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## Why Levy Discriminatory Excises on Soft Drinks?

Roy Bahl

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Roy Bahl

International Studies Program  
School of Policy Studies  
Georgia State University  
Atlanta, Georgia

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## EXECUTIVE SUMMARY

*This review of the justification for discriminatory excise taxes concludes that the economic case for taxing soft drinks is weak. In developing economies, expenditure needs are great, tax administration is weak, and countries may resort to discriminatory excise taxes as stopgap measures to solve short-term problems. More advanced economies do not have to settle for such stopgap measures. Discriminatory excises, other than on the “sin” products, find little justification in modern tax systems. In fact, discriminatory taxes on soft drinks have been eliminated in most European countries and are recommended for elimination in the EU. A middle or higher income country that resorts to a tax list of discriminatory excises on consumption of specified products is taking a step back in the development of their fiscal system and is postponing a more proper reform that would be in the better interest of the country.*

## WHY LEVY DISCRIMINATORY EXCISES ON SOFT DRINKS?

Roy Bahl\*

Why would any country impose a discriminatory excise tax? Are there conditions under which such measures can be justified as good public policy? What are the revenue implications of special excises, and how widespread is the practice? Are soft drinks a particularly good candidate for discriminatory tax treatment in the name of increasing the national welfare? The answers to these questions are integral to evaluating the question of whether a discriminatory excise tax is a wise tax policy choice.

This paper gives an overview of the justifications for special excises of soft drinks, based on standard economic analysis, the literature, and expert opinion in taxation. This review concludes that the economic case for taxing soft drinks is weak. Due to revenue needs and weaknesses in tax administration capacity, some developing countries impose excise taxes on soft drinks. But such taxes are “second-best” policies, and it would be far better if these countries adopted broader-based excise or sales taxes that do not discriminate against particular products.

As countries graduate along the development ladder, the apparent need for such practices disappears. The need to compensate for a poor tax administration gives way to fairness in taxation and economic efficiency as the driving forces behind tax reform. There is little justification for discriminatory excises on products other than those imposing significant external effects, such as alcoholic beverages, cigarettes, and motor fuels. One European public finance expert has put it well, “Almost all countries impose special taxes on alcoholic drinks, tobacco, motoring, and betting. But the reasons why Anglo-Saxon Countries have penalized mechanical

\* Professor of Economics and Dean, School of Policy Studies, Georgia State University.

lighters and playing cards, and continental European ...(countries have penalized) tea, coffee and sugar, are mostly hidden in the mists of time.” (Kay, 1990, p. 40).

#### THE NEUTRALITY CASE AGAINST DISCRIMINATORY TAXES

To most fiscal economists, good tax policy begins with the rule of neutrality, i.e., in the absence of “market failure” the tax rate and base structure should not interfere with consumption, production or investment choices. Though no tax regime is perfectly neutral, the more broad-based it is, the closer it moves toward the goal of taxing all consumption and production activities at the same effective rate. Under broad-based and flat rate taxes, economic decisions are influenced more by the conditions of the market and less by the tax rules.

Special excise taxes are the textbook example of how to violate the rule of neutrality. By raising the price of the taxed good relative to other goods, special excises bias consumption away from the taxed product. Consumer choices are thus distorted by the tax system, and the national welfare is harmed. This is the traditional thinking that has led most tax policy analysts to hold to Adam Smith’s original maxim of neutrality and to argue for broad-based and non-discriminatory taxes.

In fact, many countries impose discriminatory taxes, with liquor, beer, cigarettes, motor fuels, and various kinds of luxury consumption being the usual targets. One might ask the obvious question: If special excises are such a bad idea, then why are they so often used as an instrument of tax policy? There are a number of answers to this question.<sup>1</sup> One is that there are conditions under which special excises can be justified as in the national interest. Another answer is that

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<sup>1</sup> The traditional justification for special excises is presented well in Tanzi (1995, pp. 56-64). For a more detailed discussion, see Cnossen (1991, 1998).

special excises are politically feasible by comparison with the other tax choices available. Finally there are justifications for tax structure choices that are completely outside economics and politics -- such as reaching for the moral high ground -- and discriminatory taxes might be justified by such considerations. Most advocates of special excise taxes fall in one of these camps, and they usually argue one of the following five points in advocating discriminatory taxes.

