Analysis of Changes in the Excise Duties on Specific Goods in Mozambique

The purpose of this note is to provide a critical analysis of proposals contained in a discussion paper by Mozambique's Ministry of Finance, from 28 April 2008, to amend Specific Consumption tax (ICE).[1] The ICE, passed into law in 1998, is an excise tax levied on a relatively narrow band of imported and domestically produced goods. Recently, the second proposal was accepted by the Council of Ministers and is scheduled to be passed by parliament shortly.

In that which follows, the authors[2] provide a brief introduction to excise taxes. They then summarize the current system in place in Mozambique and outline the proposals contained in the discussion paper. Finally, they provide their thoughts and recommendations regarding the proposals.

AN INTRODUCTION TO EXCISE TAXES

Excise taxes are consumption taxes levied on selected goods as an ad valorem tax (as a percentage of the good's value) or a specific tax (at a fixed level, independent of the good's value.) Excises are commonly imposed on goods considered to generate negative externalities (much as alcohol and tobacco products or motor vehicles) luxury goods (such as perfumes and jewelry.) Goods selected for excise taxes usually demonstrate price inelastic demand and production or importation can usually be closely supervised by the government. While excise taxes have historically been imposed on domestically produced goods, they are now also levied on imports of taxed products. The objective for imposing an excise tax varies by governments but generally fall under one or more of the following broad categories:

- <u>Revenue Generation:</u> Goods with large volumes of production, few producers, price inelastic demand and lack of close substitutability can be a good source of excise revenue for the government.

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[1] Mozambique Ministry of Finance. April 2008. Reference No. 066/AT/GPECI/GD/08.

[2] Alexander Greenbaum and Pooja Pokhrel of Nathan Associates Inc.

- Correcting for negative externalities: Excise tax can be levied in the form of a *sumptuary tax* for commodities such as alcohol and tobacco products that harm the consumers directly but may also have harmful effects on others – second hand smoking, for instance. Excise tax may also take the form of a *sin tax* when levied on goods and services that are deemed to have morally harmful effects on the consumers themselves and others, such as gambling, or prostitution, and may be imposed on goods and services that harm the environment, such as motor vehicle fuel.
- Improving vertical equity: A system of excise taxes can be used an instrument to achieve greater progressivity in taxation. This will only work if the imposition of excise tax does not substantially reduce the demand for taxed commodities and if the excisable commodities constitute a large share of household expenditure for higher-income groups and not for lower-income groups.[3]

Once the objective of the excise tax is clearly defined, three major considerations in designing any tax proposal must be analyzed - efficiency, equity, and administration. Efficiency considerations take into account the tax-induced distortions to economic decisions by households and businesses. The distortions usually occur through two mechanisms. Firstly through increased prices to the taxed good, as the burden of an excise tax is typically passed on to the consumer as a price increase in the amount of the tax. Secondly, through changes in the demand and supply of substitute and complimentary goods. These distortions have welfare implications as consumers and producers will alter their decisions to minimize their tax liabilities and should be analyzed when designing an excise tax system. Equity considerations aim to ensure that the proposed tax do not unfairly burden any group of taxpayers. Ease of administration considerations are important in implementing the proposed tax structure – for instance, if the objective is simply revenue generation, it may be worthwhile to see whether a direct tax can achieve the same outcomes with lesser administrative and financial costs.

Excise taxes are typically levied on domestic products at the site at the production facilities, and at customs clearance for imports of the same item. Products on which the excise duties have been paid may need to have an excise stamp to distinguish from those that have not. Personnel to supervise such facilities as well as resources to collect and administer excise duty must be within the parameters of human and other resource constraints.

THE CURRENT ICE SYSTEM

ICE was first introduced in Mozambique together with the Value Added Tax (VAT), following the safe passage of Law 3/98 on April 1, 1999. According to the legislation, the aim of both these

[3] Some countries, such as the United States and the United Kingdom, have also used excise duties as a punishment tax by levying it on illegal goods and activities, such as drugs and money laundering. For instance, the Kansas Department of Revenue dictates that dealers purchase a drug tax stamp on marijuana and other controlled substances, which are valid for 3 months. Drugs seized without valid stamps “may result in criminal or civil penalties which may include fines, seizure of property or liens against real estate.” The tax rate on processed marijuana, for instance, is $3.05 per gram or portion of gram. Other than an additional source of government revenue, such taxes subject the perpetrators, when caught, to greater punishment and reparations on the basis of tax evasion, and can act as a deterrent to engage in illegal activities.

taxes was to raise revenue through a “more efficient and neutral system”[4] than the consumption taxes that had previously existed. The main objective of ICE is revenue generation; however, as with most excise taxes, ICE also aims to reduce negative externalities such as smoking related illnesses and environmental damage from cars.[5]

From the outset, ICE was levied on the consumption of both domestically produced and imported products. The major product groups on which it is levied are alcoholic beverages, tobacco products, luxury items, motor vehicles, toys, and antiques (see Table 1).

