Industries	$Billions	Percent	$Billions	Percent
Agriculture, forestry, fishing & hunting	3	0%	70	1%
Mining	49	4%	55	1%
Utilities	42	3%	143	2%
Construction	17	1%	609	7%
Manufacturing	451	36%	701	8%
Wholesale trade	82	7%	632	8%
Retail trade	84	7%	823	10%
Transportation and warehousing	19	1%	224	3%
Information	95	8%	463	6%
Finance, insurance, real estate, rental & leasing**	222	18%	1,445	17%
Professional and business services	149	12%	1,427	17%
Educational services, health care & social assistance	11	1%	925	11%
Arts, entertainment, recreation, accommodation & food services	19	2%	467	6%
Other services, except government	3	0%	331	4%
Total Private	1,246	100%	8,315	100%

*Excludes exports. Taxes on imports assumed to be remitted by foreign companies importing to the United States.
**Less imputed rental value of owner-occupied housing

Source: Computations by Ernst & Young LLP using Bureau of Economic Analysis data.

Potential economic benefits of a VAT and other consumption-type taxes

The effects of a VAT on economic performance depend on how the revenue from the VAT is used. A VAT that replaces or reduces the worst features of the income tax could increase economic growth, while the effects of an add-on VAT can be more varied depending on the alternative policies for reducing the deficit.

Many economists have long held that the income tax imposes a drag on the economy by taxing the return to saving and investment. This "tax penalty" on saving and investment could manifest itself in many ways; for example, businesses might provide less equipment to workers or use older technologies and be slower to incorporate new technologies, thereby decreasing worker productivity and their real wages and, ultimately, lowering living standards.

Greater reliance on value-added taxes, or other consumption-type taxes, to fund government can help improve economic performance because consumption taxes do not tax the return to saving and investment. By not taxing the return to saving and investment, these taxes reduce the cost of capital and lead to greater investment. Greater investment means more capital formation, and, ultimately, higher labor productivity and living standards than otherwise.

Some estimates suggest that the economic gains from replacing all or a portion of the income tax with a consumption-type tax, such as a VAT, could be significant. One study found that complete replacement of the individual and corporate income tax could increase the size of the economy in the long-run by between 6 percent and 10 percent.[6] Another study found that replacement of the corporate income tax with a VAT could increase long-run output by 2.0 percent to 2.5 percent.[7]

The effects of a deficit-reducing add-on VAT would be more varied. A deficit reducing add-on VAT increases private savings, but does so primarily by replacing deficit-financed government spending with VAT-financed government spending, which frees up private saving to finance private investment rather than financing government spending. Over time interest rates and the cost of capital would fall, thereby further stimulating investment and the larger capital stock would increase labor productivity and nominal wages. As a consumption-based tax, the VAT would also encourage saving and investment and additional capital formation. Both channels contribute to an increase in capital intensity and stimulate long-term economic growth.

Even though a deficit-reducing add-on VAT increases long-term economic growth, a recent study found that taxable consumption and employment would fall in both the near-term and the long-term under a deficit-financing add-on VAT as compared to a policy that reduced the deficit through a reduction in certain types of government spending.[8] The analysis also found that the add-on VAT would reduce output for several years after enactment with only negligible positive effects over the following several years, before increasing output in the longer-term.

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[6] David Altig, Alan J. Auerbach, Laurence J. Kotlikoff, Kent A. Smetters, and Jan Walliser, (2001) "Simulating fundamental tax reform in the United States," *American Economic Review* 91 (3), pp. 574–95.

[7] This approach for reform would not only replace the income tax, but also individual income taxes collected from pass-through businesses (e.g., S corporations, partnerships and sole proprietorships), and conform the tax treatment of interest to that of dividends. U.S. Department of the Treasury, *supra* note 5, p. 32.

[8] Robert Carroll, Robert Cline and Tom Neubig, "The Macroeconomic Effects of an Add-on Value Added Tax," An Ernst & Young LLP report prepared on behalf of the National Retail Federation, October 2010.

