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THE TAX TREATMENT OF FARMERS
AND SMALL FIRMS UNDER VALUE-ADDED TAXES

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Abstract

The paper lists reasons for special treatment of farmers and small firms in developing countries and in many industrialized countries. Some system for excluding small enterprises is imperative. The author recommends that the optimal (not necessarily perfect) solution is to exempt farmers from registration and zero rate major farm inputs, and small firms should be exempted, even if discrimination in their favor results. It is contended that these exemptions do not cause serious economic distortions, while resulting in smaller administrative costs and greater equity. This paper was prepared for the Conference on Value Added Taxation in Developing Countries, sponsored by the Public Economics division, Development Research Department, The World Bank.
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THE TAX TREATMENT OF FARMERS AND SMALL FIRMS
UNDER VALUE ADDED TAXES

John Due*

In the developing countries and to some extent in many industrialized
countries, an inherent problem with any form of sales tax, value added or
otherwise, is that of control of relatively small firms -- a problem of course
also encountered with income taxes. Retailing in most developing countries is
characterized by large numbers of small firms -- the market stalls of Kumasi
and the sidewalk sellers of Lagos, the endless small shops of the Indian
cities, the tiny establishments of Latin America. Even in countries in which
there are some large retail establishments, a high percentage of retailing is
small scale. Likewise the manufacturing sectors of most developing countries
are characterized by large numbers of craft producers, some working entirely
by hand, some with simple power tools; the large factory is the exception. At
the wholesale level there are numerous relatively small firms selling to
retailers -- themselves often retailers as well, even in countries in which a
small group of large importer-distributors control most of the primary
wholesale trade, as in Jamaica and other West Indies islands.

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The Need for Special Treatment of Farmers and Small Firms

Small size of firms alone would not prevent effective operation of the taxes; there are many relatively small firms in the most developed countries. But in the developing countries, these firms are typically operated by persons as a household activity, the persons often uneducated, with few or no records. Many stores especially in small towns and rural areas, consist of nothing more than a room in a person's house; store keeping is a part-time activity, and records are nonexistent. Most proprietors are not subject to income taxes because their incomes are too low, but they are potentially subject to sales taxes, including value added taxes.

Quite apart from the commercial sector, small enterprises are almost universal in agriculture. While there may be a few large plantations and state farms, and in some countries emergent farmers moving toward commercial operations, most agricultural production is carried on by small-scale farmers. Often in the least developed countries, they operate on a semi-subistence level, but produce a substantial portion of the total agricultural output reaching the market. These small farmers are not likely to be subject to income tax, but they can well be liable for sales tax collection and payment under some forms of sales tax.

The measures relating to small firms seek to avoid, lessen, or offset the high compliance costs of the firms and to minimize the administrative costs. To force the firms to keep adequate records would be virtually impossible, and any attempt to do so and get them to file returns would create severe hostility and, if carried out, burden them all out of proportion to the
revenue involved. Furthermore, on the average small firms must pay their suppliers sooner and collect from their customers after a longer delay than the larger firms. There is also an extremely high rate of turnover of craft producers and stores, with failures and formation of new enterprises.

On the administrative side, an attempt to enforce correct payment from these small firms would result in cost all out of proportion to the revenue involved. The cost/benefit ratio would be phenomenally high. Quite apart from control of delinquency and audit, the mere routine issuance of registration certificates, distribution of return forms, recording of payment, and ascertainment of delinquency would be very expensive relative to the amount of money collected.

The purpose of this paper is to review the experience in the EEC countries and elsewhere with the treatment of small firms and farmers, as a basis for consideration of policy in developing countries.

**Tax Treatment of Small Firms Other Than Farmers Under European Value Added Taxes**

All of the European countries using the value added tax have introduced features relating to small firms, as authorized for EEC members by Article 14 of the Second Directive: "Each state is to have the option ... to apply to small enterprises, for which subjection to the normal system of the tax on value added would encounter difficulties, the particular system best adapted to national requirements and possibilities." Article 24 of the Sixth directive allows the member countries to exempt firms with annual turnover
under 5,000 European units of account (about $7,000). Higher figures used before the directive could be continued, but future increases are limited to the rate of inflation. The article also allows the use of simplified procedures for small nonexempt firms, "provided they do not reduce tax liability." The intent was that these special rules be temporary.

Exemption of Firms with Sales Below a Specified Figure

Seven EEC countries exempt small firms completely from registration, collection of tax, and filing of returns. For comparison the exemptions are converted to U.S. dollars at January 1986 exchange rates.

Germany. Firms with a total annual sales figure of DM 20,000 or less (US$8,200) in the previous year and expected figure under DM 100,000 in the current year are completely exempt; they do not register, collect tax, or file returns. Some tendency for firms to split to avoid tax is reported.

Denmark. Firms with annual sales under DKr 10,000 (US$1,100) are completely exempt.

United Kingdom. Exemption is granted to firms whose turnover is expected to be under L 20,000 (US$29,000) in the current year, or whose taxable sales in the last quarter have not exceeded specified figures. The figure is indexed and changes annually.
Ireland. The exemption figure is IrL 25,000 (US$28,700) annual sales for sellers of commodities, IrL 12,000 (US$13,800) for suppliers of services. These and the U.K. figures are the highest ones in the EEC. There is some pressure to raise these figures. There is almost no voluntary registration of small firms except for a few selling to registered firms.

Luxembourg. Firms, except in agriculture, with sales under LFr 200,000 (US$4,000) are exempt.

