VALUE ADDED TAX REFORM

PROPOSALS FOR THE DOMINICAN REPUBLIC

by

Glenn Jenkins
Ranjit Lamech

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Part I

THE VALUE ADDED TAX TODAY

"The economic and technological changes of the second half of the century.....have made VAT the quintessential modern tax."

Financial Times (London)
February 15, 1988, pg.44.

INTRODUCTION

The growth of value added taxation from its first adoption in France in 1954, to its present implementation by more than sixty countries is unprecedented by any other concept in taxation. While sixty nations use one or another form of VAT, forty nations have implemented a comprehensive VAT.[1] Its acceptance by nations in varied economic circumstances and stages of development, is most impressive and indicative of the flexibility inherent in its form and design.

Since 1984 the world has witnessed a virtual revolution in the field of applied public finance. During the past seven years there have been at least twenty major tax reforms that have taken a "systems" approach to the design of taxation systems i.e. focusing more strongly on the broader tax system rather than individual tax structures. This is a radically different approach from the norm of the previous three decades.[2] While individual variations do exist, they have all sought to simplify the structure of the tax systems and to remove incentives for tax avoidance or evasion. Most of the tax reform proposals put forth by these countries came to similar conclusions; namely, that the best design for indirect taxes is a broad base with low rates. It cannot be coincidental that of the 20 at least 18 countries have implemented value-added taxes. Jamaica the most recent entrant to this group, introduced a general consumption tax at the rate of 10%, on April 1, 1991.[3]

All countries in Latin America except Venezuela and Paraguay now use the VAT. Brazil was the first in Latin American to adopt a VAT. Bolivia, introduced the tax in its most comprehensive and simplest form (i.e. one rate) in 1986. See Table I, for a date of introduction and prevailing VAT rates in various countries.

The value added taxes that have been adopted in recent years have largely utilized the credit method of accounting, the consumption base and the destination principle. With the number of choices available this certainly reflects some measure of what is considered good in a normative sense. Exceptions from the above configuration are few. The Dominican Republic for instance does not use the consumption base.

There are a number of economic benefits in moving to a VAT. The VAT was the choice of the member countries of the EC as the best way to promote neutrality and uniformity of the tax burden and to provide incentives for increased productivity and industrialization.[4] The recommendation of the EC Fiscal and Financial Committee that all member countries shift to the VAT was formulated as early as 1962.[5]

As with other modifications to a tax system, political and administrative realities can give rise to concessions, and variations in the treatment of different classes of taxpayers. Politically sensitive groups are typically small businesses and farmers. Farmers in particular receive favorable treatment using provisions ranging from, zero-rating to exemptions. Even without considering the political influence of taxpayers, or the revenue loss implicit in making concessions, the availability of administrative resources can substantially constrain the design of the VAT.

WHY DO COUNTRIES CHOOSE A VALUE ADDED TAX

Amongst the chief reasons countries have chosen a VAT was to avoid the problems inherent to manufacturers' sales or cascading turnover taxes.[6] As a rough rule of thumb, it is estimated that the effective rate of a cascading tax by the time it reaches the retail stage is approximately two and a half times the nominal rate; thus, a turnover tax of 4 percent is equivalent to a retail tax of 10 percent.[7] In the case of Bolivia, the 2% turnover tax has been estimated to be equivalent to a 4% rate of value-added tax on the same set of goods and services.[8]

Other schemes of mitigating the cascade effect have been attempted e.g. the single stage manufacturing or wholesale tax[9]. The so-

Table 1.

Value-Added Tax Rates at Introduction and at Present

COUNTRY	Year Introduced	Standard VAT rates at Introduction	Standard VAT rates in 1989 or later
Argentina	1975	16	13
Austria	1973	16	20
Belgium	1971	14	19
Bolivia	1973	5	10
Brazil	1967	12	12
Canada	1990	7	7
Chile	1975	20	16
Colombia	1975	10	10
Costa Rica	1975	8	
Cyprus	1990 Law passed at 5% rate — not in operation		
Denmark	1967	10	22
Dominican Rep.	1983	6	6
Ecuador	1970	4	
France	1968	13	18.6
Germany	1968	10	14
Greece	1987		16
Honduras	1976	3	7
Indonesia	1985	10	10
Ireland	1972	16	23
Italy	1973	12	19
Cote d'Ivoire	1960	8	25
Jamaica	1991	10	10
Japan	1989	3	3
Korea	1977	10	10
Luxembourg	1970	8	12
Mexico	1980	10	15
Morocco	1962	12	
Netherlands	1969	12	20
New Zealand	1986	12.5	12.5
Norway	1970	20	20
Panama	1977	5	5
Peru	1976		15
Philippines	1988	10	10
Portugal	1985		17
Spain	1985		12
Sweden	1969	11	19
Turkey	1986	10	12
United Kingdom	1973	10	17
Uruguay	1968	14	21