#### COMPENSATION FOR EXTERNAL COSTS

The best economic justification for a discriminatory excise tax is that the additional tax is needed to compensate for an external effect related to the production and/or consumption of “undesirables”. For example, the consumption of cigarettes imposes health risks to smokers and to those who are around smokers, productivity losses to workers and therefore to the economy, and health care costs on society. The consumption of liquor increases the cost to society in the form of increased automobile accidents, drinking related crime, and the maintenance of alcohol abuse centers. Gasoline consumption is associated with increased levels of air pollution, increased congestion and increased highway expenditures that must be financed by others.

Somehow, the consumers and producers of the offending products should pay these external costs. An excise tax imposed on production or consumption of these items is meant to compensate society for these externalities, though revenues often are not adequate in amount. Consumers of alcohol, tobacco, and gasoline, for example, are required to pay a price for their consumption that reflects not only the value they place on the good, but also the cost they impose on society.

The externality justification, however, does not easily fit the situation of soft drinks. Consider the merit of the three principal arguments that soft drinks impose external costs that

should be compensated with a special tax. The first has to do with who should pay the environmental cost of aluminum, plastic, and glass containers that are not recycled, and who should pay for the share of recycling cost that is now borne by government. On the one hand, there can be little argument other than that consumers of soft drinks should bear their fair share of these costs, and an excise tax would seem to be a possible approach to recouping this cost. On the other hand, the share of containers generated by the carbonated beverage industry is relatively small. Other consumer good industries, therefore, should be subject to a similar tax based on their potential waste and recycle cost. Clearly, it would be infeasible to administer a differential excise tax for each industry, depending on their contribution to environmental problems. A special excise tax levied only on carbonated beverage consumption can hardly be justified on these grounds.

The second externality argument is that soft drinks require government monitoring of packaging and labeling, and this imposes a cost for which taxpayers should be compensated. Again, the issue is that many other consumer goods require the same degree of monitoring. Simply put, special excises are not the answer to compensating society for external costs of government monitoring of labeling and packaging.

Third, there is the point that carbonated beverages are a mixer for alcoholic drinks, and that a special excise tax would therefore discourage liquor consumption. This argument would seem to be a significant stretch, and has not been convincing to government fiscal planners in most countries or to the EU. Many have argued that soft drinks should be viewed as a substitute for alcoholic beverages, not as a complement to them.

The more general view is that soft drinks do not impose a social cost on society in the form of health risk, in the inducement of aberrant behavior by those who consume soft drinks, or by requiring special costly public infrastructure to meet the needs related to increased soft drink

consumption and production. In short, a discriminatory tax on soft drinks is not justified on economic efficiency grounds.

#### IMMORAL BEHAVIOR

A special excise tax may be levied for “moral” reasons. Drinking and smoking are seen by some as immoral activities that ought to be discouraged, and higher taxes are imposed to raise the price of these activities in hopes of curtailing consumption. This argument is based on philosophical views rather than economics and cannot be evaluated using economic theory. However, it is difficult to see how the consumption of soft drinks would offend national sensibilities.

#### REALLOCATION OF RESOURCES

Another argument is that the government fears production and consumption of non-essential goods and services will “crowd out” more productive uses of resources in the economy. A much better allocation of resources, some would argue, is heavier investment in capital intensive, export oriented industries. To discourage the investment in activities such as cigarette or liquor production, governments often adopt discriminatory taxes that discourage domestic consumption or domestic production, or both. Government planners also make other disfavored activities the target of discriminatory taxes. For example, it may be desired to discourage luxury consumption in favor of increased savings, or to discourage the consumption of foreign-produced luxury goods in favor of consumption of domestically produced goods.

There are many questions to raise about such a justification for special excises. First, it substitutes administrative decisions for market signals about what production is “best” for the

economy, and raises the more general question about the extent to which the economy will be planned or market driven. Second, if tariff protection is part of this discriminatory tax regime, inefficiency in domestic production may be encouraged, and fundamental reforms in economic policy may be delayed or postponed. Third, such policies require governments to identify “degrees of luxury” and to tax various consumer goods accordingly.<sup>2</sup>

To use this justification for a discriminatory tax on soft drinks would require one to believe that resources are being siphoned from other more productive sectors, and to believe that increased soft drink production does not increase value-added tax in the economy. This would be a difficult case to make in countries, as soft drink production shows a high domestic value-added component, can produce an excess of exports over imports, and has positive employment impacts.<sup>3</sup>

#### REVENUE YIELD

The government may levy the specific excise simply to increase its revenues. The rationale is straightforward. The typical targets for special excises are thought to be price inelastic in demand, which means that government can raise the tax rate and realize a significant revenue increase. Consumers cannot find good substitutes for these products, and therefore maintain

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<sup>2</sup> For discussions of this issue, see Tanzi (1991, Chapters 8 and 10), Bird (1992, Chapter 9), and Due (1988, Chapter 4).