Defining the VAT base

In principle, the base of a VAT should include all final household consumption and exclude all investment purchases to minimize economic distortions and maximize its economic benefits. However, in practice, VATs are seldom applied to all consumption expenditures and frequently exclude a variety of goods and services from the tax base or provide preferential rates.[9]

A concern with VATs is that they are borne disproportionately by low-income and moderate-income households. Discussions of VATs are typically combined with discussions of policies to address their regressivity relative to an income tax. The narrowing of the VAT base through exemptions and preferential rates is typically intended to address these regressivity concerns. In addition, for social reasons, the tax is often reduced or eliminated on goods such as food consumed at home, education or health care services.

Standard VAT exemptions among OECD countries include health care, education, and financial services and most VATs could more accurately be termed "partial VATs."[10] Exemptions and preferential rates exclude a significant share of household consumption from the VAT. One measure of the narrowness of the VAT base is the OECD's VAT revenue ratio (VRR), which relates actual VAT revenues to potential VAT revenues assuming all household consumption is subject to a country's standard VAT rate. As shown in Chart 1, the weighted average VRR is 53.9 percent with New Zealand with the highest VRR (98 percent) and Mexico the lowest VRR (35 percent). Only five countries have a VRR above 70 percent, reinforcing the view that other developed nations tend to exclude or provide preferential rates to a significant portion of household consumption.

Experience with sales taxes in the United States also suggests that certain consumption goods would likely be exempt from a new VAT. Virtually all states exempt prescription drugs and most do not tax health care. Thirty states exempt food for home consumption or tax it at a lower preferential rate. One study estimated that 38 percent of personal consumption expenditures were subject to state and local sales taxes.[11]

A recent study by Toder and Rosenberg (2010) considering two potential VAT bases for the United States – a "broader" base that includes most purchases of final goods and services to consumers (i.e., personal consumption) that might reasonably be expected to be subject to tax under a new VAT in the United States and a "narrow" base or partial VAT that includes several additional exemptions.[12] Both bases assume that the VAT would not be applied to educational expenses, government-financed medical expenses (primarily Medicare and Medicaid), services provided by charitable and religious organizations, the imputed value of financial services, existing residential housing, and services provided by state and local governments. The VRR for the narrow-based VAT and broad-based VAT are calculated at about 41 percent and 67 percent, respectively, suggesting a substantial portion of consumption is likely to be excluded.

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[9] Some VAT proposals suggest a VAT rebate as a mechanism to offset in whole or part the VAT paid by low-income households, but there are few if any examples of the provision of such rebates in other countries. For an example of a study that considers refundable credits targeted to low-income households see: Eric Toder and Joseph Rosenberg, "Effects of Imposing a Value-Added Tax to Replace Payroll Taxes or Corporate Taxes," Tax Policy Center, Urban Institute and Brookings Institution, 2010

[10] For example, see Organisation for Economic Co-operation and Development, *Consumption Tax Trends, 2010*, 2011.

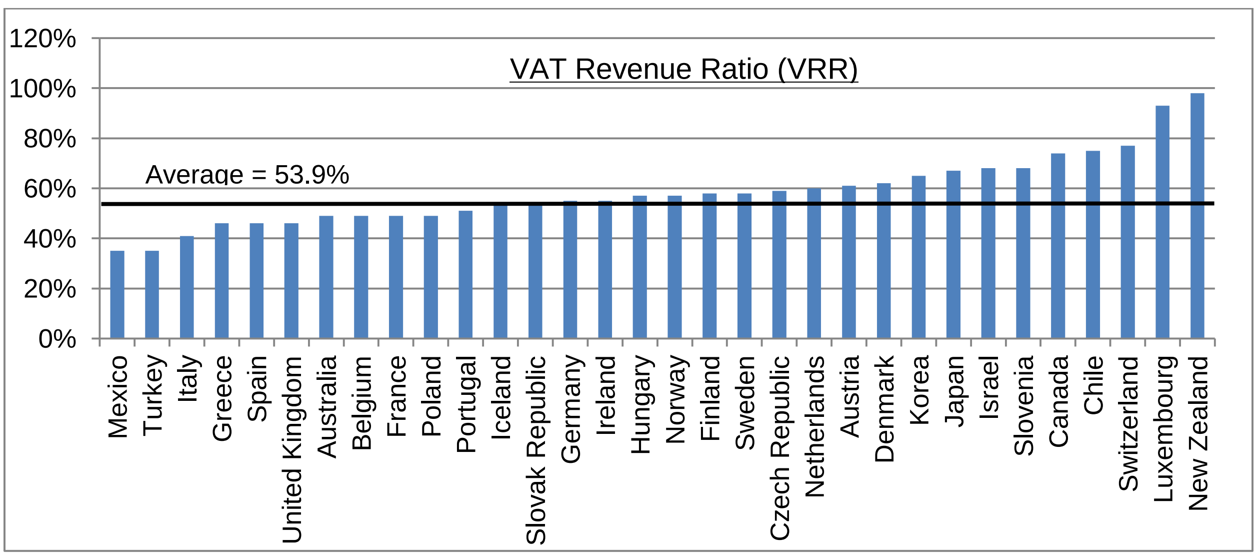
[11] See Robert Cline, John Mikesell, Tom Neubig and Andrew Phillips, "Sales Taxation of Business Inputs: Existing Tax Distortions and the Consequences of Extending the Sales Tax to Business Services," Council on State Taxation, January 25, 2005, p. 1.

