REFORMING EXCISE TAXES

PROPOSALS FOR THE DOMINICAN REPUBLIC

by

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INTRODUCTION

Excise taxation is one of the oldest forms of government revenue instruments in the world. It can be traced back to the Han dynasty in China, and the Mauryan period in India. The term excise may be attributed to the Dutch, whose duties on beer, sugar, spirits and other goods were called excijsen.

Most countries continue to use excise taxes with varying degrees of coverage. The Indian Subcontinent (i.e. Bangladesh, India and Pakistan) is unique for its extensive reliance on the excise tax. Their broad excise base is characterized by a complex schedule of rates covering virtually all domestically produced goods. In Europe and North America the tax is still in limited use on traditional sumptuary items like tobacco, alcohol, and in some cases petroleum products, and gambling. Latin America and the Far East, with broader bases, fall somewhere in between the two extremes.

Many governments have use the excise as a vehicle for propagating their social and economic development policies. Often this translates into incomprehensible and capricious application. Consequently, the excise has been loosing favor in nations moving towards greater economic and fiscal transparency. Thus, in recent years the focus has been on rationalization – in effect reducing the scope of excise coverage. In Europe, community members are now in the process of harmonizing their respective excise systems.

Implications of the excise system are far-reaching for income distribution, and the allocation of resources in the countries where it is used as a major revenue source. However, the ostensible simplicity of the excise base and the forms of imposition have caused some to devote greater analytical and empirical efforts to taxes held to be intellectually more challenging, even if sometimes less relevant to policy issues.[1]

In the context of reforming indirect tax systems the thrust has been on reducing the scope and coverage of the excise. With revenue stability and buoyancy being the overriding considerations, the VAT, and at times, broad based taxes at the manufacturers level, have been adopted. The economic arguments for substituting an excise with an alternate revenue instrument are many. Notwithstanding these objections, excises continue to be used by many countries for various reasons, some compelling and others more obtuse. Both reality and sensitivity to the case in question dictate that these factors be understood and discussed in the reform context.

Though the excise should not be considered a broad based indirect tax option, there continue to be a limited number of circumstances where the excise is the most suitable levy. Depending on the commodity on which the tax is imposed, the excise is also a fairly easy and inexpensive tax to collect. The cost of collecting a unit of excise revenue from certain commodities is very low eg. cigarettes, automobiles. Administratively all one needs is a few in-factory excise inspectors to monitor the quantity of production on the basis which the tax liability is readily ascertained.

Related to the ease of collection - another reason that the excise tax is still in use is its high revenue yield, especially from "traditional" excise bases[2] like: tobacco products, wine, spirits, beer, and petroleum products.

The fact that almost every country developed or otherwise, use excises in some form stands as adequate testimony of their fiscal utility and importance. Table I, gives an indication of excise revenue importance in a sample of countries from every continent.

Part 1, of this paper provides a theoretical overview of excise taxation discussing aspects of design, economic efficiency and administration. Part 2, focusses on the excise reform proposals in the Dominican Republic. The proposals are put in the framework of the evolving indirect tax system in the country.

REGION Country	YEAR	EXCISE REVENUE as % of Central Govt. Tax Revenue	PERMIT FEES as % of Central Govt. Tax Revenue
WESTERN EUROPE			
Belgium	1988	5.60%	1.00%
Denmark	1989	12.66%	4.69%
France	1989	8.66%	0.11%
Germany	1989	9.86%	0.09%
Ireland	1987	10.88%	1.82%
Italy	1989	15.00%	1.63%
Luxembourg	1988	10.78%	0.56%
Netherlands	1989	5.49%	1.61%
United Kingdom	1988	14.91%	1.83%
CENTRAL AMERICA & CARIBBEAN			
Bahamas	1986	6.14%	0.38%
Barbados	1988	4.55%	3.04%
Costa Rica	1989	8.83%	1.56%
Dominican Rep.	1988	21.75%	2.87%
Jamaica	1984	23.46%	1.05%
Panama	1988	10.70%	4.12%
Trinidad & Tobago	1989	9.77%	4.59%
SOUTH AMERICA			
Argentina	1988	17.61%	0.00%
Bolivia	1989	18.65%	0.00%
Brazil	1988	22.27%	0.04%
Chile	1988	9.66%	0.16%
Colombia	1987	6.13%	0.37%
Ecuador	1988	4.38%	0.00%
Paraguay	1988	19.24%	0.27%
Peru	1988	25.64%	2.18%
Uruguay	1988	14.12%	0.11%
Venezuela	1986	10.37%	0.42%
NORTH AMERICA			
Canada	1989	6.65%	0.00%
Mexico	1990	11.26%	0.55%
United States	1989	3.41%	0.08%

SOURCE: Government Finance Statistics Yearbook
Volume XIV, 1990, International Monetary Fund

NOTES. Excise tax includes tax on specific services

Part 1.

THE EXCISE TAX DEFINED

The excise tax has no single unambiguous or uniform definition, the concept varies in interpretation across countries and also over time. Excises are defined more accurately by identifying the broad features that distinguish it from other taxes. An excise tax is distinguished by its selective coverage, discriminatory intent, and utilization of some form of quantitative control or measurement to determine tax liability (Cnossen 1977).

1. <u>Selectivity of Coverage</u>:

Indirect taxes on goods and services may include - taxes and duties levied on production, sale, transfer, leasing, and delivery of goods and rendering of services. Within this broad category distinction is made between selective and general taxes. Sales, turnover, or value-added taxes are examples of general taxes. Selective taxes on goods are normally labeled excises. A further subcategory covers taxes on the ownership or use of goods - distinct from taxes on the goods themselves, and taxes on permission to perform certain activities. Examples are the recurrent user taxes on motor vehicles, and taxes on licenses to sell alcoholic beverages - these taxes are also selective in nature. The distinction on the basis of selectivity of coverage is seemingly inadequate for precise definition. However, for ease of exposition and expression it should be acceptable to consider all selective taxes on goods, services, and motor vehicles as part of the excise tax system.

As is now the situation in the Dominican Republic, most nations operate a broad-based indirect tax in conjunction with selective excises. Under an excise system, taxable commodities are individually enumerated in the law; under a sales tax, on the other hand, the tax base is typically defined to include all commodities for sale other than those explicitly exempted. In practice coverage may be similar, particularly between an excise system with extended coverage and a sales tax with a large number of exemptions. In these cases, the selective nature of excises usually implies that rates are determined separately for each commodity, in contrast to a sales tax which applies the same rate or a few rates to all commodities or all items within a group of commodities.

2. Discrimination in Intent:

Excises are not normally designed solely for revenue purposes, but are often also justified on other social grounds. They are also viewed as necessary in providing moral and commercial restraint. This contrasts with sales taxes which have mostly been introduced to meet general revenue needs, and are, therefore, "general" in intent if not in effect.[3]

Amongst the various arguments advanced to support the imposition of an excise are:

- **Reliable Source of Revenue – Ease of Collection.** When levied on goods with relatively high income elasticities, and if the coverage is comprehensive within a class of commodities (i.e. taxes on close substitutes), the excise can be a buoyant revenue instruments. The term buoyancy may be defined as the change in tax receipts in relation to a change in income, as well as other discretionary revisions to the tax law. It includes the automatic changes in tax revenue in response to income fluctuations, as well as discretionary changes in tax structure and rates, or improvements in compliance and enforcement.[4] A highly buoyant tax will by definition be a responsive and stable source of revenue.

  In an important study (now almost two decades old), it was shown that excises and sales taxes displayed the highest buoyancy of all taxes.[5]

  A high income elasticity is a desired characteristic for any tax instrument. The income elasticity can be disaggregated into the: tax-to-base elasticity and the base-to-income elasticity. In general one would like to tax items whose base-to-income elasticity is greater than one i.e. those whose consumption (base) increases faster than the rise in income. Typical examples are electricity, telephones, and automobiles.

- **Control the consumption of items that are considered immoral or unhealthy.** Prime examples are sumptuary goods such as tobacco products and alcoholic beverages. Another reason is that sumptuary excises are alleged to charge consumers for external diseconomies associated with the consumption of cigarettes and liquor.

- **Excises may be imposed on items that are consumed primarily by high income individuals, and thus considered proxies for taxpaying capacity**. Examples, are the so-called "luxury" excises on cosmetics, jewelry, furs etc.. In developing countries, large cars, foreign travel, and five star hotel rooms are representative luxury goods.

- **Excises in the motoring field may be designed and rationalized as service charges for the use of roads**. Such payments are referred to as benefit levies or user charges. Though justified on the basis of the benefit principle, benefits are only partly discernable and the charges only approximate the price. Airport taxes, and motor vehicle fuel taxes are similarly justified.

- Related to the service/user charges are **regulatory type excises, designed to improve efficiency of resource utilization**. In some sense, these levies are designed to internalize external diseconomies generated by the producer or consumer. Despite the resemblance to sumptuary excises designed to curtail consumption, no moral or ethical reasons necessarily underlie the objective of reducing consumption. Another difference is that here the main aim is regulation, whereas revenue is an important objective of sumptuary excises. Pollution charges are examples of such taxes.

It must be noted that excises are frequently employed solely for revenue purposes. Excises on salt, were considered a big revenue earner for many centuries. In these instances administrative ease, and price inelasticity are prominent attributes.

3. Administrative Control:

An excise tax requires physical or special regulatory control, unlike other forms of indirect taxes. The regulatory procedures of an excise, typically specify some form of physical checking or measurement to determine the tax liability and ensure compliance with the law. Factories have excise-inspectors who monitor the quantity of production and collect the tax (actually or notionally) before the goods leave the factory premises. In some instances, conscious or unconscious human frailty is replaced by metering devices that record the quantities produced eg. numbered tickets issued for admission to entertainment events. Measurement is also necessary for pollution charges, unless some presumptive tax is imposed.

The outward sign of physical control is often the stamp or banderole on cigarette packages, liquor bottles, sugar bags, or other excisable goods, the officially numbered ticket to entertainment events, or the license plate or window sticker on motor vehicles.

This particular administrative distinction of the excise is apparent when compared with other indirect taxes such as the sales tax or value-added tax. In both these cases the liabilities are almost always verified through checks upon written records.