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[4] GoM, (1998), Lei 3/98 (Introdução do Imposto sobre o Valor Acrescentado e o Imposto sobre Consumos Específicos no Sistema Tributário Nacional), *Boletim da República*, No.1 Série I, 8 Janeiro de 1998.

[5] Mozambique Ministry of Finance. April 2008. Reference No. 066/AT/GPECI/GD/08.

Table 1: Summary of Current and Ministry of Finance-Proposed ICE Tariff Rates by 4 digit HS Code

HS4 Code	Product	Current Tariff rates (%)	Proposed Ad Valorem Rate (%)	Proposed Specific Rates (MT)
2203	Beer Made From Malt	40	50	13/L
2204	Wine Of Fresh Grapes, Including Fortified Wines; Grape Must (Having An Alcoholic Strength By Volume Exceeding 0.5% Vol.) Nesoi	40	75	80/L
2205	Vermouth And Other Wine Of Fresh Grapes Flavored With Plants Or Aromatic Substances	40	75	80/L
2206	Fermented Beverages, Nesoi (Includ Cider, Perry & Mead); Mixtures Of Fermented Beverages & Mixtures Of Fermented Beverages & Non-Alcohol Beverages Nesoi	40	75	60/L
2207	Ethyl Alcohol, Undenatured, Of An Alcoholic Strength By Volume Of 80% Vol. Or Higher; Ethyl Alcohol And Other Spirits, Denatured, Of Any Strength	40-65	75	80/L
2208	Ethyl Alcohol, Undenatured, Of An Alcoholic Strength By Volume Of Under 80% Vol.; Spirits, Liqueurs And Other Spirituous Beverages	40-65	75	60/L-180/L
2209	Vinegar And Substitutes For Vinegar Obtained From Acetic Acid	30	30	
2402	Cigars, Cheroots, Cigarillos And Cigarettes, Of Tobacco Or Of Tobacco Substitutes	65	75	200/MP/ST
2403	Tobacco And Tobacco Substitute Manufactures, Nesoi; Homogenized Or Reconstituted Tobacco; Tobacco Extracts And Essences	65	75	Unavailable
3303	Perfumes And Toilet Waters	30	30	NR
3304	Beauty Or Make-Up And Skin-Care Preparations (Other Than Medicaments), Including Sunscreens Etc.; Manicure Or Pedicure Preparations	30	30	NR
3305	Preparations For Use On The Hair	15-30	15-30	NR
3307	Personal Perfumery, Cosmetic Or Toilet Preparations Nesoi, Including Shaving And Bath Preparations And Deodorants Etc.; Prepared Room Deodorizers	15-30	15-30	NR
4303	Articles Of Apparel, Clothing Accessories And Other Articles Of Fur skin	40	40	NR
4304	Artificial Fur And Articles Thereof	40	40	NR
6702	Artificial Flowers, Foliage And Fruit And Parts Thereof; Articles Made Of Artificial Flowers, Foliage Or Fruit	30	30	NR
7101	Pearls, Natural Or Cultured, Not Strung, Mounted Or Set; Pearls, Natural Or Cultured, Temporarily Strung For Convenience Of Transport	40	40	NR