Sources: Alan A. Tait, The Value-Added Tax: Why and How, 1984.
International Bureau of Fiscal Documentation — Country Supplement Series
Price Waterhouse — Country Information Guides

called ring system of exemption has also been tried unsuccessfully in a number of countries.[10] The ring system is similar to a retail level tax as manufacturers are "ring-fenced" with all transactions within the ring being tax-free, and those outside the ring subject to tax.

Sweden and Norway used the VAT to replace a retail sales tax. If comprehensive, a retail sales tax avoids the problem of cascading. These countries opted for the change as the VAT was best suited to ensure complete exemption (zero-rating) of exports.[11] In other words, the VAT is the ideal tax instrument to totally eliminate the tax component on exports. As export-competitiveness can be adversely influenced by the tax-factor, the capacity to zero-rate easily and accurately is an important consideration.

Sometimes the motivation could be just a long-term structural change intended to broaden the sales tax base and perhaps lower the tax rates. A variant of this is to put in place a new tax which in the long-run can be more easily used to raise revenues. For instance, analysis has shown that the incremental social costs of raising an additional dollar of revenues through the tax system can be as high as 80 cents per dollar of additional revenue raised.[12] This is because of further induced misallocations of resources in the economy as tax revenues rise. In contrast the potential gains to the economy from rearranging the structure of taxes, so long as the level of taxes remain the same, are smaller.[13] Thus, the move to a value-added tax could have more far reaching effects on economic performance, than on the level of taxes raised in the economy.

In rough conformity with the objective to eliminate cascading is the desire for economic neutrality. To provide the appropriate long term incentives, the tax system should not distort preferences e.g. imported inputs over domestic substitutes; capital over labor; vertical integration over smaller production entities; ownership over renting or leasing - or vice versa. Indirect taxes are notorious for creating implicit distortions within an economy. By moving towards a form of value-added taxation these distortions can be minimized. Economic neutrality can become a secondary consideration in cases where the state purposefully uses the VAT system for meeting certain political objectives. Motivations include purported health, education, and other social policy goals. These interventionist goals often require a degree of fine-tuning of tax structures inconsistent with present realities of tax administration and tax compliance.[14]

When faced with chronic budget deficits, and growing expenditures, governments have been turning to tax reforms as a way to raise revenues. Governments seek revenue sources that are income elastic, and not sensitive to changes in prices of particular goods or income sources. The wider the extent of coverage at the time of design and inception, the closer one gets to this objective. Some skeptics of the governments inability to curtail their burgeoning expenses, have called the VAT a "money machine" and use it to impede VAT introduction. The difficulty with the argument is that, even if it is true, it in no way justifies the retention of a narrow-based, distorting, and income inelastic tax.

Finally, perhaps of the greatest practical significance when contemplating reform is the need for a simple and administratively feasible tax. Administrative ease and compliance are almost completely dependent on basic design choices. Complexity can be assumed to increase in quantum progression with the number of rates, and exemptions. The system of multiple rates is endemic in Europe, giving less developed nations a notion that the VAT is an "advanced" form of taxation suitable for wealthy nations, requiring a high degree of administrative sophistication.[15] In fact there is marked tendency for value-added taxes to get simpler with time, as there is a constant pressure to roll-back the number of exemptions and limit the number of rates. As part of customs integration by 1993, the EC has stressed the need to restrict member countries to a maximum of two-rates. Experience with VAT introduction in developing nations with the most rudimentary administrative institutions, indicate that a classic VAT with a single rate (plus a zero rate for exports), and few exemptions is easily managed. Countries using complex schedules of exemptions and multiple rates, have without exception faced difficulties.