[12] Toder and Rosenberg, *supra* note 9.

The narrow VAT base excludes a number of additional consumption items that have traditionally received special treatment in the United States, either under the federal income tax or under state sales taxes. The exclusion of housing is extended to both rental housing and new home purchases in recognition of the special status housing has received under the U.S. tax system. Purchases of groceries and other food items are also excluded, following the practice among most states. Finally, private health care spending is excluded, including both out-of-pocket expenses and health insurance premiums, which follows the special tax treatment health care spending generally receives under the federal income and payroll taxes and under state sales taxes.

One recent study analyzed the differential effects of a broad-based and narrow-based VAT as defined by Toder and Rosenberg (2010) on consumption patterns and found large differential effects on household consumption. Taxable retail spending was found to initially fall by 4.3 percent to 5.0 percent, while nontaxable retail spending would initially rise by 0.8 percent to 2.3 percent, both relative to a policy that lowered the deficit by an equivalent amount through a decline in government spending and depending on the specific VAT-policy scenario.[13] These results suggest that VATs that exclude a significant portion of consumption from the tax base can distort consumption patterns.

Chart 1. VAT base coverage of OECD countries, 2008



Note: VAT revenue ratio is calculated as VAT revenue divided by the product of the standard rate and final consumption expenditures less VAT revenue. Average is weighted by personal consumption expenditures.
Source: Organisation for Economic Co-operation and Development, *Consumption Tax Trends 2010*, 2011.

Reliance on VATs abroad

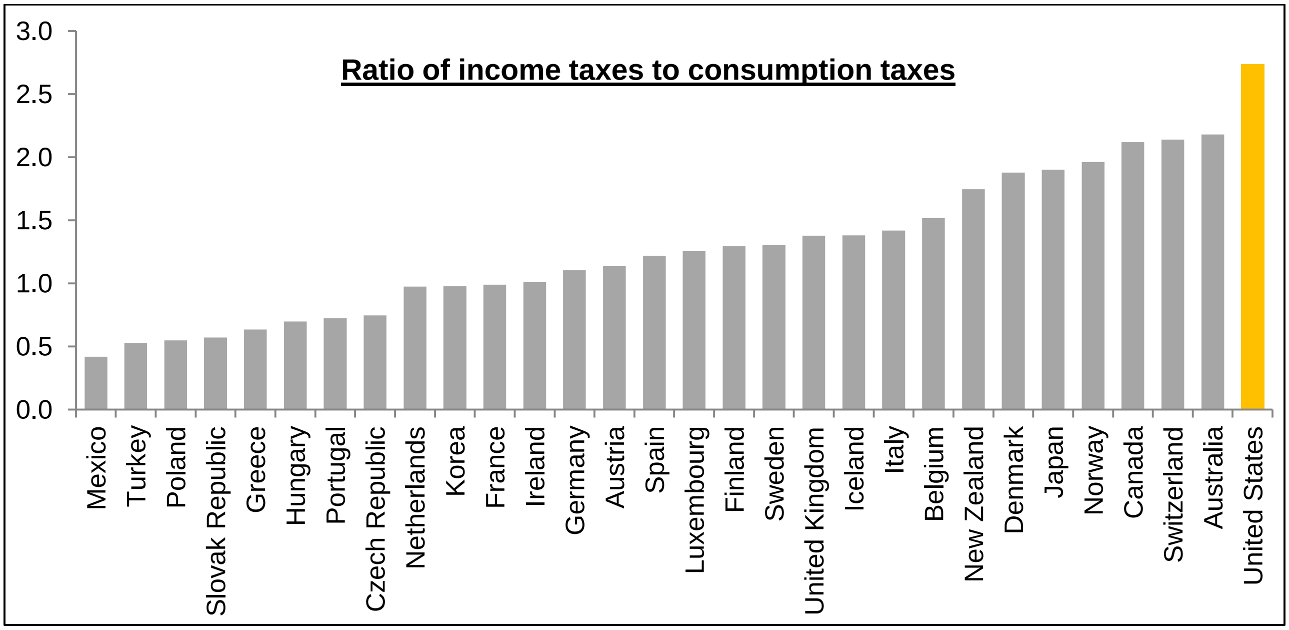
The United States relies more heavily on income taxes as compared to consumption-type taxes to raise revenue than other major developed nations, even when taking into account state sales taxes in the United States (Chart 2).