HS4 Code	Product	Current Tariff rates (%)	Proposed Ad Valorem Rate (%)	Proposed Specific Rates (MT)
7102	Diamonds, Whether Or Not Worked, But Not Mounted Or Set	40	40	NR
7103	Precious And Semiprecious Stones (No Diamonds), Not Strung, Mounted Etc.; Ungraded Precious And Semiprecious Stones (No Diamonds) Strung For Transport	40	40	NR
7104	Synthetic Or Reconstructed Precious Or Semiprecious Stones, Not Strung, Mounted Or Set (Including Ungraded Stones Temporarily Strung For Transport)	40	40	NR
7105	Dust And Powder Of Natural Or Synthetic Precious Or Semiprecious Stones			
7107	Base Metals Clad With Silver, Not Further Worked Than Semimanufactred			
7108	Gold (Including Gold Plated With Platinum), Unwrought Or In Semimanufactured Forms, Or In Powder Form	40	40	NR
7109	Base Metals Or Silver, Clad With Gold, Not Further Worked Than Semimanufactured	40	40	NR
7110	Platimun, Unwrought Or In Semimanufactured Forms, Or In Powder Form	40	40	NR
7113	Articles Of Jewelry And Parts Thereof, Of Precious Metal Or Of Metal Clad With Precious Metal	40	40	NR
7114	Articles Of Goldsmiths' Or Silversmiths' Wares And Parts Thereof, Of Precious Metal Or Metal Clad With Precious Metal	40	40	NR
7115	Articles Of Precious Metal Or Of Metal Clad With Precious Metal Nesoi	40	40	NR
7116	Articles Of Natural Or Cultured Pearls, Precious Or Semiprecious Stones (Natural, Synthetic Or Reconstructed)	40	40	NR
7117	Imitation Jewelry	15	15	NR
7118	Coin	15	15	NR
8407	Spark-Ignition Reciprocating Or Rotary Internal Combustion Piston Engines	15	0	NR
8702	Motor Vehicles For The Transport Of Ten Or More Persons, Including The Driver	30	30	NR
8703	Motor Cars And Other Motor Vehicles Designed To Transport People (Other Than Public-Transport Type), Including Station Wagons And Racing Cars	15-30	5-40	NR
8704	Motor Vehicles For The Transport Of Goods	30	30-35	NR
8711	Motorcycles (Including Mopeds) And Cycles Fitted With An Auxiliary Motor, With Or Without Sidecars; Sidecars	15-30	10-35	NR

HS4 Code	Product	Current Tariff rates (%)	Proposed Ad Valorem Rate (%)	Proposed Specific Rates (MT)
8716	Trailers And Semi-Trailers; Other Vehicles, Not Mechanically Propelled; And Parts Thereof	15	15	NR
8801	Balloons And Dirigibles; Gliders, Hang Gliders And Other Non-Powered Aircraft	65	35	NR
8903	Yachts And Other Vessels For Pleasure Or Sports; Row Boats And Canoes	40	0-40	NR
9304	Arms Nesoi (Including Spring, Air Or Gas Guns And Pistols, But Excluding Swords, Bayonets And Similar Arms)	30	30	NR
9503	Toys Nesoi; Scale Models Etc.; Puzzles; Parts And Accessories Thereof	15	15	NR
9504	Articles For Arcade, Table Or Parlor Games, Including Pinball Machines, Billiards Etc.; Automatic Bowling Alley Equipment; Parts And Accessories	15	15	NR
9506	Articles And Equipment For General Physical Exercise Etc. Or Outdoor Games Nesoi; Swimming Pools And Wading Pools; Parts And Accessories Thereof	15	0-15	NR
9507	Fishing Rods, Line Fishing Tackle; Nets (Fish Landing, Butterfly Etc.); Hunting Decoy Birds Etc.; Parts And Accessories Thereof	15	0	NR
9508	Merry-Go-Rounds, Boat-Swings, Shooting Galleries And Other Fairground Amusements; Traveling Circuses, Theaters, Etc.; Parts And Accessories Thereof	15	0	NR
9701	Paintings, Drawings And Pastels, Executed By Hand As Works Of Art; Collages And Similar Decorative Plaques	65	30	NR
9702	Original Engravings, Prints And Lithographs, Framed Or Not Framed	65	30	NR
9703	Original Sculptures And Statuary, In Any Material	65	30	NR
9706	Antiques Of An Age Exceeding One Hundred Years	65	65	NR

Under the current system, ICE is levied at ad valorem rates on all products (see the third column of Table 1) either when the product leaves the factory gate (when domestically produced) or when the product leaves the port warehouse (when imported). On imports, it is applied on top of the cost inclusive of freight (CIF) and customs duty. On both domestically produced and imported products ICE is applied before VAT.