ECONOMIC AND WELFARE IMPLICATIONS OF AN EXCISE TAX

A criterion of public finance fundamental to tax policy formulation is that a tax be allocatively neutral and equitable. Expressed as an objective function - a tax should minimize economic inefficiency, and at the least distribute the burden proportionally. The notional guidelines of what constitutes fairness and economic efficiency can vary across countries. As taxes also influence economic behaviour, it is not strictly possible to dissociate the equity from efficiency objectives. This leads onto issues of optimal taxation, which is not the focus of this discussion. However, to serve as background some of the concepts are laid-out.

An optimal tax is one that cannot be modified without decreasing aggregate net welfare. Tax design under this condition is reliant on the specification of a social welfare function. The theory though impressive is far removed from the practical limitations of determining consumer preferences.[6] First, an optimal tax system breeds inherent instability, as it can at best approximate a static optimum and not keep pace with dynamic movements of taste and technology, necessitating frequent changes. Second, any close to "optimal" tax will be a multi-rate, multi-exemption system. With pervasive differentiation, there is a tendency for pressure groups to constantly clamour for special concessions on ostensible efficiency grouds. Fiscal stability is difficult to maintain in these situations. Further, an optimal tax is not necessarily a neutral tax. Both difficulties of implementation and perceptions of inequity cast considerable doubt on the practical utility of optimal taxation. Difficulties of implementation include lack of knowledge about the relevant parameters, specifically elasticities of factor supply and product demand. Attempting to base taxation on such parameters, even if they were known, would probably not seem fair to most taxpayers.[7]

The relevance of the above point is that perceptions of fairness are equally important in the design of an equitable and efficient tax, as are the theoretical justifications for the tax. The social factors of design are dealt with in a subsequent section. This section will deal with the incidence, welfare aspects, and economic efficiency of the excise.

A. INCIDENCE OF EXCISE TAXATION

Taxes affect the allocation of real income amongst various economic agents i.e. consumers, households, owners of firms, and suppliers of labour services. The burden of the tax, called the incidence is transmitted through changes in relative commodity prices and factor rewards (i.e. return to capital, and labour). The term relative commodity prices denotes that taxes affect choices related to a taxed commodity as well as those that are left tax free.

As is the case with most incidence analysis of indirect tax systems, it is usually assumed that excise taxes are fully shifted forward to the consumer. There have been studies assuming incomplete forward shifting,[8] but none have been taken very seriously. Not because the work is unimportant or questionable in quality, but because the broad magnitude of the shift is more important than an ostensible precise estimate. In pursuing such analysis the partial equilibrium approach has largely been used. In the case of excise taxes, there are virtually no general equilibrium studies of tax incidence. Partial equilibrium studies model the effects of an excise as a price phenomenon basically applying price theory to taxation. The general rule is that the more elastic the supply and more inelastic the demand, the greater the amount of excise borne by the consumer relative to the producer. As supply is more elastic particularly in the longer run, a full forward shifting of the tax to consumers is considered the most plausible outcome.

Once it is assumed that excise burdens are related to consumer expenditures on excisable commodities, changes in the effective rate i.e. excises paid as a percentage of income received by households can be used to measure incidence. The effective rate at different points in the income distribution, may be taken to indicate the degree of tax progressivity: a declining rate implies that an excise is regressive, a rising rate that it is progressive, and no change in the rate implies a proportional incidence. It is important to note that effective excise rates are very dependent upon the assumed or observed differences in consumption patterns. For instance, there is a presumption that patterns of expenditures on excisable goods, and by extension their excise content, are likely to differ substantially between highly monetized urban areas and essentially rural subsistence sectors of a developing economy.[9]

More recently, other studies show that the simple application of tax incidence analysis as detailed above, to developing countries is likely to yield inaccurate conclusions. Shah and Whalley (1990), use the term "nontax policies" and draw to attention factors like -- informal or black markets, urban-rural migration, credit rationing, industry concentration, product market competition, price controls, import licensing regulations, exchange controls, and quantitative restrictions, cartels, and the extent of unionization.[10]

Some Findings on Excise Burden Distribution:

- **Low-Income Countries:** The tobacco duty appears to be the most regressive of traditional excises. Some developing countries impart a degree of progressivity by taxing imported cigarettes at a higher rate. Generally, the alcohol excise is less regressive and may even be proportionate over large ranges of income. The automotive excises exhibit progressivity. Duties on salt and matches appear uniformly regressive, but those on public utility services and entertainment are generally progressive, as is the foreign travel tax in a few countries (e.g. Turkey, India, Dominican Republic). The extended excise systems of the India and Pakistan exhibit substantial progressivity on account of the heavy discrimination in favor of necessities and against semiluxury and luxury items.[11]

The utility of such intersectoral comparisons of consumption patterns, is that these differences may cause the overall effective tax rates for the aggregate excise system to exhibit progressivity. These differences in consumption patterns and commercial integration would always work in the desired direction if low-income families lived in rural areas and high-income families in cities. This is obviously not the case, and the urban poor are much less in a position to escape excise burdens than low-income rural families, because they consume more processed and imported goods. In general, overall effective tax rates of urban families were three to five percentage points higher than those of rural families, and that in several cases the urban rates were twice as high as those of the rural poor.[12]

- **High Income Countries:** The potential for progressive excise taxation in high-income countries is lower for three reasons: their greater degree of commercial integration; smaller variations in consumption patterns between rich and poor; and their more effective tax administration. Traditional excises are moderately progressive in lower-income classes, then proportionate, and sharply regressive in higher-income ranges.

In a U.S. study, a regressivity index was computed for fifty-one individual excises.[13] A zero value indicated proportionality, negative values regressivity, and positive values a progressive distribution. The values of the index ranged from a very regressive -37.1 for smoking tobacco, to a fairly progressive 14.2 for the tax on furs. The same study, deals with the effect of repeals of a large number of manufacturer's and retail excises on luxury items, as well as the incidence of the remaining excises on sumptuary goods, automotive items, and a number of specific purpose levies. The repeal measures enacted in 1965 reduced the total excise burdens on urban consumers from 3.38 percent to 2.47 percent of annual income. The distribution of the burden was about the same after as before the repeal, although excise reductions were 1.57 percent for the lowest income class and considerably smaller for the highest income class i.e. 0.69 percent.

There are a number of problems to applying developed country incidence techniques to developing countries. Thus, one must be cautious about interpreting some of the results indicated by incidence analysis. The principal differences between developed and developing countries arise from the interactions between tax policies and non-tax features of the policy and regulatory environment including, protection, rationed foreign exchange, price controls and black markets, and credit rationing.

Issues in the Taxation of Alcohol and Tobacco

Excises on alcohol and tobacco owe their origins to prevalent views on morality the state felt needed to be imposed on its citizens. This might explain the often used term "sin taxes". Moral perceptions made these taxes politically and socially acceptable - irrespective of individual or collective social preferences. Being a stable source of revenue and a base where rate increases could be effected with a minimum of resistance, these taxes persist worldwide. As noted these excises usually have a regressive incidence, because of the relatively heavier consumption by the poor. Recently however, regressivity and concerns of moral persuasion are being gradually overshadowed by economic justifications for the tax. A number of studies have been done on the negative effects of alcohol abuse and smoking - increased health costs, lowered worker productivity, loss from fire, probabilities of automobile accidents, violent crime, physical and psychological discomfort to individuals in the immediate vicinity, impact on infants and subsequent effect on future factor endowments etc..[14] It would suffice to note that the tax on alcohol and smoking is because of their negative externalities rather than considerations of equity or income impacts.

B. PROGRESSIVITY ENHANCEMENT IN EXCISE TAX DESIGN

Various methods and principles are often proposed in an effort to increase the progressivity of a given tax or tax system. One is of course advised to consider the other second order effects that can result from such efforts. What we are trying to underscore is not the desirability or undesirability in attempting to make the tax system progressive, but rather the conflicting policy considerations involved. There is broad agreement that all other factors being equal a more progressive tax system is preferred to a proportional or regressive system. This concern is heightened by the high degree of income inequality existing in many developing, as well as developed nations.

Rate differentiation and appropriate selection of the taxable base are two commonly employed methods to impart progressivity. Virtually all indirect tax systems in the world employ rate differentiation to enhance progressivity. Rate differentiation usually implies the imposition of a higher than normal rate on certain commodities and lower than normal rate on some others.

The process of relating a high, low, or normal tax rate to a specific commodity can be based on notional definitions of luxuries and necessities, or moral judgements of sumptuary and conspicuous consumption. Alternatively, more rigourous economic criterion may be employed to determine stable yet progressive base.

Criticisms levelled at the normative approach to rate differentiation and selective taxation, is that allocative efficiency, and overall welfare is usually compromised. Differential levels of tax can move resources to uses which are not socially optimal. Furthermore, lower levels of taxation may be compared to subsidies (or tax expenditures). Subsidies of this type are general, as the benefits are available to all consumers irrespective of income class. Thus the revenue loss may be in excess of the benefits passed on to the low income groups being targeted.

Another factor overlooked in the process is that administrative costs can spiral upwards with increasing non-uniformity of rates and the scope of the base. Easy administration requires precise definitions of excisable goods in order to minimize the number of disputes and arbitrary assessments by tax officials, as well as the possibility of imposing enforceable accounting checks on production.

Limitations of adopting such ad hoc distinctions are that these distinctions will differ between countries, urban and rural areas, generations, and professions. In India an airconditioner would be widely considered a luxury, but in Saudi Arabia it may be viewed as a necessity. Some goods are valued differently even among countries at the approximately the same level of economic development. Thus, while beef is fairly common in an American diet, it is considered a luxury in Japan.

The following guidelines help in making an excise more progressive:

- Excisable commodities should have an income elasticity greater than unity. To be comprehensive, it is necessary that close untaxed substitutes should also have low cross-price elasticities of demand.
- Expenditures on excisable commodities should account for a large fraction of incomes in the middle and upper parts of the income scale, and by extension be a minor item on the budgets of low-income groups. For the progressivity to be appreciable, the items selected should be a must form a significant share of expenditures of the higher-income class -- among individual goods, Scotch whisky does not satisfy this criteria but automobiles do.

B. WELFARE ASPECTS AND ECONOMIC EFFICIENCY

An efficient tax system should not in principle hinder the optimum use of an economy's scarce resources. As an instrument of policy, however, taxes are often chosen to influence resource allocation and use. The excise in particular has been singled out as being especially inefficient because the induced price distortion influences a consumer to purchase some good that has an inferior ranking on his preference scale.