One factor that may trigger increased interest in a VAT in the United States is the difficulty of raising substantially more revenue through the current income tax system. Higher tax rates may be problematic because they have been found to be damaging to the economy. A recent OECD

[13] Carroll et al., *supra* note 8.

study suggests that income taxes are among the least conducive types of taxes to economic growth,[14] which may partly explain the growth of consumption-type taxes abroad.

Chart 2. United States more reliant on income taxes than other nations, 2008



Source: Organisation for Economic Co-operation and Development, 2010.

Among the nearly 150 countries that have implemented VATs, the VATs account for nearly one-fifth of total government revenue. The United States is the only major developed nation without a VAT. As shown in Table 2, the average VAT rate among member nations of the OECD in 2011 was 18.5 percent. Japan has the lowest VAT rate (5 percent), while several countries have combined federal/sub-national rates approaching 40 percent (e.g., Austria, Norway, Sweden). The rates have also risen over time. Not only is there considerable variation in the top-line VAT rates across countries but also in the breadth of their tax bases and the use of multiple rates to address distributional concerns.

[14] Asa Johansson, Christopher Heady, Jens Arnold, Bert Brys and Laura Vartia, "Tax and economic growth," *Economics Department Working Paper No. 620. ECO/WKP(2008)28*, Organisation for Economic Co-operation and Development, 11 July 2008 and OECD, "Tax Policy Reform and Economic Growth", *OECD Tax Policy Studies*, No. 20, OECD, Paris.

Table 2. VAT rates for member nations of the OECD, 2011

	Federal VAT rates			
	Year implemented	Standard rates	Reduced rates*	Select sub-national rates
Australia	2000	10	0	—
Austria	1973	20	10/12	19
Belgium	1971	21	0/6/12	—
Canada	1991	5	0	13
Chile	1975	19	—	—
Czech Republic	1993	20	10	—
Denmark	1967	25	0	—
Finland	1994	23	0/9/13	—
France	1968	19.6	2.1/5.5	—
Germany	1968	19	7	—
Greece	1987	23	6.5/13	3/6/13
Hungary	1988	25	18/5	—
Iceland	1989	25.5	0/7	—
Ireland	1972	21	0/4.8/13.5	—
Italy	1973	20	0/4/10	—
Japan	1989	5	—	—
Korea	1977	10	0	—
Luxembourg	1970	15	3/6/12	—
Mexico	1980	16	0	11
Netherlands	1969	19	6	—
New Zealand	1986	15	0	—
Norway	1970	25	0/8/14	—
Poland	1993	23	0/5/8	—
Portugal	1986	23	6/13	4/8/14
Slovak Republic	1993	20	10	—
Spain	1986	18	4/8	—
Sweden	1969	25	0/6/12	—
Switzerland	1995	8	0/2.5/3.8	—
Turkey	1985	18	1/8	—
United Kingdom	1973	20	0/5	—
Average		**18.5**		

*A number of countries apply a domestic zero rate (or an exemption with right to deduct input tax) on certain goods and services. This is shown as 0 in this table. This does not include zero-rated exports.
Source: "Indirect Tax in 2011: A review of global indirect tax developments and issues," Ernst & Young LLP, 2011; and Organisation for Economic Co-operation and Development.

