



AN INTRODUCTION TO THE VALUE ADDED TAX (VAT)

This is the first in a series of White Papers by the U.S. Chamber of Commerce on issues that may arise during fundamental tax reform. The Chamber appreciates the contributions of Philip Beram to this paper.



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With the U.S. government finding itself mired in dire financial straits, it is looking desperately for more revenue. National debt is rising precipitously and exploding entitlement spending is on the horizon. Many possible revenue streams have been examined, such as taxing the wealthy or changing the U.S.'s international tax provisions, but critics have contended that these would have chilling effects on the fragile economy – or would not raise the needed amounts.

So why do we want to talk about the value-added tax, also known as the VAT? Lately the VAT has been mentioned increasingly often as the possible knight in shining armor, riding to the rescue. Some have proposed it as an add-on system to supplement the income tax, while others suggest it could serve as a replacement for the income tax system.

In light of these recent discussions, the U.S. Chamber of Commerce has developed this White Paper, “An Introduction to the Value Added Tax (VAT).” Below we explore basic types of VATs, which VAT method is generally preferred, and general pros and cons of VATs.

I. INTRODUCTION

Value-added taxes are utilized in approximately 150 countries worldwide. The United States is the only major developed country currently without a VAT as part of its tax system.

A VAT is a tax imposed and collected on the value added at each stage in the production and distribution of a good or service. It is, in effect, levied on the difference between the sales and production inputs of a business.

The VAT is generally thought of as a consumption tax, similar to a retail sales tax. One important difference, however, is that the VAT is collected in stages as the goods and services are produced and sold, whereas the retail sales tax is collected at once upon the final sale.

The tax may be calculated in a number of ways. The two most prevalent methods are the credit-invoice method and the subtraction method, also known as a business transfer tax. (There is also a third type, the addition method, which will not be covered here, as it is not currently in use in any country.)

II. TYPES OF VATs

A. Credit-Invoice Method

We lead off with the credit-invoice method VAT because it is, by far, the most commonly used. It has been adopted in all but one country that uses a VAT, Japan.

Under the credit-invoice method, a tax is imposed on the business for all of its sales. The VAT applies the tax rate to the sales price of the good or service (“output”) and the tax is disclosed on the sales invoice. As such, the credit-invoice method is considered to be a “transaction-based” tax, as it is imposed on each sale. A business credit is provided for all VAT on purchases of taxable goods and services (“inputs”) used in the business. Accordingly, the net tax paid at a stage of production or distribution is computed on the value added by that business at that particular stage.

In order to receive a credit for VAT on inputs purchased, the business is required to possess an invoice from a seller that identifies the purchaser and the tax collected on that sale or transaction. At the end of a reporting period, the business calculates its tax liability by subtracting the cumulative amount of VAT stated on its purchase invoices from the cumulative amount of VAT stated on its sales invoices.

Example: Credit-Invoice Method VAT with 10% rate applied

Assume Wheat Farmer grows, harvests, and sells wheat to Miller for \$50, paying a \$5 VAT (10% x \$50 sale price).

Miller processes the wheat into flour and sells it to Baker for \$150, paying a VAT of \$10 [(10% x \$150 sales price = \$15) minus credit of \$5 paid on previous business inputs by Wheat Farmer, as reflected on the invoice received].

Baker bakes the wheat into bread and sells it to Retailer for \$300, paying a VAT of \$15 [(10% x \$300 sales price = \$30) minus inputs credit of \$15 paid on previous business inputs paid by Wheat Farmer and Miller].

Retailer sells the bread to consumers for \$500, paying a VAT of \$20 [(10% x \$500 sales price = \$50) minus inputs credit of \$30 paid on previous business inputs paid by Wheat Farmer, Miller, and Baker].

In this example, a total of \$50 VAT has been paid to the government in four stages.

Business	Purchases	Sales	Credit for Business Inputs	Tax on Sales of Outputs	VAT Liability
Wheat Farmer	\$0	\$50	\$0	\$5	\$5
Miller	\$50	\$150	\$5	\$15	\$10
Baker	\$150	\$300	\$15	\$30	\$15
Retailer	\$300	\$500	\$30	\$50	\$20
Total					\$50

B. Subtraction Method

Of the approximately 150 countries with a VAT, only Japan uses the subtraction method VAT. Under this method VAT, the tax base is computed as the difference between the business’s taxable sales and its purchases of taxable goods and services. At the end of the reporting period, the tax rate is applied to the difference. The subtraction method VAT is considered to be “account-based,” as it is computed from the business’s books and records of account.