The most critique of excises, which is no longer totally accepted, is that they impose a burden over and above the actual amount of excise receipts. In other words the tax burden is not restricted to the money actually accruing to the tax authorities, but includes the additional loss imposed on the taxpayers because taxes are not raised in the most efficient manner. Further, in contrast to a proportional income tax (or a general sales tax) levied at a uniform rate on all goods and services has only an income effect, an excise being selective, also has a substitution effect - inducing households to substitute nontaxed goods for taxed goods. In effect, an excise causes an excess burden that could be avoided if instead a general tax on consumption or income were levied that would not interfere with consumer preferences.

Theoretically the above criticism stood well on its own, however, when analyzed with reference to a nontaxed factor like leisure, the argument is less convincing. Work by I.M.D. Little, proved that if the assumption of a completely inelastic labour supply was dropped, the distorting effects of an excise did not differ, qualitatively at least, from those of a proportional income tax.[15] Arnold Harberger proceeded to make an efficiency comparison between an income tax and an excise.[16] He concluded that the preference for income taxation was still justified in the U.S., the welfare cost of excise taxation was probably small. The total welfare cost of the U.S. tax system, for instance, was estimated at some 3% to 4% of total tax revenues, of which one-third was being accounted for by excises.

Interestingly, another study demonstrated that in a multiperiod setting in which anticipated spending patterns fluctuate more than anticipated income receipts, an individual who has to meet a fixed tax obligation would prefer to pay a single excise on a residual and postponable item of consumption rather than any other tax — whether levied as a lump sum, on income or on general consumption expenditures.[17] An important caveat is of course the validity of the assumption, of spending patterns fluctuating more than anticipated income receipts.

Additionally, the conventional view of excise induced distortion is inaccurate if prevalent market failures are interpreted to include situations in which the production and consumption of certain goods gives rise to external economies or diseconomies not accounted for in market prices. In these cases private benefits or costs differ from social benefits or costs, and it may be argued that an excise (or subsidy) is required to move the economy closer to optimum conditions.[18] Typical examples that have been gaining importance are road congestion and pollution charges.

Using an excise to create the "right" distorting or offsetting effects aimed at improving the efficient use of resources, is in itself a questionable principle. Central to the discussion is that some acceptable measure of the distortions can be obtained to create the needed offset. There are a diverse number of such applications for excises to correct for externalities. Excises have been used to provide a correction to the price of capital, encourage the adoption of labour-intensive production techniques. The much touted energy tax is in effect a "corrective" excise.

In summary, the excise if selectively used as it is meant to be, can be a useful instrument of social policy. Problems do arise in its use, as it often distorts more than it corrects. Aspects of such uses are discussed below.

USER CHARGES

User charges are theoretically based on the beneficiary pays principle i.e. an individual should pay the full social cost of the resource, commodity, service or other benefit accruing to him. Expressed in economic terms, a resource like a road is used most efficiently or optimally when the marginal benefit to the consumer (motorist) equals the marginal cost to the provider (government). To arrive at the social cost, other costs external to the consumer (motorist) such as the associated traffic congestion, air and noise pollution must be factored in. Benefits derived by individual consumers are identifiable and can be estimated. Although, the estimate may be imprecise, the objective is to induce a better use of the resource, rather than achieve a precise optimum. By charging road users the approximate marginal social cost of operating their vehicles, efficiency in road utilization is advanced.

When interpreted in the pure economic sense of the term – the efficiency objective as outlined above, should be the only consideration influencing the adoption of a user charge. In practice, political, financial, fiscal and equity considerations frequently supersede the ideals of economic efficiency.

User charges as a special category of excise taxes are extremely heterogenous. Examples include: water charges, pollution levies, public levies for garbage collection, and of course those imposed as road user charges.

Road user charges can be further disaggregated into levies that operate in conjunction to achieve the desired goal. A single tax can never serve the purpose for reasons of administrative feasibility and fairness. The separate levies include: annual automotive registration charges, parking fees, excise taxes on gasoline and diesel, and also tolls collected for the specific use of highways, and bridges. Within each of these categories the interregional variations can be just as dramatic.

The central issue in determining a road user charge is to find a set of economic user charges that adequately reflect the level and range of variable maintenance and congestion costs. One of the concerns is the extent of cost recovery through road user charges. The primary element is the cost of construction and maintenance of the roads over and above what the costs would be if there were no motor vehicles. With regard to construction cost, there has been a long standing debate over whether the appropriate amount is the long-run or short-run marginal cost. The short-run cost is typically much lower than the long-run cost. A user charge set at the level of short-run marginal cost will not pay for the full cost of the service because road systems do not have an infinite life. A conflicting consideration is that it is not feasible to charge users the entire cost of the road in the year of construction. It must also be realized that roads are generally characterized by decreasing average costs. In this case the deficit should be made up by taxes or other budgetary appropriations not related to road use so that optimal efficiency is achieved.

The cost of road construction and maintenance is but one of the elements in the total cost for which users are responsible. The other element is the congestion cost i.e. the cost that use by one person will create for other users through delays and greater accident hazards. These costs, which enter into total marginal costs, may exceed the costs of road construction and maintenance.

While, the flexibility of the system is apparent, the pricing function of road user charges is usually subordinated to the general revenue function. In cases where the revenue derived from user charges is in excess of marginal cost, the inclination not to forego this revenue is likely to be strong. Furthermore as automotive excises are easy tax handles , there is also the incentive to make the tax system progressive in this manner.

Related to user charges which are intended to approximate the true marginal cost, are excises designed to propagate very specific national policy goals. Typical examples include: petroleum excises and various energy taxes.

Petroleum Excises

A major group of excises are those upon petroleum products, in most countries this is usually on motor fuels i.e. gasoline and diesel fuel. In at least ten countries excises on petroleum yield over 50% of excise tax revenue.[19] In general the greatest source of petroleum tax revenues is the tax on gasoline. In the EEC it was estimated that gasoline taxes raised between 80 to 95 percent of the petroleum excise revenues, while accounting for only between 25 and 35 percent of total mineral oil consumption.[20]

The justification for these taxes varies across nations. The most common in western Europe and developing nations is that motor fuels are luxury goods with a high degree of income elasticity. In other words low-income groups purchase little or none. Additionally, of course, is the high revenue productivity of petroleum taxes. From the perspective of macroeconomic management in oil-importing nations, the tax is also used to restrict petroleum product usage and thereby foreign exchange outflows.

Energy Taxation as an Instrument to Discourage Consumption

Taxes on energy are gaining importance as a means of inducing the conservation of energy. The principles behind using a tax either to curtail pollution or dampen demand are similar. The distinction is the objective function. A pollution tax, or a carbon-tax as it is commonly referred to these days, is based on the amount of pollutants (or carbon-dioxide) the combustion of a particular fuel would generate. Tax levels can thus be used to discourage the use of highly polluting fuels, and encourage shifting to cleaner burning fuels. The EEC has agreed on a tax that will be progressively increased to the

$10 per barrel level by the year 2000, and would in part be based on the carbon content of fuels.[21]

ISSUES IN EXCISE ADMINISTRATION

Excise administration has traditionally been assigned to the customs, and hence the commonly seen "customs and excise" departmental nomenclature. This is generally true for countries that were (or are) a part in the British Commonwealth. The joint administrative aegis was a consequence of the fact that the first excises were on commodities that were also major sources of customs revenue. Additionally, both taxes required substantial physical control and policing. Exceptions to this administrative arrangement are countries which have established a single agency to operate all domestic indirect taxes or have, as in the United States, placed excises under the jurisdiction of the Internal Revenue Service. Other influences on the type of administrative structure adopted derive from the extent of fiscal centralization or decentralization.

Irrespective of the structure chosen the excise does have several features and functions that require independent or dedicated staffing.

As the excise relies excessively on quantitative measurement for assessment purposes, with compliance usually ensured through physical controls, the operational aspects of an excise system require careful thought and design. Structural features such as the items/commodities selected to form the excise base, do however play the central role in determining the final efficiency of the tax. The dictum that good tax administration is good tax policy certainly applies to excises.

As in the case of other indirect commodity taxes – one must define and classify the taxable good, and also the taxable event. The taxable event is the specific stage, from manufacture to retail sale, at which the tax is imposed (or liable) . For a multistage tax like the VAT, each transaction or transfer of the good is a taxable event, and consequently a general definition is usually adequate. For an excise, however, it is important to specify the stage accurately as the tax is usually single stage.

The next consideration is to establish a functional tax base upon which either a specific or ad valorem levy can be imposed. When a broad-based excise is in operation, supplementary considerations include the question of any excise relief for goods purchased as capital inputs. India with a broad-based excise, operates an excise exemption scheme for capital and intermediate purchases and calls it the Modified Value Added Tax – although the principal of value added is never used. Small manufacturers/producers may need to be exempt for administrative or political reasons. Alternately, exemptions may be evaluated against presumptive excises. In brief the principal structural issues are:

- The selection, definition and classification of excisable commodities.

- Choice between specific and ad valorem rates.
- Application of exemptions and the treatment of small-scale producers.

It is analytically useful to evaluate these issues more from the broader perspective of their impediments to the operation of an excise tax, rather than narrowly as excise design considerations.

Definition and Classification

Being a selective tax, commodities must be meticulously defined in the excise law. Classification is the first step towards defining a base on which a tax can be computed and applied. When goods are homogenous and used for a single purpose, classification is easy. To complicate matters, however, products within a broad group differ widely in composition, quality, price, essentiality, application or use. This explains why a broad based tax has certain advantageous over a selective tax like the excise. The different criteria used in classification are:[22]

1. On the basis of nature, plant, or animal origin of the commodity
2. By reference to the contents of the commodity.
3. According to the designation or use of the commodity.
4. By reference to the nature of the production process.
5. On the basis of capacity, or size of plant and equipment.
6. On the basis of value of the commodity.
7. According the way that goods are packaged or sold in

bulk.

Of course, in most cases the actual product classification may be based on several criteria. It must also be pointed out that the definition of exemptions, if applicable, will also be based on the same criteria.

Many difficulties arise in applying a complex excise rate schedule. The most common problem encountered is one of interpretation. Classifications according to designation, use or content of commodities are particularly troublesome; a host of meanings may be attributed to "primarily used in" or "primarily consisting of." As expected these often translate into excessive litigation, wasting both the taxpayer's and administration's resources. Refinements can be, and are made in the classification system. But these interfere with production and trading without a commiserate benefit in terms of revenue.