A general overview of the VAT tax systems for 10 large OECD economies that have adopted the tax is provided in Table 3.[15] Nine of the countries use a credit-method VAT, while Japan uses the subtraction method with a single tax rate of 5 percent. The table shows the year of adoption, as well as original and current tax rates.

Most of the countries listed in Table 3 adopted VATs that, at least initially, replaced existing turnover or sales-type taxes collected at the wholesale or manufacturing level. Their VATs replaced what was viewed as relatively inefficient turnover taxes with considerable cascading and uneven taxation of consumption.

[15] Note that the VAT is referred to as a GST in Australia, Canada and New Zealand.

Table 3. VAT tax adoptions and rates for selected countries

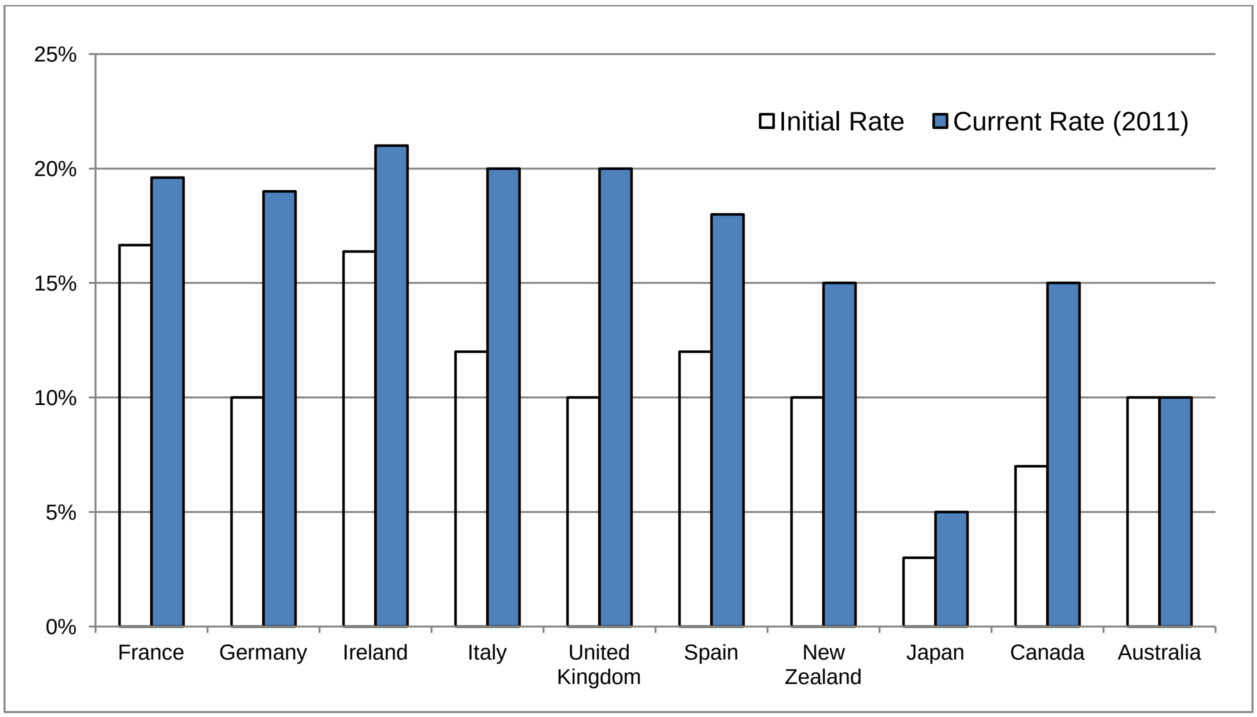
	Type of VAT	Date enacted	Initial general rate	Current general rate	VAT as percentage of GDP	Type of tax replaced	Additional information
France	Credit invoice	1954	16.66%	19.6%	7.2%	Turnover tax	Applied to services in 1968; peak rate of 20.6% in 1999
Germany	Credit invoice	1968	10%	19%	6.3%	Turnover tax	
Ireland	Credit invoice	1972	16.37%	21%	7.9%	Turnover tax	Peak rate of 25% in 1989; 22% rate in 2013 and 23% rate in 2014
Italy	Credit invoice	1973	12%	20%	6.3%	General tax on consumption (IGE)	
United Kingdom	Credit invoice	1973	10%	20%	6.7%	Selective employment purchase taxes	Rate was 15% in 2009; 17.5% in 2010; 20% in January 2011
Spain	Credit invoice	1986	12%	18%	6.4%	23 indirect taxes	Rate increase from 15% in January 2010
New Zealand (GST)	Credit invoice	1986	10%	15%	9%	Wholesale sales tax	Rate increased to 15% in October 2010
Japan	Subtraction	1989	3%	5%	2.6%	Selective excise taxes	
Canada (GST)	Credit invoice	1991	7%	5% GST; 12% to 15% HST	3.1%	Federal manufacturers' sales tax	HST is combined federal and provincial tax (nine provinces)
Australia (GST)	Credit invoice	2000	10%	10%	3.9%	Wholesale sales tax	

