## JARGON ALERT

## **Value-Added Tax**

BY TIM SABLIK

arlier this year, newspapers reported that the Trump administration was weighing a value-added tax (VAT) as part of its tax reform proposal. While a VAT was ultimately not part of the final proposal, it has been a perennial topic of U.S. tax reform discussions for decades. Indeed, the United States is one of the few countries today that does not have a national VAT.

A VAT is a tax on consumption, similar to a sales tax. But unlike a sales tax, which is charged only at the final point of sale to consumers, a VAT is levied on all sales of inputs throughout the chain of production.

Take, for example, a wooden chair that retails for \$100. Suppose this is the chair's production chain: A

lumber company first harvests the wood to sell to the furniture maker. If it sells this wood for \$30, it has added \$30 to the value of the chair. If the furniture maker then turns this wood into a chair and sells it to a retailer for \$70, its value added is \$40 (\$70 minus the \$30 contributed by the lumber company). Finally, if the retailer sells the chair to a consumer for \$100, its value added is \$30 (\$100 minus \$70).

A 10 percent VAT would collect revenue from each link in this production chain. There are different

ways of calculating and collecting a VAT, but by far the most common is the credit-invoice method. Under this method, each business pays the full VAT but receives a refund of any tax amount previously paid on the item. In the chair example, the lumber company would owe a \$3 tax on its \$30 sale of lumber to the furniture maker. The furniture maker would owe \$7 on its \$70 sale to the retailer but receive a \$3 credit from the tax authority for the amount already paid by the lumber company. The retailer would owe the full \$10 tax on the sale of the \$100 chair but receive a \$7 credit for the amounts paid by the lumber company and the furniture maker.

In the end, the total tax collected would be \$10, just as it would be under a 10 percent sales tax. Also like the sales tax, the incidence of a VAT is typically passed up the chain and ultimately falls on the consumer. So the lumber company would charge \$33 for the wood, the furniture maker would add his or her tax to the cost and charge the retailer \$77 for the chair, and the retailer would charge \$110 to the consumer.

Given that the outcome of a sales tax and VAT is largely the same, why do many countries favor the more

involved VAT? A VAT creates a chain in which each buyer has an incentive to make sure the seller below them has paid the tax. The only way for a buyer to be reimbursed is to submit receipts to the tax collector showing the portion of the VAT already paid by the seller. In theory, this chain of accountability makes a VAT easier to enforce.

Increased enforceability is helpful given that VAT rates can be high. For example, the European Union requires member countries to have a minimum 15 percent VAT, and several have rates higher than 20 percent. High rates on a broad base mean VATs raise substantial revenue. For example, in 2009, VATs

accounted for an average of 19 percent of the revenue raised by other countries within the Organisation for Economic Co-operation and Development. The Congressional Budget Office estimates that even a 5 percent broad-based VAT in the United States would raise \$2.7 trillion over 10 years.

Economists generally favor a VAT because it can be less distortionary to economic activity than other types of taxes. A broad-based VAT raises the price of all goods and services equally, leaving consumers' preferences

unchanged (though it could provide some disincentives to work, since a general price increase would be equivalent to a wage decrease).

Despite calls from numerous policy think tanks for a U.S. VAT to address the growing fiscal imbalance, the idea has so far proven unpalatable to both sides of the political spectrum. Liberals tend to criticize the VAT as regressive, since poorer households consume a larger portion of their income and thus proportionally bear a greater burden of the tax. To address these concerns, many governments with VATs exempt things like food or medical care from the tax, but this makes the VAT more distortionary.

Conservatives have argued a VAT would collect too much revenue in a way that is largely invisible to taxpayers, ultimately growing the federal government. VATs are typically included in the price of goods and services rather than listed separately as with sales taxes, which can obscure the cost of the tax for consumers. There is also the administrative challenge of implementing a national VAT on top of state sales taxes, which many states rely on for a substantial portion of their revenue.