# Chapter 4

## ALTERNATIVE TYPES OF SALES TAXATION

### I. Introduction

This chapter compares a value-added tax with alternative types of sales taxes. Sales taxes may be single stage in nature, applying to only one stage in the production or distribution process, such as the retail or manufacturing, or to all stages, such as the value-added tax. Notwithstanding its multistage character, a consumption-type value-added tax that extends through the retail level is, in effect, a tax on the final, retail sales of goods and services. Its tax base and revenue potential are equivalent to those of a single-stage retail sales tax with similar coverage and an identical tax rate. Therefore, the objective of taxing purchases of goods and services by consumers can also be accomplished with a retail sales tax. Forty-five of the states and many local governments have a retail sales tax, a single-stage tax that applies to all sales to final consumers, not just those made by retailers. Liability for the retail sales tax depends on the character of the sale, rather than on the business activity of the seller. A manufacturer, for example, may make some retail sales and a retailer may make some nonretail sales to business customers.

With a manufacturers or wholesale sales tax, a tax is applied at the manufacturing or wholesale level, respectively; that is, on the sale by the manufacturer or on the last wholesale sale (the sale to the retailer). A value-added tax that excludes the retail level would be similar to a wholesale sales tax. A personal exemption value-added tax is another form of sales tax; it is a simplified flat-rate tax that has many of the characteristics of a value-added tax, but with a personal allowance and exemptions to alleviate the regressivity of the tax. It can also be viewed as an income tax with a deduction for saving, or as a tax on consumed income.

### II. Analytic Framework

These sales tax alternatives, retail, manufacturers and wholesale sales, and personal exemption value-added tax are analyzed primarily with respect to two objectives: consumption and production neutrality. A tax is neutral toward consumption if it does not cause consumers to change their buying habits, to buy more of some commodities and less of others. A tax is neutral toward production if it does not induce business firms to change their production and distribution methods. Other important similarities or differences with the value-added tax, however, will also be mentioned.

#### A. Consumption Neutrality

Some taxes are specifically intended to change economic behavior. For example, one justification for sumptuary excise taxes, such as those on tobacco or alcohol, is to discourage the consumption of goods that may be associated with disease, accidents, and other social costs. But, without an accepted social justification for encouraging or discouraging certain types of consumption activity, a sales tax should not distort, or change, individual consumption behavior. On the assumption that individuals indicate the goods and services they want by the prices they are willing to pay, a sales tax should not alter the relative prices for the goods and services available to consumers. If a sales tax does change those prices by making some goods less expensive and other items more expensive, it will favor individuals with strong preferences for the lightly-taxed expenditures and penalize those preferring to buy the more heavily-taxed goods and services. Consumers, in general, will respond to the tax-distorted prices by buying more of some goods and less of others. The result is reduced consumer satisfaction and a less efficient use of the economy's resources.

To avoid distorting consumption patterns, a sales tax should constitute a uniform percentage of consumer expenditures. To achieve this, the sales tax should be the same on each dollar of expenditure. This objective is most likely to be accomplished by a tax that is levied at a uniform rate on all items of consumer expenditure.

### B. Production and Distribution Neutrality

A sales tax should not cause business firms to change their methods of production or distribution. Assuming that in the absence of a tax business firms use the most efficient and least cost production techniques available, then any interference by a sales tax in those techniques would cause total output to fall. The result would be a smaller quantity of goods and services.

To prevent any distortion of production methods, the sales tax borne by a product should be the same regardless of the choice of production techniques and distribution channels. If a manufacturer, for example, can reduce its tax liability by selling directly to a retailer, rather than through a wholesaler, then direct sales to retailers will be encouraged. Or, if a firm's tax liability can be reduced by combining certain production or distribution activities, the firm will have an incentive to integrate those activities. These artificial incentives to change business practices should be avoided because they will result in less output and a less efficient use of resources.

The objective of production and distribution neutrality also requires that only consumer goods be taxed; capital goods and other inputs used in production should be excluded from the sales tax. Otherwise, in an attempt to minimize costs, firms will substitute labor for those capital goods and other business purchases that are taxed. Investment and economic growth will suffer and exports will be penalized. Some firms may even respond by producing their own inputs to minimize the tax. Taxation of capital goods and other business purchases also distorts consumer expenditure since those goods produced with large amounts of the taxed equipment and material per dollar of output will be more heavily taxed.

