Value-added tax, national

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Broad-based tax on business designed to measure net dollar value generated in a country.

The usual value-added tax (VAT) is a general sales tax on all goods and services. It is levied at each stage of production and accumulates so that it is equivalent to a tax on all final household consumption. It has become the most popular sales tax in the world. It started in France in 1948, was adopted by the European Community (EC) in 1968, and has since spread to more than 100 countries. The only major economies that do not use some form of the VAT are Australia and the United States.

The VAT is designed to raise large amounts of revenue (typically 5 to 10% of gross domestic product) without creating economic distortions. In practice, many countries, because of political pressures to use the tax system to correct social inequities and because of their inability to tax certain sectors, use exemptions and multiple rates that erode the neutrality of the VAT. Such complications make the VAT more complex and expensive to administer and increase the opportunities for evasion.

Value added is the difference between the amount received for a good or service (output) and the cost to a trader of buying the materials and services from other traders (input). This difference, output minus input, usually consists of wages and salaries, profits, rents, and interest paid and constitutes the value added of the business. Clearly, value added can be measured either by subtracting inputs from outputs (the subtractive base) or by adding together the constituents. A tax on the additive base could be viewed as a tax on profits, rents, wages, and salaries and as a tax additional to conventional income taxes. For this reason, and because it would have to be on an annual base, levied at a single rate, it is not used. Instead, nearly all countries use the subtractive type of VAT pioneered in France. This variant does not actually require the trader to calculate value added by subtracting inputs from outputs, but taxes every sale and purchase and nets out the difference in tax liabilities for each trader.

In this way, a trader registered for the VAT charges a proportional tax rate on all sales. Likewise, he pays a VAT charged on his purchases by his suppliers. Each taxable period (usually a month), the trader credits the tax paid on his purchases against the tax liability on his sales, and the difference is his net VAT liability to be paid to the authorities. Actual value added is never calculated; it is only the difference between two tax liabilities, on outputs and inputs, that is computed. The emphasis placed on each transaction means that the evidence for each sale or purchase, the invoice, becomes a crucial document to monitor and administer the VAT. For this reason, this EC type of VAT is often called the "credit-invoice VAT."

An alternative subtractive method is to use company accounts to deduct purchases from sales and apply the tax rate to the value added derived from these accounts. This is used in Japan (the accounts method) and is administered by the income tax administration. The revenue should be the same as that when the credit-invoice method is used, but only a single VAT rate can be levied (5% in Japan). Companies make provisional tax payments through the year, and a reconciliation is performed when the accounts are closed at the end of the year.

The sum of all value added at each stage of production is equal to the final retail price. So a VAT is equivalent to a retail sales tax (RST) and should have similar effects. However, an RST is applied only at the final sale to a consumer, and it is frequently the easiest transaction to misrepresent and the most difficult for the tax administrators to check. As the VAT is levied at each stage and cumulates, the invoices for each transaction provide a better audit trail than the single retail sale. An RST at higher rates invites increasing evasion, and for this reason a VAT has been preferred as a sales tax when levied at high rates. In addition, under an RST it is often difficult to ensure that tax is not levied again on sales where inputs have already been taxed (cascading); under a truly general VAT, cascading is eliminated.

The EC adopted the VAT because it was a sales tax that could be identified precisely on exports and imports; it could be rebated entirely on exports by using a zero rate (the credit for taxes on purchases against a zero tax liability on the export sale ensures the exporter is compensated for all VAT levied on earlier stages of production). Likewise, the VAT could be levied on imports, regardless of the stage of production, at a rate identical to that used for domestic production. The assumption is that the VAT is passed forward fully in prices. The destination principle states that the VAT paid should be that levied in the country where the final consumption (sale) is made so the consumer's choice is not influenced by different countries' tax rates.

Another advantage of the VAT over the RST is that capital goods can be exempted entirely from the tax. Purchase of capital goods involves paying the VAT, but credit should be claimed at once against

the next tax period's VAT liability on sales. When capital purchases are large—for instance, involving extensive plant and machinery or a new building—the credit in a single tax period can far outweigh the tax liability; this net credit should be repaid at once by the government, although some administrations allow it to be set only against future VAT liabilities.

The VAT base should include all goods and services. To the extent that it does not, double taxation and cascading occurs and the neutrality of the VAT is eroded. Some sectors are difficult to tax. Small traders should not have to register; the time and trouble taken to monitor their liabilities is not compensated by the revenues. Thresholds for registration vary greatly; Denmark taxes all traders with an annual turnover above US$1,500, whereas Japan applies the full VAT to traders with a turnover above US$3.5 million (those between US$200,000 and US$3.5 million use a simplified scheme). Generous minimum thresholds simplify administration, and most difficult-to-tax categories drop out (small farmers, street traders, one-man suppliers of business services).