FRAMEWORK FOR AN IDEALIZED VALUE ADDED TAX

Value added taxes can take many forms. Much work has been done in distilling the elements of a so-called "idealized" value added tax. Structural features that match the needs of one country or region may not be directly relevant to another, owing to differences in economic structure. Despite the differences, a country contemplating a VAT introduction (or VAT reform) has a number of choices to make.[16] The structural choices or decisions to be made are:

1. The type of VAT i.e. consumption, income, or gross product.
2. The regime for international trade: the origin principle (exports taxable, imports exempt) versus the destination principle (exports exempt, imports taxable).
3. The method by which a taxpaying firm may compute its liability: subtraction, tax credit or invoice method, and addition.
4. The products, firms, or sectors to be exempted from the VAT.
5. The technique of freeing a firm from VAT: outright exemption (the firm need not file a VAT return) and zero-rating (the firm must file a return, but pays a zero gross tax and gets a refund for VAT payments made at a prior stage).
6. The sectors and firms, although taxable, are thought to require special rules or regimes.
7. A single-rate VAT versus a VAT with two or more rates (in

addition to the zero rate, if any).

8. A tax-inclusive VAT rate versus a tax-exclusive VAT rate. The former is levied on the total amount of money transferred, including the tax itself. The latter is levied on the price before tax.

CRITERIA FOR EVALUATING THE VAT

How wide a choice does a country really have in deciding what kind of VAT would be best? In the case of the Dominican Republic with a VAT already in place the question could be rephrased to determine the desired direction of reform.

To begin answering the question, a delineation of the criteria for evaluating the tax is important. First, in the interests of economic efficiency, the tax should create no incentives to alter methods of organizing production and distribution systems. Inherent in this criterion is that the value added tax must avoid cascading, i.e. multiple application of the tax to the same final consumption items, which causes both economic distortions and the loss of equity. Secondly, the final burden of the tax should be the same on imported and domestic production; protection of domestic industry should be left to tariffs. Thirdly, for both equity and economic efficiency reasons, it is assumed that the burden of the tax in sense of the pattern of reduction in real income should rest in relation to consumer spending, either uniformly or in conformity with a desired pattern of non-uniformity. Fourthly, the tax must fit into the overall mix of taxes, so that the tax system and other taxes in aggregate meet the standards of equity conventionally acceptable in the country. In most cases this means the avoidance of a significant tax burden on the lowest income groups. Finally, and perhaps most importantly the tax must be structured to permit adequate compliance and administration at reasonable cost, a requirement that may conflict with others, necessitating a compromise.[17]

Countries will with very few exceptions use criteria that differ significantly from those listed above. What may and will vary are the reference income groupings/classes; priority sectors or in other words - politically sensitive sectors; training, integrity, and competence of the tax administration; and finally, the broad macroeconomic variables in each.

As indicated most countries prefer a consumption type VAT imposed on the destination principle utilizing the tax-credit method of collection. Does this in any broad sense denote an idealized value-added tax? The answer is probably an unequivocal yes.

(A) <u>The Type of VAT — Consumption, Income, or Gross Product</u>

The consumption base has been a much favored tax base from both the perspective of economic neutrality, and ease of administration. The consumption VAT restricts the burden of the tax to final consumption goods and thus exempts capital goods. In effect the tax is only on the pure value added within the production stage in question. Consumption VAT's are also the easiest to compute - simply subtract from taxes due on sales all taxes previously paid on purchases from other firms. No distinction need be drawn between capital goods and other goods, and no depreciation need be computed.

Consumption it is argued is a broad measure of the ability to pay taxes, much like income. Furthermore, it excludes savings from the base, hence does not discourage investment. If we use a flat rate tax there is also an element of fairness, as it treats persons equally regardless of what they choose to consume.

The Income form of value added tax, reflects value added in the conventional sense of total economic activity in the country i.e. a tax on National Income. The aggregate base is the same as that for a comprehensive income tax.[18] The income VAT has been used by Argentina and Columbia. The state of Michigan in the U.S. uses an income VAT, and an approximate form is used in Turkey.[19]

The gross product VAT is computed by subtracting from a firm's sales only purchases of those goods that are used up currently, not purchases of machinery or other capital goods. Depreciation cannot be subtracted. The economic base of the tax is similar to Gross

National Product (GNP). Capital investment will be taxed twice under this type of VAT — once at the time of purchase and also when products they produce are sold to consumers.