## III. Value-Added Tax

To establish a basis of comparison, the discussion in Chapter 3 is briefly summarized. A properly designed consumption-type value-added tax would be neutral with respect to consumption decisions and production methods. If the tax applies to most goods and services at a single rate, with only minimal exceptions for clear and justifiable social or administrative reasons, it would constitute a uniform percentage of consumer expenditure. Consumers would not be given an incentive to consume more of some goods and less of others. The credit for value-added tax paid by a firm on all items purchased for business use, including capital equipment, would ensure that the tax will be neutral with respect to production and distribution methods. Labor and capital intensive operations would be treated the same. There would be no incentive for vertical integration since combining or integrating production or distribution processes would not alter the total tax on a product.

## IV. Retail Sales Tax

Like a broad-based value-added tax, a retail sales tax that exempted all production inputs, including capital goods, would be relatively neutral, with respect to both consumption and production decisions. Though it may not be an inherent defect, state experience with retail sales taxes, however, demonstrates the difficulties, at least in practice, of applying the tax to all consumer expenditures and of excluding business purchases. First, primarily to alleviate the regressivity of the tax, many states exempt food, utilities and fuel, and drugs and medicine. A few exempt clothing. In many states, only a limited group of services is subject to retail sales taxation. Chapter 8 describes the problems that arise with exemptions from the base and suggests some alternatives for reducing the burden on low income individuals.

Second, unlike a value-added tax, most states do not fully exclude capital equipment and other business purchases from the scope of the retail sales tax. While all states exclude sales for resale, including sales of goods that become physical ingredients or component parts of goods produced by the purchaser, they have more limited exclusions for fuel, industrial machinery, farm machinery and equipment, office supplies and equipment, and other business purchases that are not consumed directly in the production process. All such expenditures should be excluded if the sales tax is to avoid interfering with consumption behavior and production techniques.

There are two objectives to the proper taxation of business purchases: (1) to exclude capital goods and other business purchases from taxation, and (2) to ensure that exempt business purchases are not diverted to taxable consumption uses. The value-added tax is generally regarded as superior to the retail sales tax in achieving the first of these objectives. The value-added tax provides an automatic mechanism for excluding business purchases, as the buyer is allowed a credit for any value-added tax paid on those purchases.

A retail sales tax, in contrast, effects the exemption with two approaches. First, registered firms are allowed to make purchases for resale tax free. Normally, the buyer presents the seller with an exemption certificate, which authorizes the buyer to purchase free of tax, provided the purchases are for resale. This system frees business purchases from tax, but its scope is rather limited; only those items to be resold, or which become ingredients or parts of goods produced for sale may be purchased tax free on this basis. Secondly, fuel, equipment, machinery, and supplies, generally not covered in the purchases for resale category, are freed of tax only if they are specifically exempted in the state statute, and even then exemption certificates are often required. This system does not fully exempt business purchases from the retail sales tax. In practice, most states make no serious effort to exclude all purchases for business purposes from their retail sales taxes. About 20 percent of state retail sales tax revenue comes from taxing producers goods. One consequence of this is that U.S. exports bear some state retail sales tax.

Under either a value-added or retail sales tax, the problem of ensuring that exempt purchases are not diverted to consumption uses arises. From a policy perspective, neither tax is the clear favorite in solving this problem. In the case of the value-added tax, the revenue authorities need only check that the business purchases for which a tax credit is claimed were actually used in the business. With the retail sales tax, the check begins with the seller. Once it is determined that a sale was made on an exempt basis and that the seller has an exemption certificate, it is necessary to confirm that the buyer used the items purchased for exempt business purposes. With either a retail sales or value-added tax, it is necessary to analyze the buying firm's sales and purchase information to verify that a reasonable relation exists between its sales and purchases.

Like a value-added tax, a retail sales tax would be regressive and the destination principle of border tax adjustment would apply. The number of firms involved in the administration and enforcement of a retail sales tax would be somewhat smaller, perhaps 10 percent smaller than with a value-added tax. The reason the difference is not greater is because a retail sales tax is not confined exclusively to retailers. Nonretail firms making retail sales must also register for the tax. Moreover, even firms making tax-free purchases, and no retail sales, must be checked by auditors to verify that the purchases were for exempt uses. Because of experience at the state level, a retail sales tax would be more familiar to both consumers and firms than would a value-added tax. As noted in Chapters 2 and 3, it would be easier to piggyback state retail sales taxes on a Federal retail sales tax than on a value-added tax. Either tax, retail sales or value-added, would be viewed by state and local government officials as encroaching on the fiscal territory of the states and would be criticized as such, though the value-added tax might be more acceptable because of its cosmetic differences.