<sup>3</sup> One might also note a balance of payments effect. The soft drinks association estimates total exports for 1995 at about 21 million liters and total imports at about 60 million litres. Total domestic production was 276 million litres.

something close to their pretax consumption level. Gasoline, alcoholic beverages, tobacco and some luxury items are widely believed to fit this profile.<sup>4</sup>

Because governments are ever strapped for resources to support their expenditure programs, special excises have long been a favored target when budgets are tight. “Why not let smokers or luxury consumers finance a share of the budget deficit,” is a sentiment that resonates well with voters. An increase in the tax rate on gasoline or beer is a “quick revenue fix” because the collection machinery is already in place, and the money can begin to flow quickly. Increased taxes on drinking, smoking and luxury consumption are less dangerous in the eyes of a vote-seeking politician than are rate increases on the broad-based taxes.<sup>5</sup> Do soft drinks, still subject to discriminatory taxes in many developing countries, carry these same advantages? That is, are excise taxes on soft drinks acceptable to voters, can they be easily collected at reasonable administrative cost, and is the demand price inelastic?

It is true that, with respect to political acceptability, it was finally good economics and EU harmonization efforts rather than taxpayer outcry that brought on the abolition of the discriminatory excise duties in many European countries. Soft drink producers are always unhappy about discriminatory treatment, knowing that their products sell best when prices are kept low and on par with those of competing products. A possible reason for the absence of vocal taxpayer opposition is that soft drink taxes often are not directly collected from consumers. Most

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<sup>4</sup> McLure and Thirsk (1978) find evidence of price inelasticity for cigarettes and liquor in their review of the earlier literature.

<sup>5</sup> Increased motor fuel taxes may be a different story, especially in developing countries where tax increases have led to riots in the past.

taxpayers may not fully realize the extent to which the tax has increased the price of the beverage, thus making excise duties “invisible”.<sup>6</sup>

With respect to administrative costs, a special excise tax on soft drinks is relatively easy to assess and collect. However, a separate levy on soft drinks will require the establishment of a separate department (probably within the customs and excise department), and will increase the compliance cost of those who are liable to pay the tax. Given the small yield of this tax in most advanced countries, this would seem a cost easily avoided. It could be argued that a marginally higher rate on the general sales tax, where the administrative machinery is already in place and where firms must already comply, is a better way.

The biggest difference between soft drinks and other subjects of special excises, however, may be the price inelasticity assumption. The demand for soft drinks is more price elastic than has sometimes been supposed, precisely because there are good substitutes and because many of these substitutes are subject to differential tax treatment. Consider how a family might react to a tax-induced increase in the price of soft drinks. If there are good drink substitutes subject to different tax regimes, e.g., coffee, tea, water, juices, syrups, tap water, etc., the family might react by consuming more of the substitute. There also are a great many choices of non-alcoholic beverages, and it is not uncommon for many of these to be subject to a lower tax rate.<sup>7</sup> If soft drinks are partly consumed as a general entertainment good, they may be replaced by higher spending on movies, ice cream, etc., if the relative price of soft drinks gets too high. As has been

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<sup>6</sup> A poll conducted in The Netherlands in 1992, however, showed that most consumers strongly disagreed with the imposition of this tax.

<sup>7</sup> In a recent review of the soft drink industry in the European economy, Canadean (1997) suggested the wide range of consumer choices available. In a supermarket in Britain, there are 450 “buying options” for non-alcoholic beverages. Using a similar measurement method, they estimate that there are 320 in Belgium, 480 in France, 500 in Germany, 235 in Netherlands, 250 in Spain, and 170 in Italy.

shown with data for Ireland, the demand for soft drinks is price elastic because there are good substitutes available at different prices (Bahl and Walker, 1998). We are led to the conclusion that consumers will move to substitutes if discriminatory taxes are imposed, and will increase their consumption of soft drinks if discriminatory taxes are eliminated. In the latter case, the increased consumption will significantly cushion any revenue loss occasioned by a tax elimination.