From an economic growth perspective, both the income and gross product VAT have an anti-investment bias. This is all the more significant in countries that impose substantial income taxes. An income tax, taxes saved income and hence investment twice — once as the income is being earned and again as the rewards for saving appear as interest and profit, which are again taxed.[20] Although some might justify double taxation for an income tax on grounds of relative ability to pay, it makes little sense in the case of an indirect tax such as the VAT.

There can be other short-term economic stabilization uses of including capital goods purchases in the tax base. Germany subjected capital goods to its VAT in 1973 as a fiscal tool to reduce demand for such goods and thereby control an economy that was heating up.[21]

The Dominican Republic is one of the few countries that does use a gross product VAT, primarily for administrative reasons.

(B) <u>Exemption versus Zero-rating</u>

Suppliers of goods and services are either taxable or tax-exempt. By definition, exemption relieves the exempt trader's value added from the tax, but all his purchases including capital goods are taxed. Exemption, will therefore increase the amount of tax finally paid on intermediate goods — the opposite effect that the exemption was supposed to provide. In the case of final goods, exemption eliminates the tax on value-added in the final stage only. In other words, if a commodity is exempt only at the retail level, then only the retail level is freed of value-added tax. Although the retailer would not charge value-added tax on its sale, the retailer would not be entitled to a credit for tax paid on the purchase of an exempt item.

If a commodity or service is zero-rated, the seller pays no tax on its sale and additionally receives a credit for the tax paid on the purchase of materials and other inputs used. Zero-rating, in theory, is the only way to ensure that a product is truly free of VAT. With zero rating, unlike exemption, only the final sale of the commodity needs to be zero-rated, since any tax paid would be credited on the last sale.

The considerations influencing the choice between zero-rating and exemption are: (1) The desirability of freeing users of specific goods or services completely from value-added tax (as with zero-rating), or only partially (as with exemption); (2) The merits of excluding certain firms from the registration and filing of returns. Even from the perspective of firms themselves, there are conflicting considerations. If a firm's goods are completely exempt, it is not required to register and file a return, but the prices of the goods sold by the exempt firm will include the tax incurred by the exempt firm on its purchases. This may be particularly objectionable to the exempt firm's business customers who cannot receive credit for this tax. In this case, exemption would place the exempt firm at a competitive disadvantage.

If the objective is to have a broader tax base exempting certain goods is preferred to zero-rating them. In addition, the administrative burden of the zero-rating procedure can be onerous. Zero-rating necessitates the payout of refunds, which in itself entails huge administrative costs, requiring verification and disbursement of refund cheques. Furthermore, there is the issue of controlling evasion or fraud. Zero-rating creates an incentive for sellers to exaggerate the values of their final sales, and to correspondingly inflate the value of taxable inputs purchased, in order to avail of the refund of a larger input tax element. The administrative resources needed to cross-check such claims, can impose additional and perhaps unsustainable demands on systems that are already thinly spread.

From the perspective of taxpayer compliance costs, zero-rating can help avoid complications that would arise if a firm handles both taxable and exempt commodities. With zero-rating, such a firm receives credit for tax paid on all its purchases, whether for production or distribution of zero rated or of taxable goods. But if some goods are exempted the firm selling the exempt items is entitled to a credit only for the tax on those purchases of materials and other inputs that are used to produce taxable (or zero-rated goods). In this case compliance and accounting costs rise dramatically. In a study in the United Kingdom, traders using the zero rate and standard rate had mean compliance costs over three times as great as those using the zero rate alone.[22]

(C) Single versus Multiple Rates

The debate surrounding the choice of a single or multiple VAT rates covers every policy variable considered in fiscal reform. Politicians may think that the public will acquiesce to a VAT more easily if products consumed by low-income households are taxed at lower rates than products consumed by the better off. Administrators who actually implement the tax will soon know, if they do not already, that every additional rate will significantly increase cost and complexity. Economists, unfortunately have no common voice - some support the economic elegance of a single rate, and others espouse the optimality of multiple rates.