Source: "Indirect Tax in 2011: A review of global indirect tax developments and issues," Ernst & Young LLP, 2011; Organisation for Economic Co-operation and Development, *Consumption Tax Trends, 2010* (2011); and European Commission, *VAT Rates* (May 2010).

VATs and the growth of government

Despite the perceived shortcomings of the income tax, one concern with a VAT is that reliance on this revenue source might increase over time. VATs abroad have generally grown over time. As shown in Chart 3, VAT rates have increased substantially over time. With the increase of the general VAT rate from 17.5 percent to 20 percent in January 2011, the United Kingdom is the first country shown in Chart 3 to double its tax rate since adopting a VAT in 1973. Germany follows closely with a 90 percent tax rate increase since the inception of its VAT in 1968. The 10 countries shown in Chart 3 have increased their VAT rates by nearly 50 percent since they adopted VATs.

Chart 3. VAT rates abroad have risen over time



Source: Ernst & Young LLP, "Indirect Tax in 2011: A review of global indirect tax developments and issues," 2011; Organisation for Economic Co-operation and Development, *Consumption Tax Trends 2010,* (2011); and European Commission, *VAT Rates,* (May 2010).

Some have also observed that the growth of VATs abroad may have enabled or even led to an increase in the size and scope of government; that is, a VAT may be a "money machine." There is little empirical research on this issue. Nevertheless, one study finds empirical evidence that more efficient tax systems contribute to an expansion of government[16] and another lends some credence to the idea that reliance on the VAT leads to increased government spending.[17] Various efforts to analyze and consider a U.S. VAT over the past four decades have cited the

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[16] Gary S. Becker and Casey B. Mulligan, "Deadweight Costs and the Size of Government," *Journal of Law and Economics*, *46*(2), October 2003, pp. 293-340.

[17] Michael Keen and Ben Lockwood, "Is the VAT a Money Machine?" *National Tax Journal*, 54(4), December 2006, pp. 905-928.

possibility that even if a VAT were initially small, a VAT might grow over time and potentially expand to finance an expansion in the size of government.[18]

Other issues

Compliance costs

A VAT imposes collection obligations, and the associated compliance costs, across all firms. While compliance costs are spread across firms, total compliance costs under a VAT are generally higher than under a sales tax or even the corporate income tax.[19]

An add-on VAT, or a VAT that only reduced but did not replace the corporate income tax, would require businesses to comply with an entirely new tax. Businesses would have to collect the VAT on behalf of the government, keep and maintain records of their VAT payments and collection, and prepare VAT returns. The extent of these costs would be based on factors such as the number of transactions involved, the complexity of the VAT base, rate structure, definitions, and administrative and enforcement regime. Also, for an add-on VAT, businesses would have to continue to comply with the federal and state corporate income taxes, as well as state retail sales taxes.

Surprisingly, there is little recent research on the actual compliance costs businesses face under a VAT. The international experience is primarily with credit method VATs, and so the research pertains primarily to this type of VAT. The compliance costs associated with a subtraction method VAT could be different.

A 1992 CBO study reported that VAT compliance costs were substantial, especially for small businesses.[20] In an analysis of the United Kingdom's VAT from the late 1980s, the CBO estimated that the cost for complying with a VAT with a $25,000 small business exemption would be between $4 billion and $7 billion (in 1988).