## V. Manufacturers and Other Pre-retail Taxes

Compared to a retail sales tax or value-added tax through the retail level, a pre-retail tax, levied on either the sale by the manufacturer or the last wholesale sale (the sale to the retailer), would apply to a smaller number of taxpayers. Either a manufacturers or wholesale tax would exclude the retail sector, which contains a large number of firms, some of them small. Developing countries view non-retail taxes as attractive since the number of taxpayers needs to be kept to a manageable size for administration and enforcement purposes. Moreover, recordkeeping is often not adequate to apply a sales tax to the numerous small firms at the retail level in developing countries. Neither of these reasons has any relevance for the United States. State experience with retail sales taxes has persuasively demonstrated the feasibility of a retail level tax in the United States.

Unlike a retail sales or value-added tax, either a manufacturers or wholesale tax would create severe economic distortions; neither would be neutral with respect to consumption choices or production methods. Combined wholesale and retail trade margins vary widely among products. Because the amount of value that is added to a product after the manufacturing sale is not uniform for all products, a manufacturers tax would not constitute a uniform percentage of consumer expenditure. Products with the bulk of their value added after the manufacturing sale would bear less tax relative to consumer expenditures than products with low wholesale and retail trade margins. Services would probably be excluded from either a manufacturers or wholesale tax because they are inherently retail activities. (The concept of trade margins is not readily applicable to a service activity.) Consumers would respond to the varying tax burdens by buying more of the lightly-taxed items and less of the heavily-taxed items. Thus, both consumer satisfaction and tax revenue at a given tax rate would be reduced. This potential for changing economic behavior would be magnified by the fact that, because of the reduced base, the tax rates necessary to raise an equivalent amount of revenue would be higher than for the retail sales tax. To the extent that "necessities" are low margin goods and "luxuries" high margin, the regressivity of the tax would be aggravated.

Distortions would also occur in production and distribution methods. Both a manufacturers and wholesale tax create incentives to restructure business operations in order to minimize tax liability, basically by transferring functions and costs forward beyond the point of impact of the tax. Less efficient production and distribution methods, combined with higher rates to generate an equivalent amount of revenue, are certain consequences. For example, in the case of a manufacturers tax, distribution and advertising activities may be shifted to affiliated entities beyond the manufacturing sector, and firms not willing or able to do this will be discriminated against.

Any effort to prevent this by requiring consolidated returns from affiliated firms or by not considering certain activities to be part of the tax base when carried on by the manufacturer is likely to cause serious administrative problems. A similar shifting of functions would occur with the wholesale tax, and large retailers who buy directly from manufacturers at low prices would be favored over small retailers buying from wholesalers.

A major problem, particularly with a manufacturers tax, is the valuation of the manufacturers sale for the purpose of applying the tax. Some manufacturers control their own wholesale and even retail outlets. This may be done for sound business reasons, such as the desire to provide a uniform level of customer service. One example of this practice would be a petroleum company integrated from the oil field to the service station fuel pump.

In the case where the manufacturing and distribution activities are under common ownership, rules must be specified for determining the value of the product to which the manufacturers tax will apply. Because the manufacturer has an incentive to understate the price (to minimize liability for the manufacturers tax), the price set by the manufacturer cannot be accepted for the purpose of determining the manufacturer's tax liability without careful scrutiny by tax administrators. This "transfer pricing" problem is a frequent occurrence in international transactions where countries are concerned about receiving their proper share of tax revenue from international businesses. Ideally, one would want to know the price at which the product would sell if the manufacturer and distributor were not related, that is, if they were dealing as independent entities operating at "arm's length." But, it may be impossible to know this if the manufacturer is not making similar sales to independent or uncontrolled distributors. In determining liability with a manufacturers tax, average margins may be added to costs or subtracted from the retail sales price, but they will only approximate the correct result and the margins will be different for different goods, thus complicating the administration of the tax. This problem is avoided under a retail sales or retail level value-added tax. The problem of determining the correct taxable value of a product also exists with a wholesale tax, but is less acute since fewer wholesalers own retail distribution networks than manufacturers own wholesale distribution outlets.