Sweden. Firms with annual taxable sales under SKr 10,000 (US$1,300) have been exempt. This rule also applies to farmers. The figure is so low that only tiny establishments have been exempt. As of July 1, 1986 the figure rises to SKr 30,000 (US$3,900). About 74,000 firms will thus be dropped from the roll. This is still a very low figure.

Norway. Firms with annual sales under NKr 12,000 (US$1,600) are exempt.

In most countries, exempt firms may opt for regular tax treatment. In Norway, for example, few firms do so, but in Germany and Great Britain the number is substantial.

In general, exempt firms must keep their sales invoices.
Small Firms Not Exempt from Registration but Exempt from Payment of Taxes

Under this system, all firms are registered, but firms with sales volume below a certain figure merely invoice forward to their customers the tax paid on their purchases.

**France.** As subsequently noted a substantial range of firms receives special treatment. But exemption is confined to firms whose annual tax liability is under FFr 1,350 (US$176). These firms are registered and invoice tax on their purchases to their customers so that the latter may obtain credit for it against their tax liability. The exempt firms must file annual returns.

**Netherlands.** Firms are freed of payment of tax when the tax is less than HFl 2,050 (US$738) per year. They invoice the tax to their customers, thus allowing the customers to take credit for the tax against their own tax liability.

**Austria.** Firms with sales under AS 40,000 (US$2,350) in the tax period are not required to file a return and pay VAT on their sales, but receive no credit for tax on their purchases. The firm may, however, apply the tax on sales invoices to their customers, who then can obtain credit for it. Firms may opt for regular treatment for five-year periods.
Simplified Schemes for Calculating Tax Paid on Purchases or Taxable Sales -- Industry-wide Systems

Quite apart from exemption of small firms, several countries have sought to simplify the tasks of the smaller firms subject to tax. In some instances calculation is based on industry-wide markups, in others on individual circumstances of each firm. These approaches may be used together with exemption, or separately.

**Germany.** Small firms are allowed to calculate the tax paid on purchases by use of a specified percentage of their sales (based on standard markups). Only firms with sales during the year under DM 100,000 (US$41,000) are eligible, and certain activities, primarily financial, are excluded. These firms of course do not have to keep records of purchases or tax on them.

**Italy.** As is characteristic of the Italian tax system, the "simplified" system is complex. For determining tax paid on purchases, small firms may apply a specified percentage to figures of sales to calculate their purchases and thus the tax paid on purchases: 50 percent for hotels, transport, restaurants, and the like; 70 percent for retailers, 25 percent for commercial intermediaries, 20 percent for artists and other professions. In general firms with sales under LIt 6 million (US$3,600) are eligible.
Belgium. A system of allowing firms to calculate taxable sales on the basis of their purchases is authorized for smaller firms -- the reverse of the German and Italian system.

Simplified Calculation of the Tax Liability of Individual Firms on a Forfait Basis

In five countries, provision is made for determination of the tax due by each firm on a forfait basis for certain types of activities, that is, by negotiation between the firm and the administration, rather than by actual calculation of tax due on sales and tax paid on purchases.

France. In France, which has no provision for use of a standard markup system for calculation of tax due, tax is determined on a simplified basis for firms with annual sales of goods and hotel services under FFr 500,000, of other services, 150,000 and for the professions, 175,000. As noted above, the firms do not pay tax if the amount thus determined is under FFr 1,350.

Belgium. Individual administrative determination of tax is provided in instances in which the standard markup system cannot be used.

Italy and Ireland. Simplifying rules are provided for small firms subject to more than one rate.
Reduction in Tax Liability of Small Firms to Compensate for Greater Cost of Compliance

Several countries reduce the burden of tax on small businesses that are not exempted in order to offset the higher costs of compliance as a percentage of sales for smaller firms.

**Luxembourg.** Firms with annual sales between LFr 200,000 (US$4,000) and LFr 1,000,000 (US$20,000) may reduce their tax liability by one percent of the difference between LFr 1 million and their actual sales. Presumably they collect the full amount from their customers.

**Germany.** Firms with sales under DM 60,000 (US$24,600) and not opting for exemption if eligible, may reduce their tax liability by 80 percent if their sales are under DM 20,500 (US$4,050); if over, the 80 percent figure is reduced by one percentage point for each tranche of DM 500. These firms are registered, collect VAT from their customers at the regular rate, and receive credit for tax paid on inputs.

**France** Firms with tax liability between FFr 1,350 (US$175) and FFr 5,400 (US$702) receive partial reduction in the tax liability they must pay. Partial relief is also provided to firms in the "artisanat" group, for which labor constitutes over 35 percent of sales, when the tax liability is between FFr 1,350 and FFr 20,000 (US$2,600).

**Netherlands.** A partial reduction of tax liability is provided for firms with annual sales between DFr 2,050 (US$738) and DFr 4,150 (US$1,494).
Austria. Firms with sales in excess of AS 40,000 in the tax period, up to AS 150,000, are subject to regular tax treatment, but are allowed a reduction in tax liability of 20 percent with sales under AS 50,000, 15 percent for sales AS 50,000 to AS 100,000, and 10 percent with sales from AS 100,000 to AS 150,000. The deduction is made from net VAT due.

Variable Payment Periods

In some countries small firms are permitted to use returns and payment periods that are longer than those required of larger firms.

Equalization Tax

In order to lessen the competitive advantages of small firms from preferential treatment, Belgium applies an equalization tax to sales to the exempt firms. The tax is applied by suppliers of the exempt firm in addition to the regular VAT on the sales.