The CBO estimated that about 90 percent of that cost would be incurred by businesses with annual sales of less than $1 million. A 1998 study of the State of Washington's sales and use tax found that the compliance burden for small firms was more than six times that of large firms.[21] Because VAT compliance costs can be high, small businesses are often exempted from registering for VATs.

Large multinational enterprises already need to manage their VATs from a global perspective whereby they comply with VAT systems that vary, sometimes substantially, from one country to another with different VAT bases, different rate structures, definitions, administrative and enforcement regimes, and registration requirements.

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[18] Two notable examples are President Nixon's 1970 Task Force on Business Taxation and President Bush's 2005 Advisory Panel on Federal Tax Reform.

[19] A recent World Bank study found that compliance costs for VATs were 26% higher than for corporate income tax. World Bank, *Paying Taxes 2010,* November 2009, Appendix 1.3.

[20] Congressional Budget Office, "Effects of adopting a Value-Added Tax," February 1992, pp. 70–72.

[21] Washington State Department of Revenue, "Retailers' cost of collecting and remitting sales tax," 1998.

The start-up costs for businesses to comply with a new VAT could be considerably more substantial than suggested by the experience in the United Kingdom in the late 1980s. A1999 Ernst & Young LLP study of the implementation of Australia's GST estimated the start-up costs for the largest corporations to be 0.75 percent to 1 percent of annual revenue and 10 percent of annual revenue for small businesses.[22]

The use of multiple rates and exemptions likely comes at a significant cost. These items increase administrative and compliance costs for both tax agencies and taxpayers. For the nine countries included in Table 3 that use a credit-invoice method VAT, the hours needed to comply with consumption taxes (primarily their VATs) exceed the hours needed to comply with the corporate income tax by 26 percent.[23]

Non-compliance is also a significant by-product of the complexity introduced by multiple rates and exemptions. A study of VAT compliance in the EU found that, on average, the VAT gap in 2006 was 12 percent of the potential tax liability, translating into a total gap of 106 billion euros. The estimated VAT gap ranged from 30 percent in Greece to 2 percent in Ireland.[24]

These studies suggest that, in practice, the view of a credit-invoice method VAT as a self-enforcing tax system whereby the presence of invoices ensures voluntary compliance may be incomplete. Rather, it could be viewed as a transaction-based tax on very large gross flows producing much smaller net tax collections, requiring substantial tax agency resources and imposing significant compliance costs on businesses. Notwithstanding these concerns, the presence of invoices under a credit-invoice method VAT could well help with enforcement of the current income tax by providing a paper trail that helps address underreporting of income, a major component of the tax gap.

Non-recoverable costs for businesses

Under a VAT, businesses act as tax collectors. In addition to the compliance costs, businesses may often bear extra costs associated with VATs. A business is liable for VAT on its gross receipts but receives credits for VAT previously paid on purchases. Businesses have found that, in the United Kingdom, the tax on these gross flows — the tax on gross sales and the credits on purchases — has been 10 times the net VAT collected.[25] There may be circumstances in which VAT crediting may be incomplete, which would impose a direct tax cost on businesses and might be difficult to pass on to consumers. Because the gross flows are so large, imperfections in the VAT system can be greatly amplified.

The more complex a VAT (e.g., the more exemptions and greater use of multiple rates) the more likely that businesses will have difficulties. Mischaracterizing sales items (i.e., applying the wrong rate) can affect credits for businesses downstream. Different jurisdictions or countries may have different requirements for substantiation of invoices that can affect the ability of businesses to claim credits. There may also be issues related to the timing of VAT taxes and credits. Delays in the issuance of invoices can affect the timing of businesses' claims for credits

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[22] "Preparing for the GST: an Australian survey*,"* Ernst & Young LLP, 1999, p. 6.

[23] World Bank, *supra* note 19.

[24] Reckon LLP, "Study to quantify and analyze the VAT gap in the EU-25 member states*,"* report prepared on behalf of the EU Directorate-General for Taxation and Customs Union, 21 September 2009, p. 22.

[25] Richard Summersgill, HM Revenue & Customs, "Improving VAT compliance in the United Kingdom," Presentation to the OECD Forum on Tax Administration (September 2006).

against their VAT taxes. This can create variability in net tax payments over time and affect the cash flow of a company. Delays in issuing invoices to businesses further down the production chain could also have implications for other businesses.

