

September 16, 2019

MEMORANDUM FOR

Dr. Vera Songwe

cc: Mr. Chris Canavan

From: Robert Conrad

Subject: Excise Taxation in Ethiopia

Excise tax is imposed on an extensive list of commodities in Ethiopia. In addition to the commodities typically subject to excises, such as tobacco products, alcoholic beverages, petroleum products, automobiles, and perhaps jewelry, the Ethiopian tax is imposed on items such as clothing, washing machines, toys, and other products that might be considered to be purchased by higher income consumers.¹

The tax is ad valorem, at varying rates, imposed on the cost of production for domestic products and on the declared customs value for imported excisable commodities. Discussions with tax officials revealed that the use of cost of production for determining the ad valorem base is cumbersome even though there is a relationship between cost of production used for excise purposes and costs defined for income tax purposes. As a result, a move to the factory gate price is being considered for the next budget. It is not clear to me whether this shift is an improvement. Supposedly, the factory gate price is the arm's-length price charged to independent parties. There are transfer pricing issues, however. In particular, importers and local producers may operate distributors that may have an exclusive right to market particular products. Transfer pricing incentives result unless the factory gate is extended to the distributors. I believe the best that can be said about the proposed change is that tax revenue can be now lower than under the current system because the factory gate price should be no lower than cost of production, however cost of production is defined.

The exclusive use of ad valorem rates instead of either per unit rates or a combination of ad valorem and per unit rates is rather unusual when compared to practice in other countries. I believe it may be useful for Ethiopia to consider:

- Reducing the number of taxable commodities to the big three (alcoholic beverages, tobacco products, and petroleum products) plus perhaps automobiles and jewelry;
- Moving to either per unit measures adjusted annually for inflation or a mix of per unit charges and ad valorem; and
- If an ad valorem charge is adopted, using survey data to compute the average retail prices, converting those prices to per unit charges, and imposing that per unit charge at the factory gate (or the point of importation).

¹ A complete list is supplied in Proclamation 307/2002: Excise Tax Proclamation 2002.

If the structural changes are supplemented with some administrative changes where emphasis is placed on physical control and transparency, tax revenues should increase significantly.

Below I offer a bit of analysis and some justification for the approach.

I. Purpose of Tax

Excise taxation methodology depends on the issue being addressed. If the principal purpose of the tax is to correct a negative externality, then a per unit charge is appropriate. Alternatively, an ad valorem tax may be reasonable if the principal purpose of the tax is to collect revenue. The primary advantage of excise taxation is that collection can be either at the point of importation or manufacture. Thus, an ad valorem approach must be tempered with the administrative costs of determine the basis of the ad valorem tax.

A. Externality Correction

A charge imposed to correct a negative externality should be a per unit charge adjusted for inflation. The purpose of the charge is to change relative prices so that market participants incorporate the social cost of the externality when they make private decisions. The charge is per unit because the externality is generally assumed to be unrelated to the price of output (other than the underpricing for the externality). For instance, the quantity of secondhand smoke is generally assumed to be independent of whether the smoke is created by cheap or expensive cigarettes.

Revenue to the government may be a significant by-product of the use of the excise as an incentive to reduce the consumption of the commodity. As a matter of method, the tax should be imposed on the specific ingredients that causes the externality. For example, the charge for alcoholic beverages should be based on alcoholic content of the product. Thus, other things equal, the charge per unit volume for beer and wine should be lower relative to spirits. In the case of motor fuel, the tax should be based on the amount of lead, particulate matter, unburned hydrocarbons, and other ingredients that affect air quality.

B. Revenue Collection

Excise taxes, as a sub-classification of general consumption taxes, designed for revenue purposes can be ad valorem, in general, and flat rate within a commodity classification. This revenue objective can be achieved, within the product classification, by imposing a charge that does not affect relative prices, again within the product classification.² In theory, the tax should be charged to the consumer, in the same matter as a VAT. Ad valorem excises are discriminatory consumption taxes and in many countries are designed to exploit inelastic demand while discouraging consumption.

² Differential rates may be optimal in a world with costless administration and with knowledge of own- and cross-price elasticities. In addition, imposing an ad valorem excise on tobacco products discourages the use of tobacco products relative to consumption of other commodities. It is possible, however, to exploit the relatively inelastic nature of demand (and the lack of close substitutes) by imposing such a differential excise in order to raise revenue.

Retail ad valorem excise taxes are not the norm, however, for at least four reasons. First, excise tax rates are so high that governments in some countries are concerned that quoting the tax as a percentage of the net of tax price would be politically unacceptable.³ Rates in excess of 500% on tobacco products, on a tax-exclusive basis, are common, and politicians are concerned about public resistance to such rates.

Second, evasion might be significant if taxes at such high rates are collected at the retail level. Governments may resort to collection methods using tax stamps that are placed on the tobacco product at the manufacturing level (usually inside the protective wrapping). Per unit charges are preferred in this situation because the same stamps, or other control methods, can be used for any excisable product, regardless of quality and price.

Third, one advantage of excise taxes is that there are fewer manufacturers and importers relative to distributors and retailers. Administration is simplified because the bulk of the excise can be collected from fewer taxpayers. In short, the major administrative advantage of excise taxation is physical control via use of treating the manufacturing as a type of bonded warehouse where the tax is imposed at the time taxable goods leave the facility (similar to the relative few choke points used for collecting import tariffs). This advantage is lost if the collection point is move to the retail level. The number of collection points increases and it may not be possible to monitor all points of sale, including small shop keepers and street distribution.