This system applies only to certain sectors of retailing, and only when the sales of retailers are less than BFr 4.5 million (US$90,000) for food sellers, BFr 2.5 million (US$50,000) for others. Small retailers, however, may opt for taxation in the normal fashion.

Extent of Coverage of the Exemptions and Special Treatment of Small Firms

In most countries it is impossible to know exactly how many firms are excluded from responsibility for registration, since no records are kept of the exempted firms. In the United Kingdom, there are an estimated one million
undertakings not subject to the registration requirement, relative to
1,459,000 (1985) registered firms. In Ireland, there are reported to be some
9,000 firms not registered, with 87,000 registered, but the 9,000 figure
probably does not include all of the unregistered firms. In Luxembourg, only
550 firms are known to be exempt from registration; but 11 percent of the
firms are eligible for tax reduction. In France (1984), in which all
undertakings registered, out of a total of 2.17 million total registration,
66,000 or 3 percent are completely exempt; they account for only .03 percent
of total potential tax revenue. Some 435,000 or 18 percent of the total are
eligible for the special artisanat treatment -- mainly small service and
repair shops. In total, 724,000 firms receive forfait or exempt treatment,
760,000 are subject to simplified calculation (RSI). Thus 759,000 are
subjected to the regular tax treatment; of these, about 15 percent are
voluntarily subject./2 In the Netherlands, out of 400,000 registrants, 7
percent, or 28,000 are exempt, and 75,000 or 18 percent are eligible for rate
relief. In Belgium, for which figures are incomplete, some 14,000 small
retailers are subject to the application of the equalization tax to their
purchases.

Relative Costs of Compliance by Small Firms

A significant issue is the relative cost of compliance for small
firms relative to large. Such information is rarely available, and the
accuracy is always open to question. The aim is to arrive at the additional
expenses for which the collection and remittance of tax is responsible, and
thus no element of overhead should be included. Only for the U.K. is any
significant information available. Several studies by Cedric Sandford of the
University of Bath come to the conclusion that the relative compliance costs are far greater as a percentage of taxable sales for small firms than large, about 30 times as great for firms with sales under L 20,000 compared to those with sales over L 1 million. The overall compliance cost (1977-78) was estimated to be 9 percent of tax revenue, ranging from 12.3 percent for the firms under L 40,000 to .4 percent for those over L 1 million./3

Changes since 1978/79, particularly the increase in the tax rate, however, have reduced costs of compliance materially. In 1984/85, with a standard rate of 15 percent, the compliance cost was estimated to be 5 percent, reduced to 2.3 percent if the cash flow gain is considered./4

Summary of European Experience

Thus all European countries using the value added tax provide some special treatment of small firms. Most countries report few problems arising from the provisions relating to small firms. In Great Britain, however, there is constant pressure to raise the exemption figure, already at the maximum allowed by EEC, although not all small firms agree. It is difficult to obtain much information on the success or inadequacies of these systems, but they appear to operate without much complaint. Outright exemption is the simplest system but creates the problem of the breaking of the chain; the attempt of two countries to eliminate this effect by allowing the small firms to invoice the tax paid on their purchases lessens the effectiveness of the system in mitigating the problems of the small firms. Allowing small firms to simplify the calculation of the tax has merit but introduces an arbitrary element into the operation of the tax, since actual markups of most firms are not identical
The standard markups provided. Forfait assessment simplifies the tasks of the firms, but is certain to deviate from the appropriate tax liability in most instances and is an invitation to corruption. Similarly, features that reduce the tax liability on the small firms but not the amount they invoice to their customers only very roughly compensate for the higher compliance costs. Allowing small firms to file and pay over longer periods is simple, and alleviates the burden on these firms.

The Tax Treatment of Farmers in Europe

The tax treatment of farmers differs somewhat from that of small firms.

Alternatives

There are several alternatives that can be followed with respect to farmers:

1. Treat farmers as any other business; require them to register and to apply tax to their sales, thus receiving credit for tax paid on their inputs. But this approach is clearly difficult, and in most developing countries, impossible, from an operational standpoint.

2. Exempt all farmers from liability for registration and application of tax. This is the simplest from a compliance and administrative standpoint but it results in some multiple taxation; tax applies to various purchased farm inputs, for which subsequent purchasers cannot take credit.
3. Apply the same rule to farmers as to other small businesses: exempt those with sales less than a certain figure. This would greatly reduce the compliance and administrative problems compared to full taxation, and eliminate cascading with the larger farms, but not for the smaller, as tax would apply to their inputs.

4. Exempt farmers and zero rate sales to farmers. This eliminates the multiple taxation, but it requires identification of sales to farmers and opens the way to escape from tax of some sales for consumption use. Farmers would not need to be registered in the usual way and file returns -- but they would almost of necessity have to be given special registration numbers.

A variant is to zero rate major farm inputs regardless of purchaser, and thus hold multiple taxation to minor items. There would be some escape from tax on consumer purchases of the zero rated goods.

5. Exempt both farmers and sales to farmers. This would lessen multiple application of tax but not eliminate it, as inputs at earlier stages into the production of the farm products would bear tax, and it would distort distribution channels.
6. Tax sales to farmers; exempt farmers; allow the purchasers of farm products to assume that the purchase price includes a specified percentage of price reflecting tax on farm inputs. This is relatively simple operationally -- but the percentages specified are certain to be highly arbitrary.

7. Register farmers; apply tax to farm inputs; require farmers to apply a specified rate lower than the basic rate to their sales. This rate is likewise arbitrary, and the approach requires control of all farmers.

8. Do not register small (or all) farmers, exempt their sales, and allow them to file for refund of tax paid on purchases. This approach avoids multiple taxation and registering farmers but creates numerous refund claims.