Example: Subtraction Method VAT with 10% rate applied

Assume that each business only purchases from the business listed above it, and that each purchase amount is the total for the period. Each business takes its total sales for the period and subtracts its total purchases for the period. It then multiplies the result by 10% to calculate its VAT.

In this example, a total of \$50 VAT has been paid to the government in four stages by the businesses, but has been calculated based on total transactions for the period, rather than individually on single transactions as was done with the credit-invoice method.

Business	Total Purchases	Total Sales	Sales Minus Purchases	VAT Liability
Wheat Farmer	\$0	\$50	\$50	\$5
Miller	\$50	\$150	\$100	\$10
Baker	\$150	\$300	\$150	\$15
Retailer	\$300	\$500	\$200	\$20
Total				\$50

III. WHY THE CREDIT-INVOICE METHOD IS GENERALLY PREFERRED

As noted above, the predominant value-added tax in use is the credit-invoice method VAT, often referred to as a European-style VAT because of its longstanding prevalence there. Generally, this type of VAT is preferred over the subtraction method VAT for a number of reasons.

A. Documentation and Calculation Considerations

The credit-invoice method VAT has a number of inherent advantages over the subtraction method attributable to its required reporting of VAT on invoices generated at each stage of production and distribution. This provides documentary evidence of each transaction including the tax liability arising from it, thus promoting the ability to verify credits taken by tracing the credits at each stage to tax paid on invoices for business inputs. This detail provides a strong audit trail and, with the limitation of allowing input credits only to registered businesses, renders the credit-invoice method VAT less vulnerable to evasion than the subtraction method, which is calculated using gross accounts without itemization by transaction.

The credit-invoice method VAT provides the easier, more direct way to calculate and verify the tax as it is applied to individual transactions. It can more easily be calculated closer to the time of the transaction, as it is calculated without resorting to the compilation of summary accounts. It is more practical because it can be calculated on a more frequent basis than the subtraction method.

Because of its calculation and documentation at each step of the production and supply chain, it is more flexible in its ability to be tailored or fine-tuned through the use of various devices such as multiple tax rates or exemptions for certain goods and services. Adjustments for the subtraction method VAT computation cannot be as easily or efficiently accomplished due to its comparative lack of documentation.

For instance, it does not have the same flexibility to adjust for regressivity by applying reduced rates to purchases of “essential” consumer goods.

The credit-invoice method VAT is more transparent and visible than the subtraction method VAT, as the tax is separately stated on invoices provided to the end-consumer, where the purchaser can see it.

B. Revenue Considerations

The credit-invoice method VAT provides a more stable, dependable source of revenue because this VAT imposes the tax on the final consumer and not on business inputs and is perceived as transaction-based, rather than company-based. Therefore, it is considered less apt to draw political pressure for preferential tax treatment by businesses, industries, and sectors providing certain goods or services. The subtraction method VAT would be more likely to draw pressure for special tax rates.

C. Border Adjustability Considerations

The credit-invoice method VAT can more effectively be levied as a destination-based tax on personal consumption in a neutral fashion as it is more easily border-adjustable than the subtraction method. This means it can be better calibrated to make our goods and services more competitive around the world, wherever they are consumed. Since this method taxes a country’s consumption, rather than its production, it tends to minimize distortions in production and consumption decisions.

The credit-invoice method clearly adds the VAT to the price of the good or service, so it can simply exclude the tax from the export by applying a tax rate of zero and allow a credit for tax levied on production inputs. Its more extensive recordkeeping makes it easier to both determine the tax to be rebated on purchased inputs and whether reported exports reconcile with actual exports. This is because the credit-invoice method requires businesses to keep track of transactions, which the subtraction method relies on sales and purchase information at a more aggregate level.

Importers, on the other hand, would be subject to tax on the full value of imported goods because their inputs would not have been subject to U.S. VAT.

Border-adjustability is more problematic with the subtraction method. If the value-added tax rate at each of the pre-export stages is not the same, it would be difficult for the exporting country to determine the correct amount of VAT to allow

as an export rebate. It would be necessary to know the number of previous stages, the value added at each, and the tax applied at each of those stages.

Border adjustments comply with the General Agreement on Tariffs and Trade (GATT) if they do not discriminate against imports or provide over-rebates on exports. A credit-invoice method VAT has been accepted as border-adjustable under GATT, unlike the subtraction method, for which a GATT-compliant determination has not been made, to date.

IV. GENERAL PROS AND CONS OF A VAT

There has been a lot of discussion about why implementation of a VAT may be helpful or harmful. Let's look at some of the considerations.