Specific versus Ad Valorem Tax Rates

The excise rate may be either specific - expressed as a fixed amount per excisable unit - or ad valorem - expressed as a percentage of the unit's value. In addition, combinations of specific and ad valorem rates are also used, examples of which can be found in the Dominican Republic.

Central to the discussion of the relative merits and demerits of the specific and ad valorem rate is the administrative and legal definition of the taxable event i.e. the stage at which the tax liability is computed (not necessarily paid). To facilitate the use of an ad valorem rate it is necessary that a monetary value of the excisable commodity be available. For the sake of fairness, the monetary value must be an arms-length value or representative of open-market value. In determining a constructive value for taxation purposes, a sales price between unrelated parties is the best yardstick. In situations where the physical transfer of the goods from manufacturer to an unrelated party do not provide a reliable monetary total an ad valorem tax is better substituted by a specific tax.

Even if the sale is specified as the taxable event, conflict can arise over the use of a wholesale or retail price. Markets today abound with scores of intermediaries with widely differing pricing practices. Products are traded and sold by distributors, channeling agents, discount stores, mail order houses, wholesalers and retailers. None of these intermediaries employ a fixed price structure, offering bulk discounts, cash discounts, preferred customer prices, credit discounts, free-trials for specified periods, service contract prices or leases etc. Defining a taxable sale and determining a single monetary base can be difficult, if not a questionable exercise. Even if one decides to use the retail sale as the final sale, it is common to find identical products being sold at different retail prices in close locational proximity.

The above reasons do explain why excises are often specific levies rather than ad valorem. Specific taxes per physical unit of quantity, weight or other standardized measure also makes for simple administration. In essence a major benefit of the specific excise is the absence of the valuation exercise. This has the desired effect of minimizing undervaluation, collusion between the taxpayer and tax collector. Apart from the problem of undervaluation, firms in competitive industries prefer to avoid disclosing a taxable price. Another reason given for using a specific rate in some cases, is that ad valorem rates would aggravate price increases, this is particularly true for luxury and selected sumptuary goods that are taxed at extremely high rates. For example, if a commodity is taxed at 300 percent ad valorem, a rise in its pretax price value by 20 percent would translate into an overall increase four times the original pretax price.

Arguments against specific rates are that they discriminate against cheaper brands of a particular product (consumed largely by low-income groups) and encourage the use of higher priced raw materials. More explicitly, a heavy excise at a specific rate inhibits price wars in the taxed commodity, while an ad valorem tax of the same initial yield does not. The heavy specific rate is, in effect, a perfectly price-elastic component of the supply price, while an ad valorem tax is as elastic as the supply curve before tax.[23]

A. Inflation and the choice of rate.

Fluctuating rates of inflation world-wide have refocused the debate of the choice between ad valorem and specific tax rates. Much work has been done on the fiscal impacts of inflation, and in recent years inflation indexation of tax rates, brackets, and schedules has been an important element of tax reform.

In general, changes in specific rate tend to lag behind the increases in the consumer price index or alternate measure of inflation. Erosion of specific rates by inflation invariably necessitate frequent upward revisions. If these revisions are made frequently, the resultant gradual increase in prices becomes less noticeable, and by extension - politically palatable. Unfortunately, administrative inertia combined with political short-termism inhibits appropriate and timely inflation indexation. When their need becomes painfully inevitable, the price jumps are large. In addition to the political cost the fiscal balance suffers in the interim between revisions.

Realization of this problem has led many nations to resort to periodic upward revisions of their specific rates. Canada shifted to a system of periodic specific rate indexation in 1981.[24] This index is constructed from a weighted average of the retail price movements of the excise taxed goods, for a 12-month period. The system was later dropped as the indices were very broad eg. beer and distilled spirits were in the same index, and thus a small rise in the cost of distilled spirits allowed the suppliers of beer to increase their price as well. As this was unsatisfactory both politically and from the consumers perspective, this scheme was dropped.

B. **An ad valorem rate translated to a specific rate**

An ad valorem rate does not of course suffer from the problem of being eroded by inflation. However, as mentioned the difficulties inherent to placing a uniform monetary value on every item that is taxable undermine the efficacy of an ad valorem excise. One way to solve the problem of is to determine an average retail price (benchmark price) for the particular good through a periodic retail survey, apply the ad valorem rate on the benchmark price to derive a specific tax, and then use the specific rate so derived till the next survey. In some sense this combines the positive features of both an ad valorem and specific tax i.e. an ad valorem rate is used to provide parity with the price index and the conversion to a specific tax makes administration simple and unambiguous. The administration will of course incur the relatively minor cost of periodic market surveys.

Exemptions and Rate Concessions

An excise becomes more complicated and difficult to administer as the number of individual exemptions and special rate concessions increase. Some exemptions are easier to administer than others, for example, export exemptions. For exports the producer is often integrated forward up to the export stage; consequently, goods can be shipped excise-free under permit directly from the factory or a bonded warehouse. In practice, exemptions or other concessions are made to advance political motivations, and not necessarily simplify administration. The usual categories of exemption include:

- Exemptions for exports.
- Exemptions for products used for specific end-uses/sectors.

  Examples include – exemptions for scientific, agricultural, or medical purposes.
- Exemptions related to specific institutions:

  Educational establishments, armed forces, diplomatic corps, charitable institutions etc.
- Exemptions to provide incentives for certain industries eg. certain "strategic" or priority industrial enterprises or sectors may be exempt.
- Exemptions to mitigate the cumulative effects of taxing successive stages of production.

If export exemptions represent the simplest exemptions to administer, end-use exemptions fall at the other extreme of the continuum. End-use exemptions are perhaps the most difficult to control and voluminous regulations are required to lay-down adequate guidelines and safeguards. A typical example would be industrial and pharmaceutical uses of alcohol, which are free from excise. To ensure that none of the alcohol consumed by these sectors leaks into the taxed drinks industry (as the British call it), strict supervision is necessitated. Country experience shows that definitions and sectoral classifications can get tenuous — exempt pharmaceutical spirits can at times be difficult to technically distinguish form colognes and other consumer products.

Another often misused exemption, is the one given for commercial vehicles. There is a marked tendency for individuals in countries with such exemptions, to purchase commercial vehicles like vans and pick-ups for purely non-commercial use. The exemption intended to reduce the burden on businesses, finally, results in revenue loss for the government. In fact manufacturers, often build vehicles that may be classified as commercial for the excise exemption, but are effectively non-commercial passenger vehicles.

Exemptions designed to provide incentives for small-scale production require regulatory definitions, additional administrative checks that distract one from the primary revenue raising function. There are also difficulties in taxing successive stages of production, adding considerable nuisance to taxpayers and excise officials. These problems have far-reaching effects, and can impede the movement of goods between local government jurisdictions. The Indian example of numerous excise check-points on interstate highways comes to mind.

Another issue faced with excises is the snowballing effect - more specifically - once exemptions are made it is nearly impossible to draw line.[25] Manufacturers clamour for special treatment, increasing discretionary practices. This would inevitably lead to the loss of horizontal equity in the system.

Part II

EXCISE TAXATION IN THE DOMINICAN REPUBLIC

The Dominican excise tax system is operated by the centralized internal revenue service -- the Rentas Internas. There are over 50 individual laws that define the system comprising over a 100 individual tax rates and bases. Of these taxes, most yield a negligible quantum of revenue. A cursory examination of the excise schedule and the revenue generated by each tax, seem to reveal that revenue and social considerations superseded criteria of administrative ease and economic efficiency. Given the potential administrative capabilities and prevailing situation, the entire structure of the excise system requires simplification.

Traditional excises on goods like tobacco, alcohol, and petroleum are of the highest revenue importance, contributing over 95% of aggregate excise collections. This limited group of excises had until the mid-eighties accounted for around a quarter of all central government revenue. Since 1987 they have been declining rapidly -- in 1990 they represented only 6.2 percent of government revenue. In a bid to maintain their absolute revenue level and relative share of revenue inflows during the latter half of the 80's, the excise law has been subject to frequent, and what may be termed capricious revisions.

Permit and license fees yield approximately 2.25% of government revenue. Though these revenues have fluctuated, they have shown less variability than the other group of traditional excises. Further owing to their lower share in total central government revenue, they have not had a great impact on the fiscal balance as the other traditional groups of excise taxes.

While the phenomenon of shrinking excise revenue is definitely of concern to all policymakers, much of the problem was a result of poor macroeconomic management in the late 80's leading to high inflation. The decline was further exacerbated by the use of unindexed specific rate in the existing excise system. However, the point is that the macroeconomic causes such as the operation of a dual exchange rate regime; soaring inflation as the government sought to meet current expenditure needs by printing money, were the principal causal factors. Modifications to the excise law were thus reactive responses with little concern for administrative constraints or neutrality considerations. Today the excise system has evolved into a complex and unmanageable tax from the imperfect pre-1985 condition.

Though general descriptions of the excise system as a whole are likely to obscure important details of individual taxes, it does provide a framework to systematically identify issues and pursue a reform. In brief, the Dominican excise may be characterized as having a moderate coverage, but highly inelastic base. In the absence of cross-sectoral empirical investigations one can only conjecture as to the productivity and welfare loss induced by the distorted economic incentives. While, no firm estimates are available, these distortions are apparent and act as a barrier to positive long-term growth. Despite the lack of a firm estimate, the effects are noticeable. It is also clearly evident that revenue collection is grossly inefficient.

APPROACH TO THE DOMINICAN EXCISE REFORM

An acceptable framework for excise reform would need to take into cognizance various factors besides the theoretical principles of sound excise design discussed in the earlier section. Amongst these are the prevailing indirect tax structure and overall tax mix, as well as the contemporaneous reforms proposed for other taxes.

The following were identified as the principal objectives guiding or constraining the reform process.

1. **Importance as a Revenue Instrument** - at the present level of economic development and administrative capacity the excise system should be used as an important instrument to raise revenues. In order to play this role and be administratively efficent, it must have a consistent structure of ad valorem rates on a relatively small number of well defined bases. These taxes should be levied primarily on luxury items whose consumption is income elastic, i.e. when income grows the demand to consume these items should be growing at an even faster rate.

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   An often overlooked reason for the existence of excises is their ease of collection. The cost of collecting a dollar of excise revenue from a commodity handle like alcohol, gasoline, tobacco etc. are probably amongst the lowest. An excise with a few centralized collection points has one of the highest net revenue yields. Therefore, from a purely fiscal perspective it is prudent to retain a few excises with high income elasticities.