#### EQUITY JUSTIFICATIONS

One notion of equity is that higher income families should pay a greater proportion of their income in taxes than should lower income families. Special excises on luxury items, therefore, might be justified on grounds that they are a progressive and (some would say) an equitable form of tax. However, while soft drink consumption generally rises with increases in total and discretionary income, tax progressivity is not a justification for discriminatory taxation of soft drinks. This is because soft drinks are but one of a host of goods and services whose consumption rises as income levels grow, and any of these goods could be equally attractive targets for taxation. Moreover, a tax on soft drinks is unlikely to impose a burden large enough to significantly change the overall degree of tax progressivity.

There is another dimension to equity that clearly argues against discriminatory taxation of soft drinks. *Horizontal equity* in taxation requires that equally situated individuals be treated the same by the tax system. Special excise taxes on soft drinks do not pass the horizontal equity test, because all individuals who buy a drink are not treated the same. Three individuals who choose to spend \$1 on a drink should be treated the same by the tax system, but in many countries with special excise taxes, if the drinks chosen are a soft drink, coffee, and fruit juice, three different tax treatments might result. The tax administration implications of this differential treatment also are

important, because every complication increases the cost of effective administration and/or reduces the probability of full compliance.

#### THE SPECIAL CASE IN DEVELOPING COUNTRIES

Most developing countries levy discriminatory excise taxes. Though the most common targets are alcoholic beverages, tobacco products, petroleum, and motor vehicle related products (tires and batteries), a number of developing countries include soft drinks in the list of commodities subject to special excise taxes. In nearly all countries, the great majority of excise tax revenue comes from the levies on alcohol, tobacco and petroleum products. Excises on soft drinks, sugar, luxury items, etc., rarely account for significant amounts of revenue.

The discussion above on the lack of justification for special excises on soft drinks holds for developing as well as for industrialized countries. Other than the case of goods whose consumption and production imposes significant externalities, the case for discriminatory excises is weak. Nevertheless, some developing countries face special circumstances that make excise taxes appealing tax alternative. Such excises, if imposed, should cover a wide range of products and industries and not discriminate among sectors except when warranted by externalities.

The first and most important reason claimed for heavy reliance on excises in less developed countries is that tax administrations are weak (Cnossen, 1991). The general sales tax (usually the VAT) is not broad-based and often covers only manufacturers, importers and large distributors. Even on this narrow base, leakage through under-reporting and non-filing can be significant. It is easy to see how manufacturing facilities become tax targets of governments in such situations. Administration is easy by comparison with the alternatives of either VAT or

income tax. There are relatively few producers, and tax assessment and collection can be based on physical controls that do not require substantial book audit or record keeping activities.

Second, the revenue shortfall in developing countries may be tighter than in industrial countries. Public services tend to be more inadequate, infrastructure more deficient, debt service burdens higher, and there is little money available for new government programs. Developing-country economies are usually more unstable and budget deficits tend to be higher, putting further pressure on finding new revenue mobilization opportunities. In light of all of this, it is not surprising that developing-country governments have expanded the list of goods subject to excise taxes. Soft drinks are an easy target, and rate increases on excisables can quickly yield desired increases in revenue. This is one reason why an increase in excise tax rates on alcohol, tobacco and gasoline is a favorite proposal of international agencies when they offer tax policy and revenue mobilization advice to developing country governments.

Third, skilled labor and capital often are scarce resources in developing countries. Too scarce, some would argue, to be wasted on the production of luxury consumer goods. The better route to economic growth is production with an export orientation. Discouraging the production of consumer goods with a discriminatory tax might seem a reasonable way to achieve this reallocation. And, if consumption choices are distorted, at least it is away from non-essential consumption.

Finally, there is the “sin tax” justification. The consumption of cigarettes, liquor and motor fuels produce external effects in developing countries just as they do in industrialized countries. One might argue that the external costs are magnified in developing countries, as suggested by the following examples:

Roadways are already congested, and underpriced automobile usage imposes heavy costs on the economy;

Pollution emissions are not controlled to the same extent as in industrialized countries, hence the external cost per unit of motor vehicle use may be greater; and

Advertising the harmful effects of smoking and drinking is less pronounced in developing countries, and “truth in advertising” restrictions may be less well enforced.