European Experience

The EEC Sixth Directive proposes the use of #7 above; farmers would be registered and tax would apply to their inputs; they would charge tax on their sales, at a single rate, to all customers other than farmers. The flat rate tax charged by the farmers would be designed simply to pass forward the tax paid by the farmers on their inputs. Farmers must be registered, but they would not file returns and/or refund claims. This is the general system used by several of the ten member states.
France. Farmers with annual sales under FFr 300,000 (US$39,000) may opt out of the regular system; they do not apply tax to their sales but may file reimbursement claims with the government for tax paid on inputs. The reimbursement varies with the product; for example, 4.7 percent (of sales) for eggs, 2.9 percent for fruit and vegetables. Farmers with sales in excess of Fr 300,000 and those smaller farmers that wish to opt in are subject to a simplified system, known as RSA (Regime Specifique de l'Agriculture). They collect tax on their sales, file annual returns, and pay quarterly. They are required to keep only simplified records of purchases and sales. A high percentage of farmers opt into the system, partly because of the relatively low reimbursements if they do not. The number of firms subject to the simplified system has risen steadily from 220,000 in 1971 to 440,000 in 1984, while the number not in RSA and receiving tax reimbursement has fallen from a high of 660,000 in 1976 to 480,000 in 1984. A few small farmers selling only to individual consumers are not subject to the system and do not receive a reimbursement. Some large farms and cooperatives are subject to the regular tax requirements.

The general conclusion reached is that the simplified system has worked well.

Germany Farmers are subject to the same general rules as other small firms. Firms not required to register may opt to do so; less than 1,500 have registered. Small farmers may retain a portion of VAT owed to offset loss of border compensations. There are problems with larger
farms splitting to avoid the ceiling. There are also problems with non-
farm product receipts, tax on which is not eligible for reduction. If
registered, they charge 7 percent tax on their sales.

**Italy.** As food is exempt, few farmers are involved with the tax; if they
are the same system is followed as in Germany.

**Denmark.** Farmers are registered and pay tax in the usual fashion and
file refund claims if their credit exceeds the tax on their sales. Out
of a total of 376,459 registered firms in 1985, 105,095 were farmers.
Reporting periods for farmers are somewhat different from those for other
firms. Few problems arise.

**United Kingdom.** Farmers must register and apply tax, receiving credit
for tax paid on their inputs, though they may opt out if all or most
inputs are zero rated and input tax credit always exceeds output tax.
Most are registered and treated like other firms. Food is zero rated in
the U.K., so most farmers are not subject to tax on their sales.
Simplified record keeping rules are provided farmers. Very low
compliance costs are found for farmers.

**Sweden and Norway.** Farmers are treated in the same fashion as other
taxpayers and thus very small farms are exempted, with no system to pass
through and no refund of tax paid on farm inputs. In Norway, registered
farmers file and pay on an annual basis.
Ireland. Since 1976, major farm inputs (fertilizer, feed, seed, animal medicine) are simply excluded (zero rated) from tax, as a means of avoiding registering farmers (to do so would double the number of registered firms) and minimize the amount of multiple tax application. Farmers can file for refund of tax paid on inputs for farm buildings, land, drainage and reclamation. Purchasers of farm products are allowed to assume that 2.2 percent of the purchase prices consist of tax on farm inputs. Only about 1 percent of farmers opt for regular VAT treatment.

The system is generally accepted, though there are complaints of discrimination in favor of less intensive agriculture and of the failure to pass the 2.2 percent credit back to the farmers.

Food is exempt in Ireland.

Netherlands. Farmers are not registered and bear tax on their inputs; purchasers of farm products are permitted to obtain credit against their tax liability of an amount equal to 4.5 percent of the purchase prices of farm products.

Austria. Farmers are subject to the same rules as other small businesses, but do not file returns or pay tax under the assumption that the tax paid on inputs equals the 10 percent tax due on their sales. (The basic tax rate is 20 percent.) The 10 percent tax may be invoiced to customers. However, if their sales exceed AS 3,500,000 (US$205,886), or assessed value of agriculture and forest net assets exceed AS 900,000
(US$52,940) or profits exceed AS 195,000 (US$114,700), they must keep records and are taxable as other enterprises.

The Treatment of Small Firms and Farmers Under Value Added Taxes in Other Countries

Outside of Europe, the greatest use of value added techniques is to be found in Latin America, in the process of implementation in New Zealand, in the Francophone countries in Africa, and Korea, Indonesia, and the Philippines. The taxes in Africa, Indonesia and the Philippines are confined to the manufacturing sector, with few exceptions.

Latin America

All Latin American countries except Venezuela and Paraguay now use the value added tax. Details of treatment of farmers and small firms are not available for all these countries on a current basis for the purpose of this paper, but a general outline can be provided.

Brazil. This is the only country to use value added taxes at both the federal and state levels. The federal tax is confined to the manufacturing sector, and thus farmers are not registered. There is no exemption of small firms, per se, but as an administrative matter, forfait assessment is applied to small firms.

At the state level, there is likewise no exemption of small firms, but substantial use of the forfait approach for them, particularly retailers with sales below a specified sum.
The states have altered their treatment of farmers over the years. Initially, farmers were subject to tax, and required to pay tax before the produce could leave the farm. Strong opposition to this gradually led the states to change their policies. The states in the South exempted all sales by farmers of unprocessed farm produce. In other states, the tax came to be collected from the firms purchasing from the farmer. Most basic foods are completely exempt.