2. **Revenue Neutrality** - Excise taxes have served as the bulwark of the indirect tax system prior to 1983, when there was no alternate indirect sales or other tax in place. In 1984, the value added tax (ITBIS) came into effect. By 1990, despite the adverse macroeconomic environment, the VAT progressively grew to account for 13.3% of central government revenue. In effect, the drop in excise revenues was moderately offset by the growth in VAT collections.

   Looking at the excise and VAT in isolation, one could argue that the situation presents an opportunity to curtail the excise tax coverage, and shift the revenue burden onto the non-cascading and more neutral value added tax (ITBIS in the Dominican Republic). In other words, the expanding VAT base and revenues could be used to offset the revenue declines in the excise.

   However, as long-term economic growth is one of the overall tax reform objectives, a more pressing concern is the rationalization of import tariffs. Therefore, in terms of reform priorities, increasing VAT revenues should be directed towards reducing the overwhelming dependence on import tariffs. A fiscal implication of this decision would be the need to maintain revenue neutrality.

The existing system can be positively reformed without reductions in absolute revenue; in fact, most estimates predict large increases with improved administration, and revision of the excise burden to real 1986 levels. However, the relative share of excise as a percent of total government revenue will probably decline with a comprehensive tax reform.

3. **Rationalization of Economically Damaging Incentives Created by Punitive Import Tariffs** - The Dominican Republic has been using very high rates of tariff on certain items to raise revenues and provide protection to domestic producers. Common examples are automobiles, VCR's, electrical appliances, high fashion cosmetics, tobacco and alcoholic beverages. Applying high tariffs on the imports of these goods will initially result in the generation of substantial revenues, but in the medium-term provide a powerful incentive for domestic producers to attempt producing these items domestically. When this occurs the government loses tariff revenues, and in addition domestic producers operating in the protected market get to either reap economic rents or produce inefficiently. In

effect, the government, the economy and the consumer lose.

To mitigate this problem of sub-optimal resource allocation, it is possible to use a set of luxury excises that would apply at the same rate on both imported and domestically produced goods. The import duty on the goods in question could be virtually eliminated without any loss in revenue. In addition, the central objective of eliminating wasteful import substituting production would be achieved.

4. **Simplification of Duty-drawback Procedures to Encourage Outward-Orientation** - Like most intuitively clear and productive tax reform recommendations, the elimination of a vast number of unproductive excises is politically difficult. A number of these taxes were introduced as a means of perpetuating a social agenda or industrial policy objective i.e. the protection of infant industries. The latter argument has been encountered often in a number of fact finding missions to the Dominican Republic. It is therefore of extreme importance that the rationale for eliminating these excises address the issue of industrial protection.

In this context: if we take export competiveness and limited import protection as policy goals — an administratively feasible duty-drawback procedure must coexist with selective import barriers. Excises by their very nature of computation and imposition do not lend themselves to easy drawback or zero-rating on exports. Further, even if a countervailing tax is required to discourage allegedly "cheap" imports, an import tariff is better suited for the purpose than an excise tax.

CURRENT STRUCTURE OF THE DOMINICAN EXCISE SYSTEM

The Dominican excise system is comprised of a large number of individual taxes and fees. Appendix I, provides an exhaustive list of most of these levies and associated laws. One of the strikingly inept legal and administrative features of the excise system, is the introduction of an entirely new law to supplement the existing law(s), to effect a rate revision. Presently, there are 4 laws for tobacco products, 16 laws for alcoholic beverages, 4 laws for petroleum products, and 6 laws for taxes on air and sea travel. In most of these cases a single law which was amended periodically would have been as effective in terms of revenue, without needlessly imposing the high compliance cost created by multiple statutes.

Of the many items presently taxed only a handful imposed on tobacco products, alcoholic beverages, and petroleum yield substantial revenues -- about 20% of central government revenue in 1986. Permit and license fees collected from those providing selected services (eg. vendors, taxis), or on those using certain capital goods (eg. automobiles, ships) contribute another 2% to 2.5% of central government revenue. Table 2. and 3. indicate the real value of these revenues from 1979 to 1990. Excises imposed on international communication services and hotel room rentals should in theory

TABLE 2.

REVENUE PERFORMANCE OF THE EXCISE TAX: 1979-1990

(in millions of 1979 Dominican Pesos)

Year	Tobacco Products	Alcoholic Beverages	Petroleum Products	Autos	Others	TOTAL	TOTAL GOVERNMENT REVENUE
1979	24.4	66.2	37.8	10.01	2.3	140.71	690.1
1980	23.83	74.16	53.2	6.41	2.49	160.09	851.02
1981	25.84	77.32	99.16	0	1.05	203.37	877.17
1982	23.46	71.96	88.76	0	2.91	187.09	628.56
1983	27.42	73.15	96.65	0	0.93	198.15	714.47
1984	22.72	59.61	99.43	0	9.46	191.22	673.96
1985	22.97	51.18	116.83	0	0.7	191.68	983.23
1986	25.33	58.28	184.53	0	1.31	269.45	934.19
1987	22.95	57.04	71.59	0	0.86	152.44	987.15
1988	21	46.71	28.18	0	0.51	96.4	1007.67
1989	14.99	34.11	7.69	0	0.55	57.34	970.08
1990	7.51	18.57	6.05	0	1.23	33.36	539.89

AS PERCENTAGE OF TOTAL EXCISE REVENUES

Year	Tobacco Products	Alcoholic Beverages	Petroleum Products	Autos	Others	EXCISE as % of Total Govt. Revenue
1979	17.3%	47.0%	26.9%	7.1%	1.6%	20.4%
1980	14.9%	46.3%	33.2%	4.0%	1.6%	18.8%
1981	12.7%	38.0%	48.8%	0.0%	0.5%	23.2%
1982	12.5%	38.5%	47.4%	0.0%	1.6%	29.8%
1983	13.8%	36.9%	48.8%	0.0%	0.5%	27.7%
1984	11.9%	31.2%	52.0%	0.0%	4.9%	28.4%
1985	12.0%	26.7%	61.0%	0.0%	0.4%	19.5%
1986	9.4%	21.6%	68.5%	0.0%	0.5%	28.8%
1987	15.1%	37.4%	47.0%	0.0%	0.6%	15.4%
1988	21.8%	48.5%	29.2%	0.0%	0.5%	9.6%
1989	26.1%	59.5%	13.4%	0.0%	1.0%	5.9%
1990	22.5%	55.7%	18.1%	0.0%	3.7%	6.2%

Source: Government Statistics - Dominican Republic

TABLE 3.

REVENUE FROM PERMIT & LICENSE FEES

(in millions of 1979 Dominican Pesos)

	Motor Vehicles Taxes	Miscellaneous Permit & License Fees	TOTAL REVENUE	as % of Central Government Revenue
1979	12.7	4.6	17.3	2.51%
1980	12.92	6.79	19.71	2.32%
1981	14.21	4.95	19.16	2.18%
1982	12.73	4.41	17.14	2.73%
1983	11.59	4.48	16.07	2.25%
1984	8.56	3.71	12.27	1.82%
1985	6.5	8.09	14.59	1.48%
1986	4.75	5.85	10.6	1.13%
1987	20.72	5.01	25.73	2.61%
1988	6.63	15.75	22.38	2.22%
1989	4	13.45	17.45	1.80%
1990	3.82	8.38	12.2	2.26%

Source: Government Statistics - Dominican Republic yield more revenue, but compliance and structural problems have marginalized their influence.

Owing to the plethora of guidelines and laws that define each individual excise tax – it is both impractical and of restricted expository interest to discuss each individual law. It is useful however, to sketch some of the common deficiencies and defects pervading the entire system.

As our reform proposals are directed at the elimination of a number of the smaller excises – subsequent sections will discuss the defects and options for reform in the context of the limited group of excises we propose to maintain.

PROBLEMS & DEFECTS WITH THE EXISTING EXCISE SYSTEM

1. <u>No Adjustment for Inflation</u> - The excise taxes used are largely all specific ad rem taxes and therefore tend to lag behind the base rate of inflation as well as income growth. An efficient specific rate system would incorporate a system to adjust for inflation. In an environment characterized by discontinuous and substantial changes in inflation and exchange rates – inflation adjustment would also be a prerequisite for stability and growth. To compound this lack of inflation adjustment is the frequent revisions, or introduction of multiple excises levied at the same stage.

Benefits generated by inflation indexing include: (1) enhanced revenue collections, (2) improved buoyancy of the revenue base, (3) external signalling of administrative efficiency, directed at improving compliance, and (4) ease of preserving fiscal balances, and continuity in expenditure planning. More specifically, with inflationary adjustments of the nominal specific taxes there is a tendency to dampen the growth in government deficits. This is because the growth in the size of the budget deficit is a function of the relative importance of the unindexed revenue sources such as the excise to the total government budget.

2. Use of Multiple excises The scheme of multiple excises currently in use can be further resolved into those that are imposed in conjunction at a single stage and those imposed individually or together at different stages in the manufacturing to retailing cycle. Examples of both permutations are found in the Dominican Republic. The multi-stage application present in the taxation of alcoholic beverages is of particular concern.

Excises that are imposed at different stages are typically found in situations where a manufactured commodity is used as an input in more than one independent downstream production process. Classic examples are process chemicals like distilled alcohol used in perfumes, alcoholic beverages and pharmaceutical products; or glycerine which is used in the production of soap, cosmetics, and also as a food preservative. In these cases excises are first levied on the input, and then on the separate products that are made using the input.

A multi-use input can be produced either by an independent firm or an integrated entity that produces the final end use product as well. Irrespective of the firms organizational structure, multi-stage taxation will greatly increase the costs of policing and physical control. For a multi-stage indirect tax like the value added tax there is a built-in incentive for intermediate buyers and sellers to explicitly account for the tax – and remit the correct tax liability. For a multistage excise there is no such self-policing mechanism, rather an incentive to evade the intermediate tax. It can be argued that the taxation of the input at an intermediate stage of the production process reduces the administrative cost burden by imposing the tax at an easily monitored control point. If this is true no subsequent tax should be required on the final good, as the quantity of input can be used to determine a presumptive total tax. Furthermore, the distorting effects of multiple stage taxation can be mitigated. Therefore, there is no specific reason for the use of a multistage excise, which cannot be efficiently resolved using a single stage excise.

The Dominican government has made an attempt to encourage compliance by allowing firms to take a credit for their input excise on their output tax payments. Although this is an attempt to control administrative expenses, it begs one to reconsider the rationale for having the intermediate stage tax to begin with i.e why not eliminate either the final output or intermediate excise without either sacrificing revenue or neutrality.