Early European and Latin American VAT systems frequently attempted to make the rate structure a progressive one, taxing basic necessities at lower rates and luxuries at higher rates, compounded with numerous exemptions. The experience has been painful every step along the learning curve. Just the volume of information that need be processed can dampen administrative enthusiasm, if any. A simple practical VAT (one positive rate, a zero rate, and some exemptions) requires at least 9 pieces of information from each taxpayer (the value of supplies at the two rates and the value of exempt supplies, the value of purchases at the two rates, two liabilities to VAT on output, and two liabilities to VAT on inputs). A VAT with three positive rates, a zero rate, and exemptions needs at least 17 pieces of information.[23] Definitions of the various classes of goods can be ambiguous, and sometimes arbitrary and subject to manipulation, often producing protracted legal disputes. For example - different rates for cars and light trucks, confectionery and food, restaurant meals and ready-to-eat snacks can encourage purposeful reclassification designed to "legally" evade taxes. The cost of auditing the classification of exempt and taxable items and the applicable rates thereon, at every stage of production, distribution and sale is high, if not impossible.

Economic arguments are equally persuasive against multiple rates. Multiple rates very simply distort consumer and producer choices. Consumer preferences are dynamic even in the uniform rate economies i.e. what was a "necessity" with a low elasticity of demand, could tomorrow become one of relatively indifferent choice (or high income elasticity). Designing a tax structure for stable revenues by differentiating on the basis of "necessities" and "luxuries" will require constant reclassification - which in itself is undesirable. The question posed is - should the government want to change its tax laws because demand became more elastic for one good, supply less elastic for another, or because a new product was introduced or an old one improved?[24] The basic thesis is that once a system of uniform taxation is in place it can be typically be left as such for many years. That is, the dynamic movements of tastes and technology are not likely to call for important or frequent changes.

The least important of the arguments for a single rate, is one of economic optimality. Using a general equilibrium model, it has been shown that rate differentiation leads to significant reductions in the welfare gains of adopting equalized tax rates.[25] The basic rule as stated by Tait - "use as few rates as will satisfy the preferences of politicians." In some ways the issue was elegantly dealt with in the Dominican Republic by using a low rate of 6% for all goods and services. Although products are implicitly differentiated by using a complex system of excise taxes - which leads one to look at the tax system as a whole in meeting the particular "standards of equity" in each country.

Often the use of multiple rates is justified on the grounds of enhancing progressivity. For example the zero-rating of food is thought to make the tax less regressive. In developed economies with a high degree of monetization this is not usually achieved. While the VAT on food is eliminated, it is the case for all consumers regardless of income. Thus, in light of its basic objective of lessening the burden of the tax on lower income groups, it is ineffective, as well as, very expensive in terms of revenue foregone.[26]

(D) International Trade under VAT

When goods cross international frontiers, avoidance of double taxation or non-taxation may be broadly effected in two ways — the transaction may be subject to the taxes of the exporting country (the country of origin principle) or to the taxes of the importing country (the country of destination principle).[27] These adjustments generically called Border Tax Adjustments (BTA), are in conformance with GATT rules and apply to only indirect taxes. Its extension to direct taxes can cause other problems, like the conscious subsidization of exports. GATT rules do permit the levy of import surcharges on imports of types similar to domestically produced goods in the course of whose production indirect taxes are levied. These countervailing surcharges represent, in principle, the equivalent of the indirect taxes paid by the corresponding internally produced commodities.[28]

Administrative convenience has made the destination principle the preferred choice of most nations. A destination based value added tax is essentially a levy on domestic consumption, with a zero tax rate on exports.

A VAT based on the destination principle is easier to control. Principally, because goods must pass through a limited number of border crossings with check points. For exports, some customs-type control is usually needed to determine the actual amount of exports, and verify accuracy of VAT refunds claimed. Imports however, require explicit valuation at the border, if the value added in the exporting country were to be comprehensively taxed by the importing country.

One must note that any attempt at taxing imports accurately is entirely dependent on the exchange rate used to value the item. VAT and other tariffs on imports are typically paid in domestic currency. When using an overvalued exchange rate, the real tax base may shrink dramatically. Experience in the Dominican Republic with overvalued exchange rates is typical of the problem of real base erosion. To offset the incentive for imports caused by overvaluation, countries often employ other forms of import controls to restrict the total volume. Thus instead of correcting the original distortion, another distortion is introduced to attempt correction.