To illustrate this let us look at two examples:

1. A liter of domestic wine that cost 500MT to produce. As the ICE rate for wine if 40 percent, ICE due will be 500 x 0.4= 200MT. As VAT is levied at 17 percent, VAT will due on the bottle will be (500 + 200) x 0.17= 119MT.The pre-retail value for the liter of wine is 500 + 200 + 119= 819MT
2. A liter of imported wine that cost 350MT (inclusive of freight). The customs duty on wine is 20 percent, thus the duty due is 350 x 0.2= 70MT. ICE will be 420 x 0.4= 168MT and VAT will be 588 x 0.17= 100MT. The pre-retail value for the liter of wine is 350 + 70 +168 + 100= 688MT

SUMMARY OF MINISTRY OF FINANCE DISCUSSION PAPER

In this section, we summarize the arguments made in the Ministry of Finance's (MOF) discussion paper, which are at some points incoherent or difficult to understand. In the next section, we critique these arguments and provide our own analysis of the data.

According to the authors, the discussion paper has four objectives: (1) to identify for each major product group whether ad valorem or specific tax rates should be used; (2) to analyze recent revenue statistics for Mozambique, both time trend data and in comparison to other countries in the Southern Africa Development Community (SADC); (3) to analyze various proposals with respect to alcohol, tobacco, and vehicles; and (4) to assess the likely impact of these proposals on revenue collection in light of the 2009 budget numbers.

Though the analysis section of the discussion paper starts with a brief comparison of excise tax rates and types across major products in SADC, the crux of the analysis lies in its discussion of trends in revenue data for Mozambique for the 5-year period 2003 to 2007. The MOF discussion paper sites four key observations:

1. The contribution from goods and services taxes to overall tax revenues have declined.[6] Especially in 2006 and 2007, revenues from ICE as a percentage of total tax revenue have declined;
2. Owing to exchange rate issues, the actual volume of imports into Mozambique fell below macroeconomic projections in each of the last five years;
3. The value of imports have been increasing, whilst the value of imported whisky has been decreasing; and

[6] Goods and services revenue share of total revenue declined from 64.7 percent in 2003 to 61.2 percent in 2007.

4. The contribution of ICE revenue from alcohol and tobacco products to total ICE revenue has been decreasing.[7]

The implications of these observations are that ICE revenues need to be increased and that under valuation of products to avoid paying ICE is worsening and needs to be combated.

To tackle theses problems, three proposals are presented and analyzed:

1. Maintaining an ad valorem excise tax system, but increasing the ad valorem rates;
2. Adopting a system of specific rates for specific products; and
3. Increasing the number of products that are subject to excise taxes.

Under the first proposal, the ad valorem rates for certain goods would increase (see fourth column of Table 1 above). The discussion paper agues that the scheme would increase revenue, would not be affected by inflation and changes in the exchange rate, and would be easy to apply (see the third point in Analysis of the Discussion Paper for discussion of this point). However, it would still suffer from the problems of undervaluation and tax evasion associated with ad valorem taxes.

Under the second proposal, a set of specific (non-ad valorem) taxes would be levied on domestically produced and imported alcohol and tobacco products (see fifth column of Table 1). According to the discussion paper, the main advantages of this proposal are twofold. First, enacting the proposal would establish a rate per unit for each good, avoiding the need for product valuations. Second, revenue forecasting would be easier as it would solely rely on quantity, and not price, information. The main disadvantages, according to the MOF, are that increased resources would have to be used to investigate shipment quantities and that monopolies would favor this system, presumably because they can increase prices without excise taxes being affected.

The third proposal is not greatly expanded upon, other than that the broadened base of goods would mainly be assigned ad valorem rates, and in order to negate undervaluation of goods, revenue targets would be set.

The discussion paper concludes that the current ad valorem rates in Mozambique have led to under invoicing and a drop in the contributions of revenue collections from ICE to overall tax receipts in recent years. The discussion paper therefore recommends adopting the second proposal, i.e. imposing specific excise tax rates on alcohol and tobacco products.

Analysis of the Discussion Paper

In this section, we critically assess the discussion paper's analysis of recent revenue data for Mozambique and its inferred conclusions and scrutinize the logic behind the major recommendation of the discussion paper. We also investigate whether the rates included in the first two proposals take Mozambique past the maximum potential revenue points for a select number of products. In all, we make six major points.

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[7] Revenue from ICE on alcohol and tobacco as a share of total IC revenue declined from 70.7 percent in 2003 to 69.4 percent in 2007.