From a comparative standpoint -- it is useful to contrast this excise credit mechanism with that used in Chile. In Chile excises are administered as multistage taxes with a credit given for tax paid at the preceding stage. This system is very close to the value added tax, which is administered independently. Strictly, the above mentioned argument against such a scheme should apply equally to Chile as well. However, the vastly superior administrative system of Chile have translated this cumbersome system into an efficient excise with high revenue yield compliance. In the Dominican Republic the major determinant of good administrative infrastructure is absent. Therefore, one cannot assume that the Chilean success can be easily reflected in the Dominican Republic. Hence it is suggested that the multistage tax be rescinded in the Dominican Republic.

3. Combination of Specific and Ad Valorem Rates In a parallel vein to the issue of multiple or multi-stage excises is the usage of an excise levy that is composed of both a specific and ad valorem rates.

An ad valorem rate by its very existence indicates that some form of reasonable constructive value is available on which the rate is applied. Assuming that a tangible market value can be determined – the logic of having a specific rate imposed in addition is unclear. If on the other hand a specific rate tax is necessitated owing to a valuation constraint – the presence of an ad valorem rate tax is inappropriate.

In essence it is difficult to convincingly argue for the imposition of a specific rate tax and an ad valorem tax on the same taxable event.

In a few circumstances such as in the case of user charges – a specific charge and ad valorem levy may be substantiated on the basis of approximating fixed and variable costs. This is however not the case in the Dominican Republic.

SYNOPSIS OF REFORM RECOMMENDATIONS

In keeping with the stated objectives of the reform, and the subjective reality of the situation i.e. paucity of administrative resources etc. the following changes have been proposed.

1. **Rationalize the Scope of the Excise:** it has been recommended that the excise be restricted to about 10 commodities and services. The base selection is founded on considerations of revenue yield, administrative ease, base broadening and enhancing progressivity. The proposed excise base includes:
   - All passenger vehicles, including buses and trucks. The base should cover spare parts, components and other transportation equipment.
   - Tobacco Products: Inclusive of manufactured and loose tobacco products, extracts, essences etc.
   - Alcoholic beverages: Distilled spirits i.e. Rum, Gin, Whisky, Vodka etc.
   - Alcoholic beverages: Fermented beverages i.e. Beer, Wine, Cider etc.
   - Ticket sales for transportation abroad: To be paid on air or sea travel from or to the Dominican Republic.
   - Airport User Fees.
   - Hotel room rentals: Tax to be imposed on the room

tariff.

- Life insurance premiums.

2. **Adoption of a Single Excise Law** - In lieu of over 50 individual laws presently in use, it is recommended that the Dominican Republic adopt a single, comprehensive excise code. Apart from reducing the administrative costs to the government, compliance costs to the taxpayer will be greatly reduced.

3. **Uniform Application of the Excise Law on Imported and Domestically Produced Goods** - The excise taxes that are being used to tax items with a high income elasticity or so-called "luxury" goods, should be imposed both on imported and domestically produced goods and services. The principle rationale for this uniform coverage is to discourage the incentive to produce these luxury goods domestically with a conacatenate loss both to the treasury and to the Dominican consumers.

   In the case of imports the tax should be levied on the C.I.F plus import duty value (inclusive of VAT) of the good. In the case of domestically produced goods, the base of the tax should be the price at which the domestic manufacturer or the related wholesaler transfers the goods to the retailer.

A. TAXATION OF PASSENGER VEHICLES

The existing excise law does not impose a specific excise on automobiles and allied passenger vehicles. Presently, vehicles are largely imported in a fully assembled condition. There is also a small amount of domestic assembly utilizing imported components and sub-assemblies. The automobiles and the components imported for domestic consumption are subject to import tariffs. The tariff rate is lower for components/sub-assemblies imported for domestic vehicle assembly, as compared to the tariff imposed on vehicles in a "drive-away" condition. Additionally, the tax rates are differentiated based on the engine size of the vehicle, and certain concessions are extended to commercial use of vehicles, trucks, and buses.

There are two major distortions created by this rate differentiation:

a). there is an incentive to assemble vehicles domestically, to benefit from the rate differentials.

b). evasion is high as a consequence of incentive to falsely reclassify vehicles to avail of the lower rates for commercial applications.

a). <u>In-efficiencies of Domestic Vehicle Assembly</u>: Vehicle assembly is a low-value added task resulting in no appreciable positive externality - there is not much transfer of technology; and owing to the small size of the Dominican market there is no incentive to invest in higher value-added manufacture of components and sub-assemblies. Thus, an objective evaluation readily indicates that by using a differential import tariff for domestic assembly

- the government loses import revenue.
- the price charged for the domestically assembled automobile is the same as a comparable import, thereby resulting in production inefficiencies, and in the accrual of economic rent (supranormal profit) to the domestic producer.
- from the social perspective, revenue that could be accruing to the government from a luxury good such as an automobile is appropriated by those who are clearly wealthy to begin with. Therefore, rather than impart any degree of progressivity to the tax system, this practice distributes wealth to those who already have it.

If an uniform excise tax on imports and domestic production is adopted, it is necessary to ensure that the import tariff is correspondingly reduced by the amount the excise tax is increased.

b). Revenue Losses from Engine Size and End-Use Concessions:
It is suggested that no rate differentiation be made based on engine size. While, there may be some justification for burdening business users of heavy commercial vehicles less, and increasing the burden on those importing large luxury automobiles - rate differentiation based on engine size is extremely difficult to

monitor effectively. Besides, the value of the automobile should serve as a more accurate indicator of rather than the its engine capacity. For example a large capacity pick-up van may be less than half the value of a smaller luxury automobile. A single ad valorem tax on cif value will ensure that more expensive vehicles pay more tax.

The tax should apply to vans and other such vehicles that can be used for passenger transport as well. This will ensure individuals do not convert or resort to clever reclassification of pick-ups and vans for personal use.

A uniform tax rate of 30% has been recommended for all motor vehicles.

Administrative Aspects of the Tax

One of the difficulties in taxing imported or domestically produced automobiles effectively with an ad valorem rate is the accurate determination of the taxable base. To facilitate easy determination of a value on which the tax may be imposed it is suggested that the automobile blue book values utilized by the U.S. customs be used. The recently computerized customs system in the Dominican Republic incorporates valuation data from the U.S. customs. It is important to ensure that the periodic revision of the relevant automobile price data be an integral part of efforts to strengthen both customs and excise administration.

Another advantage of using the relevant blue book value is the ease of determining the value of second-hand vehicles imported into the Dominican Republic.

B. EXCISES ON TOBACCO AND ALCOHOL

When taken in aggregate the excises on tobacco and alcohol are potentially the largest revenue sources within the excise tax structure. It is also estimated that by adopting the proposed changes the increase in revenue will be around 1.03% of GDP or about 625 million Dominican Pesos. This revenue increase will be achieved without surpassing the average burdens that existed on these goods before 1988, after which inflation has significantly eroded the burden.

This section discusses the structure of the existing excise taxes on tobacco and alcohol, and outlines the reform proposals. Fiscal and price impacts of the specific proposals are also examined.

1. Excises on Tobacco Products

Taxes on tobacco products[1] yielded about 22 million Dominican pesos in real 1979 terms until 1987. Since then revenues in real terms have dropped by close to 70%. of total excise revenue. Cigarettes account for about 96% of the tobacco market, cigars for around 3%, and the rest by loose tobacco products. The cigarette market is effectively in the hands of two firms: one private with 72% of the market, and the other state owned. The cigar industry is on the other hand fairly competitive with over 30 small firms producing more than 100 different brands of "Havana" type cigars. Furthermore

[1] Cigarettes both white (conventional) and black; cigars; and loose tobacco products.

the cigar industry though taxed is free from other controls -- minimum wage, registration requirements, etc..

The present system of excise taxation on white cigarettes has four separate laws[2] imposed in two stages. The first stage at which taxes are collected is at the time of production and is levied by means of fiscal stamps. The use of fiscal stamps ensures that the tax is in effect pre-paid. Additional excises are imposed when the goods are transferred from the factory to finished goods inventory. This transfer is the principle taxable event for excise tax purposes.

The four taxes total approximately RD$0.47 per package of 20 cigarettes and are all ad rem (or specific) taxes. As has been discussed earlier, an ad rem tax has the drawback that it is remains isolated from price changes or inflation, resulting in a proportional drop in revenue. A standardized indexation procedure can of course solve this problem. In the Dominican Republic the response has been the imposition of ad hoc additional excises. Tax increases are frequent in most economies and the manufacturing sector has been extremely quick in responding to these changes. What is undesirable and difficult to deal with from the perspective of the manufacturer and the tax administration is having the tax

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[2] Law 147 - 1983
Law 138 - 1987
Law 285 - 1985
Law 39 - 1988

imposed at a number of stages.

Further there is evidence that an attempt to impart some degree of progressivity by taxing black tobacco cigarettes differently has been made i.e. different specific rates for black tobacco cigarettes. Unfortunately when converted to a percentage of value this does not necessarily imply differential/progressive taxation, and might at best be proportional. Politically this serves to remove the "bite" from a tax on an item consumed by lower-income individuals by imposing a higher ad rem, but not necessarily a higher ad valorem tax on items consumed by others at higher income levels.

2. Excise Taxes on Alcoholic Beverages

To understand the existing Dominican excise tax structure on alcoholic beverages, it is necessary to separately examine the tax on distilled alcoholic beverages (rum, whisky, gin etc.) and those on beer. The reason for this distinction is that the tax on beer is based entirely on the volume of production, and is a single stage levy. Excises on distilled alcoholic products is multistage and is imposed based on alcohol content, as well as the volume of production.

In terms of relative importance beer accounts for about 40% of the alcohol excise collected and the rest comes from distilled spirits.

Rum is by far the most important of the distilled beverages, and is considered by some to be the "national beverage" of the Dominican Republic. The excise on rum accounts for over 90% of the tax on distilled spirits.

Besides the administrative distinction we have drawn between distilled spirits and beer based on the multiple or single stage nature of the tax, the primary difference is one of production procedure or process. Distilled spirits as the name denotes are made by extracting i.e. distilling alcohol from a carbohydrate (molasses, rice, rye, grain etc.). This beverage product is then aged for various intangible product characteristics such as taste, smoothness, etc. In general aging improves product quality i.e aging time, is directly proportional to quality and value. Beer is a fermented beverage made from malt and hops, and there is no aging required in the process.