The problem remained of the tax on farm inputs. The procedure followed, initially by some states and then by all following federal government action, is to exempt the primary farm inputs: fertilizer, feed, seed, pesticides, veterinary products, and agricultural machinery and tractors. These are exempt, not zero rated. Thus the manufacturers are subject to tax on the ingredients. But many of these ingredients are themselves exempt, and thus little multiple taxation remains.

Argentina. Argentina was a pioneer user in Latin America of the value added technique. Small firms are exempt. Because of inflation, actual figures are not significant for any length of time; by 1984, however, the exemption was about US$85,000. Suppliers of these firms are required to apply a special supplemental rate to the sales to these firms, reflecting tax that would apply to the small firms' margins. The small firms cannot invoice this to their customers, and thus some multiple application of tax applies if these small firms sell to registered firms -- but most of their sales are to final consumers. The rule gives some problems to suppliers, who must
distinguish between consumers and others; this is regarded as a major source of evasion. Farmers are not registered. Some major farm inputs such as seed and livestock feed are exempt, and farm machinery, fertilizer and herbicides are taxed at a reduced (5 percent) rate. Purchasers of farm inputs are permitted to take as a tax credit an amount equal to 4 percent of the value of the purchase. As of 1986, a VAT reform project is being considered that would provide for fixed amounts of tax on small firms based on capital and number of employees, with credit for tax paid on purchases.

**Ecuador.** In Ecuador, farmers are specifically exempted, but goods used in agriculture are subject to tax, and thus multiple application of tax occurs. Small firms are subject to an alternative levy on actual or estimated gross receipts, at a lower rate. The exemption from the regular levy is based upon total capital invested, in 1984 terms, about $1,000, with the further requirement that there is no fixed place of business.

**Uruguay.** In Uruguay, farmers are exempt from tax, and major types of agricultural producers goods are likewise exempt (not zero rated). Small firms may opt for treatment as regular `taxpayers, or be subject to a special alternative levy -- a turnover tax on actual or estimated gross sales, as in Ecuador.

**Peru.** Small firms are completely exempt; the figure is adjusted from year to year in light of inflation, but in recent years is around US$9,000. Firms with annual sales between this figure and about US$46,000 are provided with a simplified technique for calculation of tax. The system has proven to be complex to operate.
Bolivia. Firms with sales under a specified figure (about US$10,000) are exempted.

Mexico. There is extensive use of forfait assessment.

Colombia. Firms with sales under 3.6 million pesos in 1983 (about US$21,000) or wealth under 10 million pesos (about US$58,000) are exempt from regular operation of the tax, and subject to a tax based on the previous year's sales, less deduction of tax charged the firm by suppliers. The figure is adjusted annually for inflation. It is believed in Colombia that many firms understate sales to stay below the demarkation line. As of 1985, 60,000 firms are subject to the regular system, 85,000 to the simplified system.

Chile. Special treatment is provided for small firms operating at the final consumer stage, including retailers, artisans, and various service activities. Such firms are eligible if their average sales per month in the preceding 12-month period are less than 20 tax value units. A table is provided indicating the fixed monthly tax payment for each bracket of sales, from which is subtracted the tax paid on purchases. There are only 5 brackets of these quotas, and thus the tax only very roughly approximates the amount of tax that would be due under the regular system. The monthly tax value units are modified periodically by the tax administration on the basis of price level changes.
Francophone Africa

The former French colonies in Africa inherited the value added technique from France and continue to use it, although primarily limiting it to the manufacturing level. These levies resemble the early French value added tax, which did not extend through retailing. The tax applies at importation, and to the manufacturing and in a few countries to larger wholesale firms (the exact coverage varies somewhat with the country). Thus the problem of enforcing tax against small retailers does not arise. Farmers are exempt in all of these countries. Senegal taxes some agricultural producers goods; the Ivory Coast, Malagasy and Morocco exempt major ones.

The practices vary somewhat on small businesses. Forfait assessment for the small firms is usual, although Malagasy exempts very small firms entirely; Morocco exempts artisan producers and taxes other small firms by forfait; Senegal assesses small firms by forfait -- but forfait taxpayers and retailers, who are not registered, may show tax paid on business purchases on their sales invoices, and thus firms purchasing from them can obtain credit for this tax, to avoid cascading. In the Ivory Coast, firms selling goods have been subject to forfait if their sales are under 30 million CFA francs annually, 15 million for other activities. These are very high figures -- the equivalent of US$80,000 and US$40,000. The tax liability has been determined by negotiation between the taxpayer and the administration. It is recognized that this is a very inexact system, but it is regarded as a necessary evil. /12
Korea

The Korean tax extends through the retail level, and thus the small firm problem is particularly severe. Firms with VAT inclusive annual turnover in excess of 24 million won (about US$27,000, as of 1986) are subject to a 2 percent turnover tax on gross sales (the basic tax rate is 13 percent). As of 1984, there were 895,000 firms subject to this special treatment, 75 percent of the total taxpayers. These firms accounted for only 5 percent of total VAT revenue (1983)./13

Indonesia

Under the new Indonesia value added tax (limited to the manufacturing sector), two alternatives are provided for exemption of small firms. The first is annual sales, of R24 million, about US$19,000. The alternative is capital: R10 million, or about US$8,000. Firms must meet both requirements to be exempt.