Border adjustments

An important consideration is whether a VAT could be used to foster U.S. exports. Many hold the view that border adjustments, whereby VAT is imposed on imports but not exports, will encourage exports and help improve the balance of trade. Economists view this position with considerable skepticism.

VATs are typically levied on a destination basis, with goods taxed where they are consumed. A destination-based VAT taxes imports but not exports (i.e., it taxes what is consumed within a country). Border adjustments are used to implement a destination-based VAT. A refund is received for the VAT paid on business purchases used in the production of exported goods, and VAT is imposed on imports. In contrast, an origin-based VAT taxes goods where they are produced, taxing exports but not imports.

Many economists argue that border adjustments do not improve the balance of trade because any apparent cost advantage would be offset by differences in the real price levels across nations as reflected through changes in exchange rates or other prices. These price adjustments work over time to negate any permanent improvement in the balance of trade.[26] While there may be no significant long-term effects on a nation's balance of trade, there may be effects on specific industries and markets, especially if the VAT excludes many consumption items, as is the case in most other countries' VATs.

Transition issues

A VAT would raise significant transition issues because of the potential effects on the value of existing assets. An add-on VAT, for example, would reduce the value of existing assets by the same fraction as the VAT tax rate, presuming the VAT is broad-based.[27] For example, a 10 percent comprehensive VAT would make existing assets worth 10 percent less in after-tax terms. This occurs because the consumption eventually financed by the assets ultimately would be taxed at 10 percent.

Some view this one-time tax as desirable and as a way to address the so-called "entitlement problem," which has been characterized as a large transfer of wealth to the baby boomers from future generations. The one-time tax or levy on existing assets, however, is viewed as falling primarily on the baby boomers as they currently hold a substantial fraction of existing assets. So, a one-time tax through a VAT could be viewed as an indirect way to reduce the baby boomers' entitlement benefits. From this perspective, the one-time tax represents an intergenerational transfer from generations alive when the tax is adopted, especially the elderly, to future generations.

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[26] For example, see Carroll and Viard, *supra* note 3, pp. 1123-1124.

[27] In present value, Americans' future consumption is equal to their future wages plus the current market value of their existing assets. A 10 percent VAT is therefore equivalent to a 10 percent tax on wages plus a one-time 10 percent tax on existing assets. The VAT makes existing assets worth 10 percent less in after-tax terms, because the consumption financed by these assets will ultimately be taxed at 10 percent. For a more detailed discussion, see Carroll and Viard, *supra* note 3, p. 1122-1123.

In addition, to the extent this one-time tax is unexpected and reduces the value of existing assets, most economists assert that it has no effect on economic decision-making. However, to the extent a one-time tax is expected to be repeated (if, for example, the tax is introduced at 5 percent but is anticipated to rise to 10 percent and then 15 percent over time), the tax could affect household and business behavior, as taxpayers modify their spending patterns in response to the expected rate increase. Subsequent increases in the VAT rate would cause corresponding reductions in asset values.

<u>Summary</u>

Some view a VAT as a possible source of additional revenues to reduce the deficit and help stabilize the federal debt, while others view it as a potential source of revenue to help redress shortcomings with the current tax system, such as the high U.S. corporate tax rate.

A VAT in the United States raises a number of issues. Importantly, a VAT's economic effects depend critically on key design issues and how VAT revenue is used. Vastly different conclusions can be reached, for example, depending on whether the VAT replaces the worst features of the income tax or is an add-on VAT used for deficit reduction or additional government spending.

Many analyses of VATs assume a broad-based VAT that applies to most consumption, even though in practice, most VAT and state sales taxes are narrow-based. The exclusion of significant portions of consumption would require a higher rate to raise a given amount of revenue and also distort household consumption patterns, thereby reducing the economic benefits of a VAT.

Other important issues include whether VATs lead to an increase in the size of government over time, as some evidence suggests, and the extent to which an add-on or partial replacement VAT can impose significant compliance and other costs on businesses as they are required to comply with a new additional revenue source, border adjustments and transition.

I commend the Committee for holding this hearing to explore the issues concerning potential consideration of a VAT.

Thank you and I would be pleased to address any questions you may have.