This list of reasons explains the popularity of excise taxes, and explains why governments in some less developed countries have moved to include soft drinks in their excise tax regime. But this does not mean that taxing soft drinks is good policy.

#### DISCRIMINATORY TAXATION OF SOFT DRINKS AND ECONOMIC DEVELOPMENT

For industrialized countries, the case for discriminatory consumption taxes is even weaker. Particularly in the case of taxing soft drinks, one could make the following arguments that discriminatory taxes are not in the national interest, and should be reduced if not discontinued.

1. While specific excise taxes can be more easily administered than general sales taxes, in developed countries the tax administration justification of excises is not persuasive. In fact, protection of revenues with easily administered excise taxes, whose rate may be increased with relatively little resistance, may slow efforts to bring about the needed fundamental reform of tax administration systems. Rather than industry-specific discriminatory taxes, countries should strive for a broad-based, neutral tax system.
2. It is not clear what should be included on the excise list. Where does one draw the line on which products get discriminatory treatment? As countries mature in their economic development and tax policy, they should limit the special excises to those goods whose consumption produces large external effects. Otherwise, the hunt for new products to include on the tax list becomes a judgmental process that is laden with arbitrariness. For example, if soft drinks are taxed separately, then what about chocolate, ice cream, or just about any other consumer good that comes along? And of the drink substitute products, what about fruit juices, flavored milks, hot drinks and bottled waters? The more the tax system creates classes of goods subject to special treatment, the more it drives up administrative costs and thereby offsets its major advantage. A better way, especially in countries where modern tax administration procedures are emerging, is to subject all “non-externality” consumption to a general sales tax.

3. Are discriminatory tax rates on soft drinks truly revenue productive? Evidence has shown that the demand for soft drinks is price-elastic as there are good substitutes for soft drinks available, e.g., water, tea, juices and milk. To the extent demand is price-elastic, increases in the tax rate on soft drinks may result in more of a shift to consumption of lower-priced substitutes and less of a net gain in revenues. The revenue productivity argument is therefore less persuasive than many have supposed.
4. Is the tax on soft drinks really progressive? That is, do higher income families spend a higher proportion of their income on soft drinks? If this is not the case, then the discriminatory tax on soft drinks is proportional or even regressive, and public policy may not be well served by the tax. There is need to study the issue of whether soft drinks are consumed disproportionately by higher income families, so that the argument for taxing soft drinks as an equity measure will not be based on impressionistic evidence.<sup>8</sup>
5. The production of soft drinks does use capital and skilled labor in the production of a consumer good and thus competes with other sectors for investment resources. But this is not a strong argument to discourage soft drink production versus other forms of consumer goods production. The question is not whether the soft drink industry will use up resources that otherwise might be used by export-oriented activities, it is whether the soft drink industry adds more to the economy than do other sectors that produce for home markets. Certainly a case can be made in this respect. The soft drink sector brings significant benefits to the economy in the form of employment generation and often a high domestic value added. It encourages expansion of domestic packaging industries, strengthens the capacity to partner with exporters, and provides for the training of workers in the bottling, packaging and distribution sectors.

## CONCLUSIONS

The case for a discriminatory tax on soft drinks is very weak. At best the discriminatory taxation of soft drinks is part of a “stopgap” program, usually designed to solve a short-term revenue problem. However, continuation of discriminatory taxes may come at the expense of future economic development. Clearly, such policies do not move developing countries toward any fundamental solution to the fiscal imbalance that might exist. More advanced economies do

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<sup>8</sup> Bird (1992, page 22) points out that discriminatory taxation of consumer goods can be misleading if based on impression. He cites the case of hair oil in the Philippines - an “obvious” luxury item - that turned out to be a basic consumption item of the lowest income groups.

not have to settle for such “stopgap” measures. Discriminatory excises, other than on the “sin” products, find little justification in modern tax systems. In fact, discriminatory taxes on soft drinks have been eliminated in most European countries and are often in the process of being phased-out in others. A middle or higher income country that resorts to imposing differential, discriminatory excises on consumption of specified products, is taking a step back in the modernization of their fiscal system and probably postponing a more proper reform that would be in the better interest of the country.

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