The New Zealand Value Added Tax

New Zealand is introducing a value added tax as of October 1986./14 Farmers will be subject to the tax, except as excluded by the small firm rule noted below. They therefore will be registered, pay tax on their sales, and receive credit for tax paid on their inputs. The government argues that New Zealand agriculture is typically large scale; that farmers do keep adequate records, and small farms will be excluded by the general exemption of small businesses. There will, however, be substantial waste motion, as a large portion of all farm products is exported. Tax will apply and then will be refunded at export. It is estimated that about one-third of all registered
firms will be farmers. Firms with sales under NZ$24,000 (about US$12,000 at 1986 exchange rates) will be exempt.

The Treatment of Small Firms and Farmers Under Sales Taxes Other than the Value Added Tax

A brief review of the experience under single stage sales taxes is relevant.

Retail Sales Taxes

Retail sales taxes are rare outside of the states of the U.S. and the provinces of Canada, Iceland, South Africa, and Zimbabwe. The States and the Provinces do not exempt small firms, as such. Farmers, per se, are not exempt but are not registered so long as they do not make retail sales. The general rule for small entities is established through the definition of a vendor subject to registration for the tax; business establishments, no matter how small, regularly engaged in selling at retail on a commercial basis are liable to register. Almost always such persons have an established place of business, although a few, such as itinerant vendors or contractors may not have. By contrast, persons or groups not selling on a continuous basis and without an established place of business are not subject; tax applies to sales to them. Examples include children selling Christmas cards, persons selling door to door as agents for distribution firms, newsboys selling papers on the street. Tax is collected from their suppliers. Persons or groups holding occasional "garage" sales, not on a regular basis, are not registered. The line is somewhat arbitrary, but in practice creates few problems. The state and provincial tax administrations have never thought it desirable to exclude small firms as such.
Farmers are not exempted, per se, but in fact are not registered so long as they are not engaged in regular retail activity. Most sales by farmers are made to wholesale dealers or processors and thus are not retail sales. Casual sales of produce by farmers to final consumers are normally not subject to tax. But if farmers commence to sell taxable goods at retail on a regular commercial basis, such as through a stand in front of the farm or in a market, or through an egg route, in most jurisdictions they would become subject to the registration requirement. In some jurisdictions they would not become subject if they were selling at retail only their own produce.

Like the states and provinces, Iceland provides no exemption of small firms.

These jurisdictions have highly commercialized retail sectors, with very few illiterate sellers or ones without established places of business, and no general hostility on the part of retailers toward collection of tax. Thus the failure to exempt creates no particular problems.

Zimbabwe, a developing country, uses a retail sales tax, at a relatively high rate (the basic figure in 1986 is 15 percent). Zimbabwe provides an exemption for all firms whose sales volume is less than ZS20,000 annually, about US$13,000.\textsuperscript{15} The government has indicated that this system works well, without serious problems. It is believed that few firms understate sales to escape registration; incentive is given to register in order to collect the tax at the time of sale rather than paying it at time of
purchase and thus having use of the money between the date of purchase and the
date of making payment to the government. Inflation has increased the number
of firms subject to tax; raising the exemption to Z$50,000 would eliminate an
estimated 3,000 firms from the registration requirement with little adverse
effect on revenue.

Paraguay uses a tax that applies in part to retailers. But the
exemption figure is so high -- 8.4 million guaranties for sellers of goods,
4.2 million for services establishments, about US$52,000 and about US$26,000
respectively -- that most retailers are not registered, and the tax applies to
the sale by their suppliers. The number of registered firms is only about 3
percent of the total number of firms, but they account for an estimated 75
percent of all sales./16

Manufacturers Sales Taxes

All manufacturers sales taxes have some exemption of small firms, in
most instances by volume of sales, and farmers in general are not subject to
the taxes as they are not defined to be manufacturers. Without an exemption of
small firms, very small artisan shops would be registered; even the most
developed countries have numbers of such undertakings, and the manufacturers
tax, unlike the retail tax, is geared to control of relatively large firms.
In Canada, which has used the manufacturers sales tax for over 60 years, firms
with gross sales under C$50,000 are exempt from the registration requirement
(about US$35,500 in 1986). Certain activities that might be defined to be
manufacturing are specifically exempted; for example, preparation of meals,
tagging goods, cutting goods to length, production of concrete and concrete
blocks, repair of used goods for the owners, etc. This exemption, which benefits small firms, has not been the source of serious difficulties in operation of the tax, except, especially in the jewelry industry, to increase the practice of manufacture on a custom basis, the firm not buying the materials, to keep the sales figure below C$50,000.

The Philippines was one of the pioneer users of the manufacturers sales tax, and the first to use value added features (confined to the manufacturing sector). The exemption figure is very low -- 2,400 pesos, or about $128. But there is good reason to believe that many firms above this figure are not in fact registered.

The African countries using the manufacturers sales tax all have exemptions of small firms, as for example Kenya, Ks 100,000 or about US$7,000; Zambia, K 10,000 or about US$6,000. In Guyana the figure is about US$4,000. In India, the central excise taxes essentially constitute, in coverage, a manufacturers sales tax; artisan handicraft enterprises are exempted, and all manufacturers with annual gross sales of R 2 million, about US$164,000 (1986). This is a high figure by usual standards, and there are only about 60,000 registered firms -- in a country with 800 million people and extensive manufacturing. Pakistan provides an exemption of R 100,000 (about US$6,300) under its manufacturers sales tax.