If uniformly applied, the destination principle does ensure that goods consumed within the taxing jurisdiction are equally burdened, appropriate exchange rate adjustments can increase VAT burden on imported goods. Thus, the border tax adjustment can in practice also be used to pursue a protectionist trade strategy.

Apart from administrative ease, the decision to opt for a destination based VAT is derived from a desire to develop/expand export markets. Countries like Sweden, Korea, Canada and Indonesia, for example, used this reasoning.[29] For nations with a consumption VAT the destination principle is also the most obvious means of taxing domestic consumption.

There are, however, some administrative problems that must not be overlooked. Nations aggressively pursuing export markets, import substantial amounts of materials, machinery, etc. for export production. Under the basic destination rule, tax would be collected at importation, and the firms would receive credit for this tax and a refund when the products are exported. As a consequence of this manufacturing lead-time, there is often a strong pressure for exempting the inputs, in order to reduce working capital requirements for export-oriented firms. These pressures are further exacerbated if there is a delay in paying refunds. In the case of the Dominican Republic these pressures were intensified as there is no system to refund input credits, necessitating that the government permit credits against income tax. If compliance is good, there is no net revenue loss to the government from exemption, except for the interest on the input tax it would receive before paying-out the same as tax credits.

Other dangers from exemption do exist. This practice will retard the development of domestic production of those inputs, currently being imported, that are used to produce exports - unless such domestic production of each input is also zero rated they will bear tax for the period until the refund is issued on the export of the final good. In effect, exemption removes the tax from imported inputs, but not from domestic inputs; to do so requires zero rating. This can result in some of the goods imported tax free leaking to final consumers in the domestic market, rather than through taxable sales by registered firms. Governments may set up procedures and regulations to curtail such leakage - this is usually never totally effective. It is more effective to remove such incentives while designing the tax structure itself and make all imported inputs taxable.

- **Impact on International trade**

The starting point of a discussion about the trade effects of VAT cannot possibly be the question of whether the introduction of VAT or its special variant may have caused changes in the pattern of international trade, but rather the investigation of a possible systematic bias of VAT which leads to a discrimination against a country's trading partners.[30]

All countries applying VAT leave exports tax-free or allow a tax refund on exports, while imports are taxed. Technically, this procedure is equivalent to a tariff combined with an export subsidy and may be interpreted as a means of an unfair, discriminating and aggressive trade policy. The traditional answer to the argument that VAT promotes exports and discriminates against imports is the reference to the "exchange rate mechanism",[31] according to which a general tax is neutral with regard to international trade, whether there is a BTA or not. The argument is an application of the Lerner Symmetry Theorem of the equivalence of import and export tariffs. Thus, in that sense a change to the origin principle can be interpreted as a substitution of an import duty by an export tariff. The consequent effect will be a revaluation in the exchange rate that can be neutralized by an offsetting exchange rate adjustment. In a system of flexible exchange rates, these adjustments will automatically result in order to restore equilibrium in the market for foreign exchange. Therefore, the tax system is not to be blamed when there is a trade balance disequilibrium, but the cause is the inappropriate exchange rate policies.

More explicitly — when automatic adjustment mechanisms such as flexible exchange rates or differential price-level changes are assumed to be at work, the balance in international payments and receipts is always maintained. In this case, there is no longer any point in analyzing the effects of such measures as border-tax adjustments on the balance of payments. The relevant issue thus turn to other variables like the total volume of trade. In the light of the fact that these adjustments can be sluggish at times, Harberger[32] has looked at the balance of payments under various assumptions and has concluded that — no balance-of-payments effect is to be expected from the introduction of a new and fully general value-added tax with border-tax adjustments.

Shoup[33] observes that a VAT replacing a general sales tax that exempted all inputs to the export sector may have no impact on foreign trade. However, a VAT replacing a corporation tax may increase stimulus on exports, on the assumption that the income tax affected prices. More specifically, taxes on exports can be fully rebated under a VAT, implicit taxes on exports induced by the corporate income tax cannot be. Local income tax free imports, now subject to VAT may decrease while VAT free exports, earlier subject to income tax may increase. This may however, be only temporary in a country with fluctuating exchange rates. The reduction in imports leads to less pressure on the country's currency, which would tend to an appreciation in its purchasing power of other countries' goods; thus imports would tend to rise and exports to fall. This is an extreme case and it need not be accepted in the extreme form.[34]

All the above analysis might be suitable for a narrow assessment of the VAT. One should however, focus on the distortions to trade ameliorated by the VAT. Evidence on the impact of VAT either positive or negative is virtually non-existent.[35] The discussion has remained in the exclusive realm of theory.