First, though the observation that the contribution from goods and services taxes and specifically ICE to overall tax revenue declined in 2006 and 2007 is true, the conclusion inferred from this observation is problematic. The decline is a relative one and appears to reflect an improvement in income tax and VAT collection, rather than a serious decline in revenues from ICE. This is to be expected, as income taxes and VAT are inherently more "elastic" than the excise tax as sources of revenue in a growing economy. Between 2003 and 2007, revenue from ICE in constant 2003 meticals increased at an average annual rate of 5.3 percent.[8] Thus, it is not clear that ICE rates should to be increased.

Second, though ICE revenue from both tobacco and alcoholic products was flat in the last couple of years, there is no indication that there is an increasing problem of undervaluation of products. Moreover, even if there were such a problem, there is no indication that ad valorem tax rates are to blame and that specific tax rates would solve the problem. Rather, a solution would probably lie in increased validation checks on valuations performed by the Mozambique Revenue Authority. These would be easy to administer given that alcohol and tobacco products are well standardized in terms of content, labeling and packaging.

Third, the discussion paper barely mentions the main reason for using ad valorem rates: inflation. Charging specific excise tax rates that are set in nominal terms per physical unit, as outlined in the second proposal, will almost inevitably lead to an annual loss in revenue in real terms due to inflation. Over a short period, this will likely cause serious problems.

To illustrate this, let us investigate the implications of the first and second proposals for tax revenue on a liter wine over a five year period, assuming 10.7 percent inflation.[9] As one can see from Table 2 below, revenue from an ad valorem tax on the liter of wine will remain unchanged in real terms; however, in just five years, revenue from the specific tax will decline by 33 percent.

Table 2: A comparison of revenue (in constant 2009 meticals) from one liter of wine under the two proposals

Year	Ad valorem duty revenue (first proposal)	Specific duty revenue (Second Proposal)
2009	80 MT	80 MT
2010	80 MT	72 MT
2011	80 MT	65 MT
2012	80 MT	59 MT
2013	80 MT	53 MT

Thus, even if the government wishes to adopt the second proposal, it should at least consider amending the proposal to allow for a rate structure that factors in inflation.

Fourth, the paper provides no indication as why the rates under either of the first two proposals were chosen. As increased revenue generation is the primary objective of the proposed reform, it

[8] Using consumer price inflation from the IMF World Economic Outlook Database April 2008.

[9] Between 2003 and 2007, average annual consumer price inflation was 10.7 percent. Source: ibid.

makes sense to assess whether total tax revenues from ICE will increase given the new rates. The most common method for assessing this is identifying the maximum tariff rate, or the tax rate (including customs duties, ICE and VAT) at which revenues will be maximized for each product. If the proposed total tariff rates[10] (see Table 3, below) are above the maximum tariff rates, it is likely that government revenue will decrease if the new rates are introduced, owing to reduced overall consumption and increased tax evasion and smuggling.

Table 3: Total Tariff Rates

Product	Current Total Tariff Rate	Total Tariff Rate under the First and Second Proposals
Cigarettes and derivates of tobacco	132	146
Malt Beer	97	111
Whisky	132	146
Wines	97	111

Where there are few good substitutes for a particular product (as with most goods on which ICE is levied) it is generally accepted to use the following equation to determine the maximum revenue tax rate:

$$t^* = \frac{1}{1-\eta}$$

where t* is the tariff maximizing revenue rate and η is the own price elasticity of demand[11] for the product.

In what follows, we analyze the whether the proposed tariffs on cigarettes and other tobacco products, malt beer, whisky, and wines exceed their maximum tariff rates. As we have no data on price elacticities for these products in Mozambique, we provide three scenarios based on a literature search of international experience.[12] The first scenario provides the mean elasticities from our search, the second low-end elasticity estimates (at half the mean), and the third high-end

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[10] The sum of customs duties, ICE, and VAT on the good as a percentage of the price before customs duties, ICE and VAT are applied.

[11] According to www.businessdicationary.com, the own price elasticity of demand can be defined as "Percentage change in quantity demanded of a good or service divided by the percentage change in its price, other factors remaining unchanged." This number is normally negative, indicating that price decreases, the quantity demanded increases.

[12] Price elasticities for alcohol (beer, wine, and spirits) were obtained from: *Forgarty, James. The Own-Price Elasticity of Alcohol: A Meta-Analysis (2004).* The countries included in this study are: the UK, USA, Canada, Australia, Sweden, New Zealand, Finland, Kenya, Norway, Belgium, France, W. Germany, Ireland, Italy, Japan, Netherlands, Portugal, and Spain. Price elasticities (long-run, where available) for cigarettes were obtained from: *Ross, H and Chaloupka, FJ. Economic policies for tobacco control in Developing Countries (2006).* Countries included Brazil, Venezuela, China, Sri Lanka, Indonesia, Mexico, Nepal, Thailand, Russia, South Africa, Bulgaria and the South-East Asia region. Price elasticities shown in the table in text reflect averages for these countries.

elasticity estimates (at half again over the mean) (see Table 4). Where possible, we have tried to use the long run elasticities for developing countries.