Under the manufacturers sales tax in Thailand, firms with monthly sales under 2,000 baht (US$80) are exempt; those with monthly sales between 2,000 and 10,000 are subject to a fixed sum tax (forfait).
From all that is known about this experience, these exemptions with a manuacturers sales tax have not caused serious difficulty. Pakistan has had problems with firms splitting to avoid registration, and charged its definition of exempt firms to meet this problem./17

The Alternative Approaches to the Definition of the Delineation Line

There are a number of possible techniques for establishing the dividing line for delineating the exempt firms, if exemption or special treatment is provided./18

Sales Volume

As noted in the preceding sections, almost all of the systems for exempting small firms use the volume of sales (or the volume of tax liability) as the basis for determining exempt status. In effect sales volume is used as the proxy for the ability of the firms to comply and the administration to control the firms. As noted also, the selection of the figure varies widely, from ones as low as $200 in the Philippines and low figures in the Scandinavian countries, to figures approaching or above $100,000 in others. Experience in some countries with the volume of sales approach concludes that it functions reasonably well. But there are inherent problems. First, it is difficult to ascertain the sales volumes of firms near the border line -- and it is not worth while to use too much administrative effort in doing so. Some countries require firms above a specified figure lower than the dividing line to register even though they are not required to file returns -- but this does
not solve the problem. Second, sales volume is not a perfect measure of ability to conform with the requirements of the tax. Third, firms are given an incentive to split into two or more to escape the requirement; this is reported in Pakistan and other countries. Fourth, some provision is needed for firms whose sales fluctuate above and below the line. Usually once registered, they must remain registered unless their sales fall below a figure substantially lower than the basic registration requirement.

Capital Investment or Profit

Problems with the sales volume approach have led to some experimentation with other measures. Ecuador, Pakistan, Indonesia and Austria in part use a capital investment figure. This is a more stable one, and perhaps in some instances a better proxy for ability to conform with the law, but it is likely to be more difficult, with small firms, to determine. One danger is that some large volume firms with good record systems but little capital investment may be excluded unnecessarily.

Only Austria uses net profit as an alternative criterion for delimiting firms subject to special treatment.

Mechanization in Production

With a tax limited to the manufacturing sector, an alternative to capital investment is exemption on the basis of the use of mechanization, in the sense of power operation of equipment, as distinguished from hand methods. This is used by the Sudan, where firms not using mechanical techniques and not operating in workshops are excluded from registration for
Jamaica in recent years has excluded handicraft producers from registration. The assumption is that firms using mechanical power and workshops are large enough to be controllable. Mechanization is easier to determine than sales or capital, and this is probably the easiest rule to implement. The rule could, however, discourage some firms from modernizing, but it would not discourage hiring of additional employees. It cannot be used as the sole criterion with taxes extending below the manufacturing sector.

**Number of Employees**

An alternative often suggested but rarely used is the number of employees. New Zealand under the wholesale tax used this approach as a supplement to its basic sales volume figure for handicraft firms; those with no employees and sales less than a specified figure were not subject to registration. The number of employees is easier to determine than sales or capital, but it is subject to an objection so great as to warrant its rejection; it is likely to discourage firms from adding employees. This result is particularly serious in the typical developing country with much unemployment.

**Exemption by Type of Industry**

The Uganda manufacturers sales tax exempted manufacturers in those industries where craft production was particularly important and instead applied tax, at a higher rate, to the materials, e.g., lumber, sold to these firms. Specifically, five industries were so exempted: shoes, furniture, clothing, bakery products, and paper products. The rates on the materials were either 50 percent or 100 percent greater than the basic sales tax rate.
The rule applied to all firms regardless of size, but larger firms could register if they wished, buy materials tax free and pay the regular rate on their sales. The suppliers of these industries were either importers or larger manufacturers, on the whole. The adjustment was rough, with the assumption that value added in manufacturing bore a fixed relationship to the purchase price of materials, but it did solve the small craft producer problem.

This system is in a sense a simple approach to the problem, confining the taxes to those industries in which the firms are relatively large. But it is by no means ideal. There may be small, non-controllable firms in other industries. The most serious problem is the choice of the relative rates; the aim is to provide the same percentage burden to final sale prices as the remainder of the levy. But margins often differ widely among firms in an industry, and thus an average figure will result in lower than intended tax on some firms and higher than intended on others, to the competitive disadvantage of the latter.

Exclusion by Administrative Action

Several countries have had no statutory exclusion of small firms; tax administrators -- meaning in fact usually local district officers -- make the decision, based on visits to the establishment and ascertainment of whether the firm can collect and report tax correctly. Examples include Ghana and Indonesia, under the pre-1985 manufacturers sales tax.

The danger of this approach is that it is an invitation to corruption and prevents any appeal by firms against administrative action. It can also
be time-consuming if done well.

Summary and Conclusions /19

An inherent problem with any sales tax is the appropriate tax treatment of small businesses and farmers (including related activities such as small scale commercial fishing). While the problem exists in all countries, it is particularly severe in the typical developing country, with the lower levels of education, record keeping and administrative competence. There are two major aspects: the difficulty for such firms to comply with the record keeping and return filing requirements of the tax and thus added cost; and the problems of effective control by the revenue agency. Not only are the enterprises more difficult to control, but there are significant indivisibilities relating to registering the enterprises and handling of their returns and delinquency.

Any system, however, of delineating firms that must register, collect and remit tax from those that are excluded creates problems. If the delineation is based on sales volume, there are always problems of determining the sales volumes near the border line. With most sales taxes, firms have an incentive not to register, and thus will underreport sales if they are near the border line, and split into more than one enterprise. How much of this occurs is not known. But without question evasion through failing to register is significant. An economic consequence of exemption of small firms is competitive disturbance; the unregistered firms have an artificial advantage. There is a chronic tendency to leave the delineation line set in monetary terms without adjustments for inflation, thus continuously broadening
the coverage of the tax, an effect not without merit. The problems with farmers are comparable to those with other small businesses, coupled with the fact that farmers frequently sell in more or less perfectly competitive markets and cannot easily shift the burden of the tax.