Second-hand goods are usually taxed only on their markup; because there is no VAT on the purchase, no credit is available if a VAT is applied to the value of the final sale. Of course, the largest category of second-hand goods is the existing stock of residential houses. The usual treatment is to tax the real estate agents' margins on sales of old houses but to tax new houses fully, including the profit element of the builder.

Financial services are exempt from the VAT (except in Israel and partially in New Zealand—see discussion in Tait 1991: 12). The charge for financial services is often a spread that may be only a few base points in the final charge to the consumer. Only part of this charge is for the service of financial intermediation, and it is impossible to unbundle it from the fees. This exemption from the VAT means that banks and insurance companies pay a VAT on their purchases (which can be substantial—e.g., computers, buildings) and cannot claim any credit for their payment. Presumably their VAT liability is passed forward to their customers, who then charge a VAT again on that price including the VAT; hence, distortions and cascading are introduced.

Frequently, governments argue that items that feature prominently in low-income household budgets, such as food, should not be taxed. Whether all food (e.g., in the United Kingdom) or only "essential" food is zero-rated, this favored treatment erodes revenue, creates problems of definition, and involves valuable administrative time in settling "border" disputes. Moreover, it uses the VAT to try to attain distributional ends for which the tax is ill-suited. The VAT is levied primarily for revenue; progressive income and wealth taxes, and carefully judged government expenditures to help at-risk groups, can be better designed to meet the distributional responsibilities of the budget.

The same argument applies to the claims made to use multiple rates of VAT to tax essentials at lower rates and luxury goods at higher rates. It is undoubtedly correct that a single-rate VAT is regressive, but it is easier to administer and less open to evasion. The EC is moving to use only two rates: equal to or lower than 5 percent for food, water, pharmaceuticals, passenger transport, books, agricultural materials, and cultural events, and 15 percent or higher for everything else. Typically, much higher rates on "luxury" goods generate little revenue, are difficult to administer, and generate evasion. Equity should be the responsibility of other parts of the fiscal system (see Vertical equity).

It has also been claimed that the introduction of the VAT is inflationary. Undoubtedly, because it is an additional tax on household consumption reflected in higher prices, adopting a VAT will lead to a once-and-for-all jump in the price level. Whether this would lead, in turn, to an accelerated rise in prices depends on the wage-price nexus and whether the money supply is expanded to accommodate the rising prices. The evidence is that in most countries the introduction of a VAT led to a once-and-for-all shift in the price level but not to a change in the rate of inflation.

The VAT is not a cheap tax to administer. The revenue raised should be equivalent to an RST at an identical tax rate, but more taxpayers must be registered and more tax returns made. Much money is collected only to be returned. Much fraud is possible through suppression of sales figures, barter transactions, understated debtors, false invoices, misdescriptions, multiple claims, customs fraud, and fictitious businesses. The costs of VAT administration vary widely depending on the exemptions, thresholds, zero-rating, number of tax rates, frequency of audit, and role played by other collection agencies (e.g., customs). In the EC, the ratio of staff to taxpayers varies from 1:123 in Belgium to 1:726 in Italy. A 1993 U.S. study reckoned that with a registration threshold of US$25,000, an annual audit rate of 10.6 percent, and an average audit length of 12 hours (more or less the norms for the United Kingdom and New Zealand), 18,850 staff years would be needed for 12 million taxpayers (1:637). If the threshold is set at US$100,000, the ratio drops to 1:529.

The United States has debated the possibility of adopting a VAT on numerous occasions. It has been seen as a way to reduce the budget deficit, finance Social Security, replace the corporate and personal income tax, and finance a health scheme or defense. In the United States, a 5 percent VAT, if education, financial services, and all medical care are zero-rated, would yield about US$98 billion in 1998 (about 6.3% of revenues) (Congressional Budget Office 1995: 393). This yield is much lower than is common in Europe, and it suggests that to make the administrative costs worthwhile (US$1 billion for government and US$6–10 billion compliance costs for business) the rate might have to move toward the typical worldwide rates of VAT (10 to 20%). However, it must be remembered that such a federally administered VAT would be supplemental to existing state sales taxes typically levied at 4 to 8 percent.

Additional readings

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Cross references: consumption taxation; retail sales tax; tax reform, federal; value-added tax, state.