Canadian experience with the manufacturers tax has shown that a government is almost certain to allow some type of downward adjustment in the sale price for tax purposes when manufacturers are integrated forward and sell to retailers at prices higher than their competitors charge wholesalers; again the result is substantial operational complications. For this and other reasons, Canada is considering replacing its manufacturers tax with a value-added tax.

Under either a manufacturers or wholesale tax it is difficult to treat imports the same as domestically-produced goods. Merely applying the tax to the tariff-inclusive value of imports is not sufficient; the imported value will not necessarily be on the same basis as the value at which the manufacturers or wholesale tax would apply to a domestic good. If advertising expenditures, for example, are typically part of the manufacturers or wholesale tax base, applying the same tax rate to the import value, which presumably does not include any domestic advertising activity, would tax imports less heavily than domestic goods. Alternatively, imports would be taxed more heavily than domestic goods under a manufacturers tax if costs of some post-manufacturing or wholesale activity were incurred prior to importation.

While any expected change in a sales tax will cause purchases to be either accelerated or deferred, a manufacturers tax creates a special type of problem. By its very nature, with a manufacturers tax, the inventories of wholesalers and retailers will have been subject to tax. If wholesalers and retailers expect the tax to rise, they will accelerate their purchases from the manufacturer to acquire additional inventory at the lower tax rate. Or, if a tax reduction is anticipated, they will allow their inventories to be depleted so that new inventory can be bought at the lower tax rate. In effect, firms will try to either increase the profits or reduce the losses associated with the tax change. This disruption in buying patterns can be avoided, but only if inventories are subject to a tax adjustment when the rate of tax changes. The Federal Government does this for its manufacturers excise taxes through floor stocks taxes or refunds, designed to place inventories and new purchases on an equal tax footing. The problem can be solved, but a specific procedure, involving added complexity, must be designed. It is not automatic as with a retail sales or value-added tax extending through the retail level.

All of these difficulties with the manufacturers and wholesale taxes would be encountered equally with a value-added tax that excluded the wholesale and/or retail sectors.

## VI. Personal Exemption Value-Added Tax

The personal exemption value-added tax is a flat rate tax in which investment purchases are expensed (deducted in full in the year they are made). It can be viewed as a flat rate tax on consumption or as a consumption-type value-added tax with personal exemptions.

Under the personal exemption value-added tax, a flat-rate tax would be levied on both personal and business income. In the case of individuals, taxable income consists entirely of wages, salaries, and pensions. The tax on labor income would be withheld by the employer, as with the present wage withholding under the income tax. Interest, dividends and fringe benefits would be taxed at the business, but not the individual, level by not allowing these payments as tax deductions. A personal allowance and exemptions for dependents would eliminate the tax liability on limited amounts of labor income and thus lessen the burden of the tax. Since capital income would be taxed at the business level through the disallowance of business deductions, rather than through direct attribution to households, the personal allowance and exemptions would not reduce personal tax liability on non-labor income. Thus, the personal exemption value-added tax would not alleviate the burden of the tax for those not receiving wages, salaries, and pension income.

The business tax portion of the personal exemption value-added tax would be levied at the same flat rate as applied to individuals on all business entities, regardless of legal form, proprietorship, partnership, or corporation. In calculating taxable business income, only three categories of expenditures would be allowed as deductions: (1) wages, salaries, and pensions to employees; (2) purchases of goods, services, and materials from other firms; and (3) expenditures for capital equipment, structures, and land. The full and immediate deduction for purchases of capital equipment defines the tax base as equal to consumption. No deductions would be allowed for interest payments, dividends, royalties, state and local taxes, or fringe benefits. Given the common flat rate on all business and individual income, disallowing business deductions for these items is equivalent to taxing the owners of the business at the individual level. This is why, for example, interest and dividends are not explicitly taxed at the individual level.

The personal exemption value-added tax can be viewed as a subtraction method value-added tax in which employees are "in the system." That is, employees are treated the same as other taxpayers are treated under a conventional value-added tax, except that employees are allowed no deductions for purchases. Labor is subject to tax on its "sales" of labor to business firms in excess of the personal allowance and exemptions. Business firms pay tax on the difference between their sales and purchased inputs, including labor. In the absence of the personal allowance and exemptions, the withholding tax collected by the employer would exactly offset the deduction taken by the employer on wages.