The procedures employed in production are important as it can help in designing an excise tax base and decide the specific control points at which the tax is best imposed.

<u>Distilled Spirits</u> The term encompasses beverages like rum, whisky, gin, vodka etc. Taxation practices employed in the Dominican Republic are essentially uniform for these beverages. Presently, excises are imposed at two stages: first, when the distilled alcohol is moved to the subsequent production stage or sold to

others. Distilled alcohol can be used both for the production of beverages and as an industrial input. Further even though firms producing distilled alcoholic beverages may own distilleries, they do sell some of the alcohol to other firms, or industrial users. It is thus imperative that distilled alcohol be taxed at his stage. The existing tax on distilled alcohol is a combination of an ad rem and ad valorem levies.[3]

Subsequent taxation occurs when the aged product is removed from casks and bottled for subsequent sale. An aging period of one year for rum is the most common in the Dominican Republic, representing 95% of all the rum sold. A case of rum traditionally contains either twelve 700 milliliter (ml) bottles or twenty-four 350 ml. bottles i.e. a case contains 8.4 liters. A case of whisky contains about 9 liters (12x750 cc bottles). Taxation at this stage is a series of ad rem taxes – for rum it averages about RD$ 2.13 per bottle of 750 cc.

As the tax paid at the distilling stage is usually taken as a credit against the tax paid at the production stage the net tax collected equals the amount paid on the bottled product.

<u>Beer</u> is a popular beverage in the Dominican Republic with annual consumption averaging around 142 million liters. One firm, the

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[3] Law No. 243 - 1968 RD$ 1.62 per liter and at 8% of sale price per liter.

Cerveria Nacional Dominicana has a 94% market share. About 60% of the sales are made directly to small grocery stores (colmados), and the rest to wholesale distributors. Interestingly all transactions are cash i.e. there is no credit.

All the excise taxes imposed on beer are collected at a the bottling stage, or when the vats are in effect tapped. The tax is expressed per case of 15.6 liters. There are a four individual specific taxes totaling RD$ 0.755 per liter,[4] equivalent to RD$ 0.49 for a bottle of 650 ml.

REFORM RECOMMENDATIONS FOR ALCOHOL & TOBACCO

The single major drawback with the system is that there is no provision to effect a periodic adjustment for inflation. While this is typically the problem with most specific taxes, in an attempt to solve it the government has resorted to fresh taxes each time the base is severely eroded by inflation. Table 5, indicates the current burden of the excise tax on alcohol and tobacco, contrasting it with the burden in 1988. Assuming that the tax is completely passed onto the consumers, we see that the burden has dropped by more than half in the last three years.

4 Law 212 - 1984
Law 285 - 1985
Law 141 - 1987
Law 39 - 1988

Table 5.

Estimates of Tax Burden on Consumers

(In percent of final consumer price)

	1988	1991	Estimate if Proposal Accepted
Cigarettes	19.9	6.7	15.8
Rum	17.8	6.7	15.7
Beer	12.5	4.2	12.3
Whisky	5.6	2.6	15.7

Source: Author's Calculations

It has been suggested that ad valorem excise rates be used in lieu of the specific rates to provide revenue stability. However, from the perspective of administrative convenience it is proposed that the price on which the tax is to be imposed i.e. the taxable base, be the average retail price. The average retail price for each taxable article will be determined through a survey of the principal markets in the Dominican Republic. The results of this survey, to be conducted every 3 months by the Central Bank, will be published and used as the base on which the ad valorem rate is applied. The published price will remain fixed for the entire three month period. Consequently, the ad valorem tax will in effect be translated into a fixed specific tax for the same three month period. Apart from ensuring revenue stability, the actual administrative process of computing the total tax liability and collecting the same will be greatly simplified.

Revenue estimates for the commodity groups based on the proposed ad valorem rate schedule are summarized below in Table 6. The relative weights of each commodity in the consumer price index (CPI) have been used to compute the final impact on the CPI.

Table 6.

	Current Revenues mn. RD$	Proposed Tax Rate	Estimated Revenues mn. RD$	Weight in CPI	Increase in Price
Cigarettes	103	20%	270	1.455%	11%
Beer	109	15%	354	1.350%	10%
Rum	107	20%	281	0.869%	12%
Whisky	7	20%	50	—	17%
TOTAL	326		955		
Inc. Rev.			629		
% of GDP	0.36%		1.03%		
Inc. % CPI					0.3%

Source: Author's Calculations.

Assumptions:
- For tobacco products, blonde cigarettes were used as the base, as it represents 92%of the revenue collected in this category.
- Beer, rum and whisky account for 87% of the excise revenue on alcohol. Other beverages have been left out due to the lack of representative data.
- GDP estimate used = RD$ 92,800 million
- Assume total pass through of tax burden to the consumer.

C. TAXATION OF PETROLEUM PRODUCTS

The tax on petroleum products, is called the differential (differencial in Spanish), is effectively an excise tax. The term is derived from the method by which the tax is determined.

Determination of the Differential Final sale prices of petroleum products are controlled in the Dominican Republic. The government fixes product prices periodically based on prevailing revenue considerations. In effect, the government does not pass the benefit of lower world oil prices to consumers, choosing to appropriate the windfall revenue if any.

The tax liability or amount accruing to the government is basically the difference between the fixed (controlled) market price of the product in question and the constructed production cost. The constructed production cost includes the cost of input crude oil, processing cost, and margins for transportation, distribution and retailing. The crude oil cost used is derived from a regularly published crude index for the region. All the crude oil and some petroleum products are imported. Consequently the differential tax varies with both the world oil price (crude price index), and the exchange rate. The sale price of the specific products although revised periodically, are stable over the short term. Table 4, shows the input cost, sale price and differential tax for a sample of products as of January 1991.

TABLE 4.

Differential Excise Tax on Petroleum Products: January 1991
(All Figures RD $ per Gallon)

Petroleum Product	Refinery Cost	TDR Margin 1/	Sales Price	**TAX**	Tax as % of Refinery Cost
Gasoline	9.34	2.90	20.00	7.76	83.08
Diesel	7.63	2.06	13.70	4.01	52.56
Diesel (CDE)	7.50	0.46	8.11	0.15	2.00
Kerosene	8.15	2.64	18.00	7.21	88.47
Avker2/	8.15	1.81	17.17	7.21	88.47
Avker (CDA)	8.15	1.81	17.17	7.21	88.47
Fuel Oil	3.56	1.02	7.10	2.52	70.79
Fuel Oil (CDE)	3.43	0.11	3.67	0.12	3.50
LPG	5.92	1.05	3.11	-3.86	-65.2

1/ TDR Margin is the margin for transportation, distribution, and the retailing.
2/ Avker is an abbreviation for Aviation Kerosene, a jet engine fuel.

Source: Authors' Calculations based on 1 US$ = 13 RD$.

The differential tax as a percentage of the input refinery cost varies from negative 65% to positive 83%. The negative differential (essentially a subsidy) is given for Liquified Petroleum Gas (LPG) a popular domestic cooking fuel.

An entity that is given a tax expenditure subsidy, is the Dominican Electricity Company (CDE). The government tries to set the differential to almost zero for the company's purchases of diesel and fuel oil. In contrast the aviation kerosene used by the state operated airline (CDA) is not subsidized. The probable rationale for implicitly subsidizing electricity could be based on some misconceived industrial policy objective. It is of course clear that apart from being a large fiscal burden, there is no surplus generated to increase investment in the electricity system. The chronic power shortage in the country is the most directly apparent impact of this policy.

The revenue performance of the differential tax on petroleum has been extremely volatile. In real 1979 terms, the tax has fluctuated between 68% and 13% of total excise revenues; or between 184 mn. RD$ and 6 mn. RD$ (Refer Table 2). With the final sale price, as well as production and marketing margins being fixed, the revenue collected fluctuates with the crude price index and the exchange rate. Therefore we see revenues rising to 68.5% of total excise receipts in 1986, from being just 52% of the total in 1984 - i.e. in the period that world oil prices dropped dramatically. This increase indicates that the benefits of the oil price drop were not passed onto the consumers. In contrast to the absolute and relative increase in revenues in the mid-eighties, the period from 1987 to 1989 saw an equally dramatic drop in revenues - from 47% of total excise revenues to 13.4%. It was during this period that the Dominican Republic had a highly overvalued exchange rate, which had a major influence on revenues collected from imported goods valued at that rate.

Several inferences can be made from the structure and revenue performance of differential tax.

- <u>High Marginal Tax Rate</u> The government completely captures the entire marginal revenue on petroleum. In effect the differential is a 100% tax at the margin, as every additional unit of potential profit is taxed or appropriated by the government. This results in the lack of performance incentive for refining and distribution entities. The oil companies and downstream agents operate on a cost plus basis i.e. reimbursed for cost plus reasonable return. Under this environment there is no incentive for them to attempt purchasing input crude or products at the lowest price. The regional crude index is normally constructed from spot prices at important market centers in the Caribbean. With spot prices often being higher than contract, there is no incentive for efficient management.

  If an ad valorem rate is used, the tax rate on the margin is equal to the ad valorem rate.

- <u>High Revenue Instability</u>. While it is true that world oil prices remain outside government control, by appropriating a difference between a fixed market price and fluctuating world price, the world price fluctuations greatly impact revenue inflows. If on the other hand an ad valorem rate on an uncontrolled retail price were used, the revenue intake is likely to remain more stable. Fluctuations with the world oil price is systematic and cannot be avoided. However, revenue will tend to be less volatile. This will certainly be the case in the short-run considering the low price elasticity of petroleum demand. Under these conditions the government will be able to exert more fiscal discipline while planning its expenditures, as the petroleum tax revenues can be estimated with greater certainty.

Why use an excise tax in lieu of the VAT

To facilitate accurate zero-rating of exports, and also to give business users the benefit of a credit on petroleum inputs, it would strictly be better to impose the value added tax on petroleum in lieu of the excise. Experience has shown that the potential for tax abuse can make expensive auditing procedures necessary. Tax avoidance occurs when businesses purchasing tax-free petroleum products begin to dispense them to their employees, and also in the market. As a consequence, revenue that should rightfully be accruing to the government translates into economic rent.

If the VAT is used in the place of an excise, there is the danger of losing revenue due to poor administration and further comproming the integrity of the system. Based on these considerations it is preferable to use an excise tax (not a differential) to tax petroleum.

