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THE FARMING SECTOR AND THE VALUE ADDED TAX

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Abstract: The Farming Sector and the Value Added Tax

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A value added tax for the United States is undergoing widening public discussion. Many of its proponents suggest the VAT as a substitute for the corporate income tax. Unless exemptions are provided, this proposal has serious structural and income consequences for farming and other forms of business which are primarily noncorporate, since the new tax would be paid by all forms of business activity, but offsetting tax relief would come only to those activities organized under the corporate legal form. The gross production base of the VAT, in contrast to the net income base of income taxes, also creates a stimulus for efficiency which might create additional structural repercussions. This article examines the arguments for and against VAT, the various forms, the possible impacts on the farming sector, and alternative treatments for farming. The purpose is to suggest the relevance of a more quantitative analysis, since the proposed institutional change could have major impact on adjustments in the structure of the farming sector.

THE FARMING SECTOR AND THE VALUE-ADDED TAX*

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Persistent needs for growing or at least more stable tax revenues, plus the stimulus of adoption of the value added tax (VAT) in the European Economic Community and other nations, have led to increasing public discussion of the VAT for the United States. Though this discussion has created some general understanding of the nature of VAT, there is little appreciation of the differential impacts on various sectors of the economy. In particular, the most frequent proposed use of a VAT, to substitute for part or all of the corporate income tax (CIT), could have profound impact on major parts of farming.

Through this paper, we hope to stimulate useful economic analysis for the probable upcoming public discussion of introducing the VAT into the U.S. taxing system. Our paper summarizes the nature of the various possible kinds of VAT, identifies qualitatively the kinds of impacts they might have on farming, and suggests some possible alternative treatments for farming.

The Appeals of VAT

Six favorable and two negative features lace arguments about desirability of the VAT. One of the great political appeals is that it plucks the tax goose, as the saying goes, to get the most feathers with the least squawking.

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VAT is, in general, applied to gross national product stage-by-stage as it is produced. In contrast with an income tax, a broader base permits low gross rates to yield large amounts of revenue.

Second, VAT follows the benefits received principle of taxation. This assumes businesses receive governmental services, a form of "input" in the production process, roughly in proportion to their net output or value added. The VAT thus represents a price paid for government services received. Third, the VAT promotes economic efficiency at both market and firm levels in the senses that (1) the governmental services are brought directly into the pricing system, (2) the VAT taxes each stage of production or type of income only once, and (3) profitable firms are not penalized relative to less efficient ones. Unlike the income tax, all firms adding value pay, regardless of their profitability position or deductions available to them. The premium on efficient management is thus raised. Fourth, in pure form the VAT is relatively easy to administer and collect. It is sometimes referred to as self-policing and free of convenient tax shelters. Practically, however, inserting the tax into an existing system frequently calls for a pattern of exclusions, differential rates, and rulings. Fifth, the current GATT (General Agreement on Tariff and Trade) treaty provisions provide an export price advantage for countries with a VAT over those having a CIT because of rebate rules. Finally, it has recently been argued that VAT is a more appropriate countercyclical fiscal tool than income taxes [7].

The main counter-arguments are, first, that such a tax is regressive, i.e., it violates the ability-to-pay principle, assuming such a principle should be applied to business as well as personal taxation, and second, that little is known about shifting (adding the tax to the price of goods) and incidence of the tax so that undesirable consequences may result.

Origin and Nature of VAT

The VAT was originally proposed shortly after World War I, and was recommended, over the next 3 decades by various advisors to numerous taxing constituencies [2]. A variation known as a business activities tax was in effect in Michigan during 1953-1967 and is reportedly again being proposed. The VAT was adopted in Japan (about 1950), but repealed before it went into effect. The big impetus came in April 1967, when the European Economic Community (EEC) decided to adopt the VAT concept as a vehicle for harmonizing tax systems [2]. Variations are now in effect or being developed in EEC, in other European countries, and in Brazil and Mexico.

Four major variants of VAT have generally been recognized. They are named according to the effective base of the tax: gross product, income, wages, and consumption types. They differ primarily in the way purchases of capital goods are treated, and thus the choice of type can have major policy impact on capital intensity decisions of private decision-makers.

Value added by any firm is defined as the difference between value of sales and the cost of goods and services purchased from other firms. The firm adds value by combining these purchased inputs with its own labor, machinery, buildings, land, other capital goods, and nonpurchased (owner) managerial and entrepreneurial services. The difference between sales proceeds and purchased input costs is the tax base of VAT. Input costs of capital goods may be handled by: (1) allowing a full price deduction in the year of purchase, giving a <u>consumption type</u> VAT, (2) allowing depreciation to be deducted giving an <u>income type</u> VAT, (3) allowing no deduction, but permitting the firm to exclude from taxable income an amount equal to the firm's net earnings on capital, giving a <u>wages type</u> VAT, or (4) allowing no charge at all, (neither cost nor depreciation) to be deducted for capital goods purchases nor for inventory adjustments, giving a gross product type VAT.

Imports and exports may be handled in two different ways--by the origin or the destination principle. The origin principle counts exports in the tax base for value added, but excludes imports. The destination principle taxes goods intended to be used domestically, regardless of where they originate. The latter, resulting in rebates for goods going for export, is used in the EEC plans. This provides a potential export price advantage to EEC goods because international (GATT) trade rules permit countries to rebate VAT tax on exports, but not the CIT. Given equal production costs, and assuming both types are shifted forward, countries with VAT have an advantage in world market pricing [4].