With the tax credit form of value added tax, exemption problems relating to the small firms are altered somewhat. Exemption of any group of enterprises breaks the tax credit circle. Unless special measures are taken, tax paid by the exempt firms on their inputs cannot be taken as a credit by the firms purchasing from them, and multiple application of tax results. Any measures taken to meet this problem are inevitably contrary to the general principle of operation of the value added tax and tend to be arbitrary, not eliminating the multiple taxation in a uniform and equitable way. But this problem does offer one advantage: firms have an incentive to register if they are selling to registered firms, as only by this means can they directly pass forward the full credit for tax paid on purchases.

All of the countries using value added taxes provide some system, formal or informal, for meeting the small firms problem. In Europe, the most common but not universal technique is to exempt small firms, as defined, from the responsibility for registering and collecting tax. Farmers in most of the countries are not registered, but in a few, purchases from farmers are permitted to assume that a portion of the purchase price represents tax paid on purchases, and can receive credit for it. But these rules are not universal. The Scandinavian countries, for example, do not exempt farmers unless their sales are below the small firms exemption figure. Some countries
seek to compensate the registered firms for the added compliance cost by allowing them to retain a portion of what they collect; others seek to simplify compliance tasks. Others allow small registered firms to file returns and pay on longer intervals, thus lessening the net cost to them. Several countries, particularly Belgium, France and Italy, have developed very complex systems for meeting the small firms problem, to the detriment of simple operation of the tax. To meet the breaking of the tax credit circle problem, a few countries allow small nonregistered firms to invoice to their customers the tax paid on their inputs -- a measure that in part offsets the gains from the exemption of the small firms in the first place.

In northern Europe the policy is outright exemption of the small firms -- although the exemption figure is typically quite low. In France and southern Europe, Latin America, and the Francophone countries of Africa, the policy is to draw a much higher dividing line, and then to apply forfait assessment to the firms excluded from the regular assessment, or in a few countries, tax on a gross turnover basis, or an arbitrary amount based on estimated sales. The forfait is based upon external criteria of sales volume and negotiations between the revenue department and the firm. Such procedure is contrary to accepted standards of tax assessment in northern Europe and most British Commonwealth countries.

There is no ideal solution to the problem of small firms and farmers. Yet some exemption must be provided. Sales volume is not an ideal basis for delineating taxable and nontaxable firms but in many countries appears to be the only feasible approach. As best can be determined, the sales volume basis does not cause insuperable problems, but it undoubtedly
results in some evasion. Some countries clearly set the exemption figure too low. Use of power equipment is an alternative that has rarely been used but offers potential advantage. Determination of eligibility for exemption by administrative action has the merit of flexibility and the use of different standards in various fields, but is open to corruption and arbitrary action.

The problem of the pass-through of tax paid on inputs is one of the most serious. As noted, to allow firms to show tax paid on their inputs on their sales invoices reduces the gain from exempting small firms and is hardly workable for small semi-subsistence farmers. To allow purchasers from unregistered firms to assume that a portion of the purchase price consists of tax paid on inputs by the exempted enterprise is highly arbitrary and inequitable among firms. To allow the unregistered firms to apply for refund of tax paid on inputs is unworkable for the typical small farmer or enterprise, for the same reasons that it is not desirable to register these in the first place.

Thus, in conclusion: some system for excluding small enterprises is imperative. For farmers, the optimal, but by no means perfect solution, appears to be to exempt them from the registration requirement and zero rate the major farm inputs -- livestock feed, seed, fertilizer, pesticides, farm machinery and equipment -- thus holding the tax on farm inputs to minor items. Farmers could be given the option to register if they wish and can demonstrate adequate accounts. As a necessary evil, other small firms must be exempted, on the basis of sales volume or, alternatively, use of power equipment, giving them the option to register if they wish to do so -- which
they would do only if they were making significant sales to registered firms or have large purchases of capital equipment. Allowing small registered firms to file and pay over longer intervals greatly reduces the net cost to them. It must be emphasized that most very small firms do not sell to registered firms but only to final consumers -- and no cascading of tax results. The inevitable discrimination in favor of small firms remains -- but is widely regarded as not causing serious economic distortion, given the cost disadvantages of small firms.
 FOOTNOTES

1/ Norway is the only European country in which the value added tax has been subject to substantial criticism, but change is unlikely. The tax is reviewed in Norway, Finans-og toll-departementet, St. meld, nr 54 (1984-85) Om merverdiavgiftssystemet (Oslo: 1985).


6/ From 1984 to 1991: farmers may retain 5 percent of the tax owed in 1984-1988 and 3 percent in 1989-91. They charge the full rate of 13 percent to their customers but pay only 8 percent to the government (1984-88).

7/ Experience with value added taxes in developing countries is summarized in the article by E.G. Lent, M. Casanegra, and M. Guerard, "The Value Added Tax in Developing Countries". IMF Staff Papers, vol. 20, no. 2 (July 1973), pp. 318-78.


In 1983 the provision for forfait assessment was repealed, and apparently small firms are now exempt.

14/ New Zealand, Treasury, White Paper on Goods and Services Tax, Wellington: March 1984; Claudia Scott, "VAT and Tax Reform".


18/ This section is based in part on the article by the author, "The Exclusion of Small Firms from Sales and Related Taxes". Public Finance, vol. 39, no. 2 (1984), pp. 202-212.


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