D. EXCISE TAX ON INSURANCE

Under the prevailing tax treatment insurance is an extremely attractive savings instrument. Both life-insurance premiums, and the final return at death or maturity remain tax-free. One of the reasons behind an excise on insurance is to eliminate any opportunity for interest arbitrage. Additionally, by imposing an excise on the gross insurance premium it is possible to tax insurance services (i.e. like a sales tax on insurance services). Other methods or schemes for taxing insurance services require sophisticated accounting. A tax on gross premiums is a reasonable proxy for such a tax.

E. EXCISE TAX ON TRANSPORTATION

The present system of excises on foreign travel is controlled by three laws. Two of these taxes specify unit excises on tickets costing less than RD$ 200. The third excise i.e. a 20% tax on all tickets costing more than RD$ 200 is by far the most important yielding over 99% of the total revenues in this group. In 1989, these excises yielded over RD$ 103 million.

It is proposed that the excise on foreign travel be restricted to a single 20% tax levied on all tickets for travel abroad. To simplify collection and ensure compliance, it is recommended that the airline be made liable for the tax if the passenger has not paid the transportation tax.

Apart from the revenue gain, a transportation tax of this nature instills an element of progressivity in the tax system.

Another excise in the same sector is the airport use fee. It is recommended that the existing tax be continued for passenger departing for overseas destinations by air.

F. TAX ON COMMUNICATION SERVICES

The present scheme of taxes on long distance communication is again characterized by multiple excises. It is proposed that they be rationalized to a single ad valorem tax.

APPENDIX I

LIST OF EXCISE TAXES, FEES & CHARGES

NUMBER	DETAILS
130000	TAX (DOMESTIC) ON GOODS & SERVICES
131000	TAX ON GOODS
131100	TAX ON VEGETABLES
131101	Tax on milled timber - Law 4288
131102	Tax on processed wood - L 5856 y 1962
131200	TAXES ON THE TOBACCO INDUSTRY
131201	Tax on cigarettes L190/64
131202	Additional tax on cigarettes L285-312
131203	Tax on the sale of cigarettes
131205	Additional tax
131300	TAXES ON ALCOHOLIC BEVERAGES
131301	Tax at the wholesale level - L243
131302	Additional tax on whisky, rum, and gin L 513-73
131303	Special tax on alcoholic beverages
131304	Tax on beer - L 243 y 422
131305	Additional tax on beer, L 513-73
131306	Tax on aged liquor - L243
131307	Tax on sweet liquors - L243
131308	Tax on wine
131309	Additional tax on wine & sweet liquor - L513
131310	8% tax ad valorem on sale
131311	Additional tax on wh/rm/gn - L 285(11-6-85) y 312
131312	Additional tax on wine - L 285(11-6-85) y 312(1899)
131313	Additional tax on wh/rm/gn
131314	Additional tax on wine - Law 398
131400	TAX ON NON-ALCOHOLIC BEVERAGES
131401	Tax on carbonated beverages L 1922,5306 y 5764

cont'd...

NUMBER	DETAILS
131500	TAX ON OTHER CONSUMER GOODS
131501	Tax on matches L 180 de 1964
131502	Tax on stamps for matches L 184 de 1971
131510	Diferencial sobre petroleo segun resolucion 2/1980
131514	Tax on aircraft fuel
131700	TAXES ON OTHER MANUFACTURED GOODS
131701	Tax on the consumption of Industrial Alcohol, L 243
131702	Tax on alcohol & barrels of rum, L 243/68
132000	TAXES ON DOMESTIC SERVICES
132100	TAX ON TRANSPORTATION SERVICES
132101	Tax - Sale of International airline tickets, L 423/69
132102	Additional tax on International ticket sales, L 286/64
132103	Additional tax on marine travel, L 97
132104	$15 tax on overseas passage.
132105	Tax for airport services - airport fees
132106	Tax at airport for international travel
132200	TAX ON COMMUNICATION SERVICES
132201	Collections from CODETEL
132202	Tax on long-distance services L 850
132203	Additional tax on long-dist. services, L 5551
132204	Tax on telex/phonogram services L 598/70
132205	Tax on radio stations L 118
132206	Anti-tuberculosis seals and postage stamps
132207	Child welfare seals & stamps L-2552 de 1950
132208	Cancer Research seals & stamps L-3452(1952)
132209	Postal employees training school S&S L40/70
132210	Rehabilitation of Disabled S&S L1255
132212	Industrial labs of UASD S&S.
132211	Red Cross Seals and Stamps.(1846)
132214	Divorce seals
132215	DR Bar Association Seals

NUMBER	DETAILS
132300	TAX ON OTHER SERVICES
132301	Tax on ticket sales for public performances L1646
132302	Tax on tickets for sporting events L44
132303	Tax on Hotel rooms L594/70
132304	Tax @ 27% on Commission organizing horse-races
132305	Tax on total bets in horse-races @ 3% L194/67
132306	Additional tax on bets at horse-races @ 1.5% L194
132308	Tax on insurance Premiums, L126/71
132309	Tax on bail bonds or dispute bonds.
132311	Prestamo de menor cuantia L-4290-56
132312	Tax on being in the insurance business.
132313	Tax on preferential tickets @ RD$2.00 in sporting event
150000	OTHER TAXES
150001	Tax on commercial licenses L4456
150002	Tax when the license is issued L-4456/1956
150003	Payment of Tolls L-2116/1972
150004	Tax on Movement of documents L-2254
150005	Tax on the conditional sale of movables
150006	Miscellaneous levies
200000	FEES
210000	Fees on Communication
210001	Sales of Postage Stamps L 40 y 56/1963
210002	Tax on the handling of postal packages
210003	Tax on airmail abroad
210004	Tax on packages from abroad
210005	Fees on Post office boxes
210006	Fee on the declared value of a package
210007	Fee on message transmission by radio, telegraph etc.
210008	Additional fees on message transmission
220000	PORT FEES
220001	Right of Entry L3003
220002	Right to Exit
220003	Fees on unloading of cargo
220004	Fees for storage at the pier
230000	FEES ON THE REGISTRATION OF PATENTS
230001	Trademark
230002	Inventions
230003	Licensing of patents

ENDNOTES

1. Sijbren Cnossen, Excise Systems – A Global Study of the Selective Taxation of Goods and Services, Johns Hopkins University Press, 1977, pg.1.

2. The term traditional excise goods for the mentioned items is used by Sijbren Cnossen. For a complete classification on this basis and for a listing of other "nontraditional" goods see Cnossen, supranote 1, pp.11-13.

3. John F. Due, The Evolution of Sales Taxation, 1915-1972.

4. Sijbren Cnossen, supranote 1, p.27.

5. Raja J. Chelliah, Trends in Taxation in Developing Countries, IMF Staff Papers, Volume 18, July 1971, pg. 224-331. For more updated work see Raja J. Chelliah, Hessel Bass, and Margaret Kelly, Tax Ratios and Tax Effort in Developing Countries – 1969-71, IMF Staff Papers, Volume 22, March 1975. pg. 187-205.

6. For a substantive treatment of the concepts and theory see David Newbery, and Nicholas Stern, The Theory of Taxation for Developing Countries, Oxford University Press, 1987.

7. Charles E. McLure, Jr., Lessons for LDCs, From Tax Reform in Developing Countries - edited by Malcolm Gillis, 1989, pp.349-350.

8. G.M. Radhu, The Relation of Indirect Tax Changes to Price Changes in Pakistan, Pakistan Development Review 1: 54-63.

9. Sijbren Cnossen, supranote 1, p.46.

10. Anwar Shah, and John Whalley, An Alternative View of Tax Incidence Analysis for Developing Countries, NBER, Working Paper No. 3375, June 1990, pg.1.

11. See Ved Gandhi, Vertical Equity of General Sales Taxation in Developing Countries, International Monetary Fund, July 18, 1979.

12. Charles E. McLure Jr., Taxation and the Urban Poor in Developing Countries, World Development, Get Reference

13. Thomas W. Calmus, The Burden of Federal Excise Taxes by Income Classes, Quarterly Review of Economics and Business, Spring 1970, Volume 10, pg. 17-23.

14. For a review of literature see Carl S. Shoup, Current Trends in Excise Taxation, from Comparative Tax Studies, edited by Sijbren Cnossen, North Holland Publishing Company, 1983, pp.258-

261.

15. I.M.D. Little, *Direct versus Indirect Taxes*, Economic Journal, Volume 61, September 1951.
To explain the argument – consider three commodities, of which one is untaxable leisure, in an economy in which labour is the only factor of production. In this situation, an excise on either one of the taxable commodities would distort two of the possible choices (between the taxed commodity and each of the two other commodities), while leaving the choice between the two untaxed commodities (one being leisure) undisturbed. But a proportional income tax (which under a no-savings assumption may be interpreted as an equal-rate excise on all commodities, except leisure) would also distort two of the possible choices (between leisure and each of the two taxed commodities), while leaving the choice between the two taxed commodities undisturbed.

16. Arnold C. Harberger, *Taxation and Welfare*, Little, Brown & Company, 1974.

17. James M. Buchanan and Francesco Forte, *Fiscal Choice Through Time: A Case for Indirect Taxation*, National Tax Journal, Volume 17, September 1964, pp.144-157.

18. William J. Baumol, *On Taxation and the Control of Externalities*, American Economic Review, Volume 62, June 1972, pp.307-322.

19. In percent: Oman 100; Kuwait 98; Columbia 96; Peru 91; Mexico 88; Israel 79; Costa Rica 76; Mali 74; Trinidad 72; Argentina 69; Niger 67; Singapore 67; Chad 63; Botswana 59.
See John F. Due, *Indirect Taxation in Developing Economies*, Johns Hopkins University Press, 1988, pp.73-74.

20. Carl S. Shoup, *Current Trends in Excise Taxation*, from Comparative Tax Studies, edited by Sijbren Cnossen, North Holland Publishing Company, 1983, p.272.

21. *Financial Times*, London, Thursday, September 26, 1991, Front-page.

22. Sijbren Cnossen, supranote 1, pp.102-103.

23. Carl S. Shoup, *Public Finance*, Aldine, Chicago, 1969, p.275. Also see supranote 21, p.266.

24. Chun-Yan Kuo, *Evaluating the Demand Effects of Alternate Excise tax Structures for Alcoholic Beverages*, Department of Finance Canada, Ottawa, March 1990.

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