Three alternative approaches are available for administering and collecting the VAT, depending upon the type. The addition method works with an income-type VAT. Total factor payments including depreciation and firm profits are summed. The subtraction method works with a consumption-type VAT. Cost of purchases, including full price of capital goods, is deducted from total sales. No inventory accounting and no depreciation account is required. It obviously favors capital investment and allows managers a great deal of flexibility in timing capital purchases to minimize tax burden. It may result in negative value added in a given year, and a whole string of taxless years for a rapidly growing firm. The negative tax figures could either be handled as rebates or as carry-forward and -back credits against other year's obligations. Finally, the tax credit method may be used. With each purchase-sale transaction, an invoice is created showing the real price and tax components. The tax due or refund is found by subtracting the tax paid on all purchases from the tax calculated on gross value of sales.

Qualitative Impacts Without Other Tax Relief for Farming

It is simplest to look first at the effects of imposing a VAT on all forms of business activity without any substituting adjustments in other taxes. How might farming be affected?

1. An administrative burden is involved, both for farmers keeping the necessary records and for tax officials to handle large numbers of returns involving relatively little revenue. For this reason, many of the EEC systems involve exemptions and/or optional simplified reporting systems for farmers. Income tax records would be adaptable to this need.
2. Since the tax applies to value added in the production process rather than to net income, it would at the same time stimulate efficiency and pose a burden on those at low income levels. The specific type of tax base would determine the severity of these impacts.
3. Capital intensification and firm growth would be encouraged by a consumption type VAT, but retarded by a gross product type. Capital earnings and depreciation rates permitted would determine effects of the wages and income types.
4. Impacts by type of enterprise would vary greatly depending on type of tax, because of the differing capital intensities.
5. The incidence of the tax would ultimately determine welfare of the farming sector, and incidence is a subject of much disagreement among analysts. In the short-run, the tax might most likely draw against returns to residual resources, rather than be passed on in higher output prices. One

might thus expect depressed labor and management earnings and downward pressure on capitalized land prices. Over the longer-run lower earnings might logically result in reduced entry and/or speeded exit. If land resources were idled rather than combined into larger firms, prices of products might recover enough to say that the tax had been passed on. But certainly the farming sector would be affected adversely relative to corporate sectors, at least in the short-run.

6. Any export price advantage of EEC under GATT would be negated, unless composition of the VAT caused domestic prices to rise sufficiently. Too, the net impact could well be overshadowed by tariff and other administrative restrictions on trade. Nevertheless, in view of the importance of exports to U.S. agriculture, perhaps elimination of as many potential trade barriers as possible should be considered desirable.

Qualitative Impacts with CIT Relief

The VAT is often mentioned as a partial or complete substitute for the corporate income tax. Impacts would be serious for at least noncorporate farming (if the sector is subject to the tax), since change would amount to substitution of a tax on all business activity for one on a particular legal form of organization. The VAT would be accompanied by relief from the CIT, but this relief applies only to business activities organized as corporations. Since relatively few farms are so organized, there would be an increased tax burden for the farming sector. Second, one would expect this to stimulate a flight toward the corporate form of organization to escape income tax on farm business income. Third, costs of production increase by the amount of VAT paid on purchased inputs and there is reasonable question whether the increase could be recovered (in the short-run) by shifting it on in higher prices of output.

Alternative Treatments for Farming

Suppose first that farming is included under the taxing provision of VAT. Aaron [1] has shown that a gross product type of VAT, substituting for the CIT to produce equal yield, would increase the tax burden more for farming than for any other sector. This would not reflect any increase in farm net income, and in fact, could affect consumer purchase decisions somewhat adversely.

Suggestions are frequently made to exclude farming from the VAT. Two reasons are cited: (1) the lack of offsetting tax relief for most of farming, and (2) the administrative difficulties with a large number of small tax units. But not paying the tax directly does not necessarily mean that the sector escapes its effects. Since both those selling to and buying from farmers would be taxed, the effect on farmers depends upon whether there is either backward or forward shifting of the tax through price adjustments. If, at least in the short-run, farmers are price takers, one might expect farmers to be bearing a portion of the tax on value added in other sectors. Apparently for this reason, some EEC countries have explicit rebates and credit systems to remove the tax impact on price of farmer purchases. More commonly, however, any forward shifting is borne by farmers to the extent they cannot pass it on in product prices.

Another kind of alternative treatment in vogue in the EEC is relieving small farms of many of the administrative and record keeping requirements through special "standard deduction" procedures, permitting less rigid reporting and payment dates, or directly excluding farmers from part or all of the tax. Though these may ease the jolt, they do not relieve the tax obligation.

As an alternative to exempting farming from the VAT, we might suggest exempting a business portion of the noncorporate farm earnings from the personal income tax so that it would be handled the same as retained corporate earning under VAT. Instead of "passing through" the income to be taxed to the individual as in a Subchapter S corporation or a partnership arrangement, it could be "passed back" out of the reach of the income tax. In effect, the VAT-instilled pressure to incorporate would be met by creating an accounting procedure without the formality of the corporate legal form. The objective, of course, is to create a way in which one can replace a tax on a legal form of organization with one on business activity without reducing welfare of noncorporate businesses. This area deserves a great deal more analysis. As Aaron [1, p. 172] has noted "agriculture, in particular, would be penalized by the switch under most shifting (of tax incidence) assumptions, unless value added in agriculture were effectively excluded from the tax base." Conclusions would be only moderated for VAT systems other than the gross product type. Wallich [7] notes that since substitution of the VAT for CIT could have strong differential impacts, it is more likely to be proposed as relief for a variety of taxes or as a net new source of revenue. This merely serves to increase complexity of potential structural impacts of a VAT on farming. In addition, more and more, an individual tax must be viewed as part of related systems of raising revenue and of distributing services. Both sides must be evaluated. We commend these problems to your attention.

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