Table 4: Maximum implied tariff rates

Product	Scenario 1		Scenario 2		Scenario 3	
	Mean Price Elasticities	Implied MTR	Low Price Elasticities	Implied MTR	High Price Elasticities	Implied MTR
Cigarettes and derivates of tobacco	-0.63	61%	-0.32	76%	-0.95	51%
Malt Beer	-0.40	71%	-0.20	83%	-0.60	62%
Whisky	-0.70	59%	-0.35	74%	-1.05	49%
Wines	-0.68	59%	-0.34	75%	-1.03	49%

Note: MTR= maximum tariff rate

Comparing Table 3 and Table 4, we can see that the proposed total tariff rates for all products are higher than the maximum tariff rates in all three scenarios. Even in Scenario 2 when the elasticities are assumed to be at the low end of the international scale, the proposed new ICE rates would cause the total tariff rates to be between 34 percent and 94 percent higher than the implied maximum tariff rates.

These results have two implications. First, it is likely that the proposed rates are too high and if enacted will result in a loss of government revenue. Second, the government should consider undertaking serious research to ascertain the elasticities of these products before setting new rates.

Fifth, though the discussion paper provides a table containing excise tax rates in other SADC countries, it provides no analysis of the table or how the government should use it for benchmarking purposes. In fact, benchmarking can be a very useful tool. For example, benchmarking could highlight whether excise tax rates in Mozambique are in line with those in other SADC countries. It might be used to investigate which SADC countries have implemented specific excise tax systems and whether their tax rates are linked to inflation. It could also be used to determine the average excise tax to GDP ratios for specific product group across the region.

Sixth, the discussion paper barely mentions the costs of administering ad valorem versus specific rate taxes. Tax administration costs are important and should be estimated and included in the government's decision making process. For instance, the tax liability for a specific excise tax is easier to measure and administration is often simplified by having taxes prepaid on sales. Depending on the design of the tax, both types of excises can have loopholes that accommodate tax avoidance, and could unnecessarily increase administrative costs. Examining costs of administration and potential loopholes is important at the design phase, as can be far more complex to correct after implementation.

Finally, the discussion paper makes no mention of equity considerations. Some discussion on how the proposed excise duty affects different household and business groups is warranted, in order to ensure that the proposal does not disproportionately tax a certain (and particularly the low-income) groups.[13]

RECOMMENDATIONS

The two most important conclusions resulting from our analysis of the MOF's discussion paper are:

1. There is little evidence to support the assertion that undervaluation of goods subject to ICE is on the increase and that there is a need to switch from an ad valorem to a specific tax rate ICE system; and
2. It is unlikely that that increasing the ICE tax rates on alcohol and tobacco products will lead to an increase in tax revenue.

In light of our analysis, we recommend that the government waits until serious research has been undertaken before enacting the second proposal. Research should entail undertaking some of the following tasks:

1. Computing the own price elasticity of demand for major product groups on which ICE is levied.[14] The own price elasticities should then be used to determine the maximum tariff rates for each product group and to set new schedules should be based on these rates;
2. If the government decides to enact ICE based on specific taxes for certain products, investigating ways of linking the rates to inflation to avoid rapid revenue loss;
3. Benchmarking current ICE rates against other SADC countries and to analyze how new rates will fit in with SADC objectives;
4. Analyzing the equity effects of any proposals; and
5. Determining the costs of administering ad valorem versus specific tax rates and to factor the costs into the decision making process.

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[13] A useful tool for measuring the welfare impacts of the excise on cigarettes might be the World Bank draft toolkit for welfare measurement. http://www1.worldbank.org/tobacco/pdf/Poverty_updated.doc (Accessed: August 13, 2008)

[14] To do this, consumption data for each product should be regressed against price data for the product itself, price data for close substitutes, and real GDP per capita For further information see Haughton, Jonathan (1998). Estimating Demand Curves for Goods Subject to Excise Tax. EAGER/PSGE - Excise Project. USAID.