Fourth, if the excise tax is collected at a point other than the retail level, the ad valorem tax is easier to evade by manipulating the reported prices. At a minimum, administrative costs are increased.

Finally, it should be noted that the primary function served by excises is that the Government can collect significant revenue without affecting behavior, at least in the short run, because of the inelastic nature of the commodities being taxed. Public acceptance, even of gasoline taxes, is relatively high with the major political opposition arising from producers, who while vocal are relatively small in number.

II. A Proposal: Two Options

A. Combined Per Unit and Ad Valorem Rates

Ethiopia might consider a two-pronged approach by using a combination of a per unit and ad valorem rate; an approach used in other countries. Regardless of the rate choice, I believe the excise tax should be restricted to four commodity types: alcoholic beverages, tobacco products, petroleum products, and automobiles. Revenue from the other excises are minimal, and the revenue losses can be more than compensated for by devoting administrative resources to the restricted set of commodities.

³ I report this argument but do not support it. Anyone can compute the ad valorem equivalent of a per unit tax.

i. The per unit charge

The per unit charge, as noted, should be based on components of the taxable good responsible for the externalities or other health effects. Specifically,

1. Alcoholic content for any type of alcoholic beverages;
2. Tobacco, by weight, for tobacco products;
3. Simple volume for motor fuel; and
4. Engine size for automobiles.

The per unit amount should be adjusted automatically for inflation, and the amount should be determined in relation to the ad valorem rate.

ii. The ad valorem rate

The ad valorem rate should be based on the price at either the factory gate or at the last point of trade between related parties. For example, if a local producer owns or is otherwise related to wholesalers and distributors (such as private branders), the excise should be imposed at the point of sale between the producer/distributor and any independent party.⁴

The combined rates should be as high as the market will bear. This condition is determined in part by rates in neighboring countries. Ethiopia is constrained by such rates because smuggling may be a significant issue given porous borders.

B. Market Net Back Pricing

A reasonable compromise between the advantages of collection from a few taxpayers and the use of the ad valorem tax is to collect the tax at the time of manufacture or importation, but base the tax on some measure of market value.⁵ The system can be developed by using the following steps:

1. Use market surveys to compute the average market prices of excisable products.⁶ Product differentiation, Irish whiskey and vodka for example, can be taken into account, but I recommend that differentiation be limited to “high” quality and “low” quality, at least for cigarettes and other taxable commodities. It is important to get the system operational, begin to accrue significant revenue and gain experience before there is any attempt to fine tune the system.
2. Stipulate an ad valorem rate in the law.
3. Stipulate that the base of the tax is the retail price with net backs for VAT and the existing excise. The net back then becomes is a straightforward computation.

⁴ VAT and income tax records can be used to determine if a manufacturer has a related distributor or private brander.

⁵ I made this proposal for the Dominican Republic and Russia, among other countries.

⁶ The statistics offices should be contacted to determine the extent to which market surveys are used.

4. Convert the ad valorem tax to a per unit equivalent by multiplying the measure of the base by the ad valorem rate.
5. Collect the per unit equivalent either at the factory or at the time of importation.
6. Make all computations at most on a quarterly basis.

For instance, suppose the measured average market price before VAT is 100 and the existing tax is 30. The tax base is equal to 70. The tax would then be 28 if the tax rate is 38%.⁷ This value would be accrue at the time of shipment or the time of importation regardless of the declared value of the commodity.

Administration is simplified because there are fewer taxpayers. Valuation problems are reduced. Values are based on arm's-length market surveys and thus neither transfer pricing rules nor cost accounting are required. The government also gets the funds at an earlier date relative to a retail tax. There are still incentives to evade, smuggling in particular, but overall compliance should be greater with this system relative to a retail tax.⁸ Finally, there is no need to make inflation adjustments, and changes in relative prices, at least between excisable goods and other goods and services, are automatically taken into account by using an ad valorem basis.

I recognize that the proposed approach, in its simplest form, would affect the relative demand for different types of products within a class. For example, the effective tax rate per unit on lower quality excisable goods will be higher relative to higher quality products, unless the surveys are finely tuned. As stated above, it is possible to take into account product differentiation by computing average prices for different classes or qualities. In my opinion, however, such differentiation is unwarranted, given increased complexity of administration. It is better to get a simple system operating well and then fine tuning can occur through time.

I believe the proposal is reasonable and recommend that Ethiopia consider this methodology. Finally, I note that this system can be implemented with, or without, the use of tax stamps. There is a controversy about whether tax stamps are an effective administrative device. Stamps can be counterfeited, and the government has to physically control two things: the stamps in addition to the tobacco products. Despite these costs, governments continue to use stamps. Thus, it is important to know that our proposal can be implemented if stamps are used, as is current Ethiopian policy.

I realize this memo is general, but I would be happy to develop the proposal in detail, complete with drafting instructions and examples, if there is interest.

Thank you.

⁷ Alternatively, the tax-exclusive rate could be converted to a tax-inclusive base by making stipulations (either assumed or empirically determined) about mark-ups and other costs. It might be possible for the base to be negative using the method described in the text if smuggling is significant and markets are competitive.

⁸ There also may be incentives to increase the quality of the product, a result known from the imposition of a per unit charge.