A. Neutrality and Economic Efficiency Issues

A broad-based and uniform value-added tax – an “ideal” VAT – is said to promote neutrality and economic efficiency, as compared with various other taxes, such as the individual and corporate income taxes. Because it taxes consumption rather than income, a VAT would tend to not interfere with or distort decisions of individuals to work or not work, to consume or save, to favor purchases of one product over another, or what businesses produce or how – and, thus, would enhance economic efficiency.

An income tax, on the other hand, tends to distort these decisions. Because it taxes income – and because it applies progressively higher rates of tax to increasing levels of income – an income tax may discourage some individuals from working. Likewise, since an income tax taxes income earned on investments, it may discourage saving.

However, to the extent deviations from ideal VAT taxation are introduced – through such devices as multiple rates of tax, exemptions, preferences, etc. – neutrality and efficiency may be adversely affected and administration of the tax becomes more complicated and difficult to enforce. Most VATs exclude various goods and services, or classes of taxpayers from VAT for economic, social, or political reasons. Furthermore, certain goods and services are excluded from VAT due to difficulties in measuring either the amount of the value added or the incidence of consumption.

B. Administrative Issues

VAT on some services is easy to ascertain and levy, such as on public utilities, accommodations (hotels and motels), automotive and equipment rentals, amusement fees or admissions, repairs, and professional services (legal, consulting, engineering, accounting, consulting, etc.). Other services pose practical problems that would make a VAT difficult to measure, assess, and administer; this has led some countries to exempt certain services, such as banking, insurance, and certain financial services from a VAT.

Some consider a VAT to be advantageous because it provides a convenient, simple, and economical method of calculation and payment for consumers. It is calculated for them at the point of sale and they make the payment at that time as part of the purchase price. It is also thought to provide a simpler computation than the income tax from the business's standpoint. For administrative convenience, certain classes of sellers, such as small business providers of goods and services, may be exempted from having to register with the government and collect and remit the VAT.

In addition to industry sector and consumer administrative issues, some oppose the imposition of a federal VAT on goods and services, arguing that it may create complexity to the extent state and local governments impose sales taxes on different bases. This would make it difficult to piggyback these taxes and cause complications in administering sales to consumers.

C. Fiscal Responsibility Issues

While some favor a federal VAT as an effective way to raise revenue, others oppose it for the same reason, contending that it is such a very effective way to raise revenue that it would promote less spending discipline on the part of the government and would be easy to boost with a simple rate increase.

D. Global Issues

In the world economy, the VAT can be used to allocate tax to the country of destination, where the goods or services are consumed, whether here or abroad. This is done by "border adjustments," in which the tax is removed from exports and imposed on imports, thus resulting in taxing them at the same rate as goods produced in the country of destination, making them more competitive with each other.

E. Incidence Issues

Some advocate a VAT because they contend it is fair, in that it taxes similarly-situated consumers in a like manner. However, others criticize it as being an inherently regressive and unfair tax, as most poor and middle-class individuals tend to spend a higher percentage of their income on purchases than wealthier individuals, resulting in taxation of a higher percentage of their income.

There can be a variety of options utilized to restore a degree of progressivity to such a tax system, including such things as: providing a refundable credit through the income tax system; increasing government transfer payments to lower-income individuals; adjusting income tax rates; and exempting certain services or “necessities,” such as food, medicine, etc., from taxation. Some VAT systems also try to inject a degree of progressivity by imposing higher rates of tax on “luxury” items – goods that may be more heavily purchased by wealthier individuals.

Regressivity, however, is not the only source of opposition to a value-added tax. The elderly also are likely to take issue with a value-added tax. When they worked they paid taxes on their incomes; as they retire, they will now be taxed when they spend their savings. As with options to restore progressivity to a VAT tax system, there are ways this issue could be addressed – through exemptions from the VAT for elderly taxpayers or for those who are chronically ill or disabled.

V. OTHER CONSIDERATIONS

If a value-added tax is adopted as a replacement for the U.S. income tax system, extensive transition rules would have to be designed and implemented, and would require significant lead time to implement. If adopted as an add-on tax, the VAT would entail significant costs and efforts in setting up an additional governmental structure to accommodate and administer it in parallel to the income tax, including the hiring and training of a substantial number of additional personnel to enforce it.

VI. IN CONCLUSION

This introduction to the VAT was very brief, but intentionally so. There is more that could have been said and additional detail that could have been provided. However, the point of this paper was to give you some basic familiarity with this tax, to provide a jumping off point toward your further exploration of this topic, and to encourage your involvement in the developing political debate over tax options.