Individuals may respond differently to the personal exemption value-added tax tax than they would to a conventional consumption-type value-added tax. Though both taxes have a consumption base, they achieve this result in fundamentally different ways. With the typical value-added tax, individuals pay a tax only if they consume; they avoid, or at least postpone, the tax as long as they save. Both labor and capital income, however, are subject to value-added tax once they are used for consumption purposes. Under the personal exemption value-added tax, in contrast, the tax liability of individuals on their labor income is not affected by the decision to consume or save; all labor income is taxed when earned, regardless of whether it is consumed or saved. Unlike a sales or conventional value-added tax, the tax burden on individuals would not be reduced by saving rather than consuming income earned as wages and salaries. Interest, dividends, and other forms of capital income, however, are not taxed at the individual level under the personal exemption value-added tax even if they are used for consumption purposes.

While the conventional and personal exemption value-added taxes are economically equivalent, the question is whether individuals would respond differently to these alternative ways of implementing a consumption tax. Would they, for example, be more likely to save if there is no tax on the act of saving itself than if there is no tax on the income from saving? In the first instance, the exemption for saving is implemented through the use of income, in the latter case through the source of income.

The personal exemption value-added tax differs from value-added taxes commonly in use in another important respect. The tax would not be collected on imports and it would not be rebated on exports. Thus it would be levied on the origin, rather than the destination, basis.

Because of the personal allowance and exemptions, the personal exemption value-added tax offers a way of directly lessening the burden of the value-added tax on low-income families and individuals without resorting to multiple rates. As the discussion in Chapters 2 and 3 notes, the preferred type of value-added tax would have the following characteristics:

1. deductibility of capital purchases (consumption type);
2. broad base;
3. uniform rate;
4. credit method; and
5. destination principle of border tax adjustments.

As proposed, the personal exemption value-added tax satisfies requirements 1, 2, and 3. Can it be modified to be a credit method, destination principle tax?

The personal exemption value-added tax plan could be converted to a credit-based tax by simply deducting tax on inputs from tax on sales. Since workers are treated as "selling" labor, the employing firm would be allowed a credit for the tax on wages. To preserve the personal allowance and exemptions in the credit framework, it would be necessary to allow credit against the business tax for an amount equal to the tax that was not imposed on labor income because of the personal allowance and exemptions, as well as for the tax actually withheld on labor income.

Once the tax had been adopted to the credit method, it would be relatively straight forward to implement the destination principle. There may be some question whether other countries would view a value-added tax structured along these lines as being eligible for destination principle border tax adjustments under the General Agreement on Tariffs and Trade (GATT). The personal allowances and exemptions add an element of personal or direct taxation that might render the tax vulnerable to attack under the GATT. (Recall that a direct tax such as an income tax, is not eligible for export rebates or compensatory import taxes under the GATT.) The strongest argument for GATT legality would probably be that the personal exemption value-added tax incorporates, in a single tax, both revenue and expenditure features.

The personal allowance and exemptions, that is, can be viewed as a form of expenditure program designed to alleviate the regressivity of the value-added tax. They could, for example, be said to be similar to other countries' family allowances funded from value-added tax revenues. Alternatively, it could be argued that the combination of a value-added tax and refundable income tax credits would clearly be GATT legal. The personal exemption value-added tax can be used to achieve exactly the same objective, but in one framework, rather than two.

The personal exemption value-added tax would probably have less immediate effect on prices than would a conventional value-added tax. If it were viewed as an income tax, it may not affect prices directly. If the credit method were used to implement the tax, it would more closely resemble a conventional sales or value-added tax and might have a similar effect on prices. As with any sales tax, a rise in the price level would require an accommodating monetary policy.

## VII. Summary

The only two types of sales taxes that should be considered for the United States are a retail sales tax and a value-added tax extending through the retail level. Pre-retail taxes, such as manufacturers or wholesale sales taxes, should be rejected since they would distort consumption behavior and production decisions and techniques, as well as give rise to difficult tax administration and compliance problems. A personal exemption value-added tax would only lessen the burden of the tax on those receiving wage or pension income, not on those receiving only capital income or who are unemployed. Though they are economically equivalent in their purest form, there are administrative differences between the retail sales tax and value-added tax that tend to favor the value-added tax. In particular, a value-added tax may be superior to a retail sales tax in freeing capital goods and other business purchases from taxation.