It will suffice to emphasize that countries usually experience an expansion in the volume of trade when a VAT is introduced. Of equal importance is the fact that an appropriate exchange rate regime be adopted in conjunction. The expansion in trade volume in itself can potentially generate significant welfare benefits within the economy. For example, increased export production will result in the creation of more jobs. While imports may increase in absolute terms, the relative balance between imports and exports may not change appreciably.

(E) <u>Method of Determination of the Tax Base and Liability</u>

The specific modalities on how the tax base is established and the liability computed, will influence the administration of the VAT. Three methods of computing the actual value-added tax liability are used - the credit method (also called the invoice-credit method), the subtraction method, and the addition method.

The credit method is almost universally preferred at least for the comprehensive VAT. In fact it is clearly a necessity if multiple rates are used. A firm pays tax based upon its sales value and claims a deduction for the VAT paid upon its supplies of goods and services. In this case, the tax paid on inputs serves as an important record and not the specific value of purchases. This tax is then credited against taxes due on the sales made by the enterprise.

The credit method is now widely used in Europe, but there are difficulties. The payment of taxes to the government at each stage in the production process, with an implicit refund through credits is expensive from a tax collection point of view. This is apparent when we compare it to a system where transactions flow in only one direction.

For cross-border movements of goods the EC will be adopting a scheme which will eliminate all fiscal controls at borders. From January 1 1993, the tax on imports will be entered as a liability on the importer's next VAT return, where it will normally qualify for a refund; so no net payment will arise and the importer's cash flow will benefit from the elimination of any time lag between paying VAT on imports and being given credit for it. At present there is no VAT on exports, but after 1992 this will only apply in the EC if the purchaser is registered for VAT.[36] While the system does entail some complication in the case of exports, it should be merely transistional.

Care must also be taken in the operation of the credit system. While there is the possibility of cross-checking invoices filed by the buyer and seller, monitoring is cumbersome. Most administrations do selective audits to discourage evasion. However, the fact that the system is difficult to monitor makes the issuance of invoices equivalent to the printing of money. Frauds involving the use of counterfeit invoices to claim extra credits are common.

The subtraction method of computing a firm's VAT calls simply for subtraction of total purchase from the sales of the firm in question. The balance, the value added by this firm, is then multiplied by the VAT rate, to determine liability. This is the simplest method and at first sight looks just like the tax credit method. The effect, or revenue collection is the same as the credit method if a uniform single rate with no exemptions is employed. Advocates of the subtraction method argue that the compliance costs are lower.

The subtraction-method was one of the approaches listed by the Canadian Ministry of Finance in the 1987 tax reform proposals for the goods and services tax (GST).[37] Canada finally opted for the credit-method on introduction of the GST in 1991.

The addition method is normally employed by countries using the income type VAT. It sums the factor payments made by the enterprise during the taxable period. Value added in this case is comprised of payments to employees, lessors, interest to creditors, and profits or dividends to owners. Although rarely used, this method is occasionally suggested as a possible means of dealing with certain difficult to tax industries. This argument, however, is not compelling for a country contemplating a national VAT to augment an existing income tax system. McLure writes, "A natural place to start would be with the calculation of income for income tax purposes; using different measures of income, for the income tax and the VAT would entail annoying and inexcusable complexity. Given existing problems under the income tax, this is hardly appealing."[38]

The principal debate concerning choice of methods in computing VAT liability is normally restricted to the credit and subtraction methods. This often focuses upon the relative burdens of the accounting requirements of the two types of VAT, and whether the issuance of invoices is a sufficiently common business practice to allow the implementation of the credit (or invoice) method. More fundamental structural differences are often overlooked. The following sub-sections draw attention to these differences:

(i) Exemption of an intermediate firm

Exemptions in an intermediate production stage results in a break in the production chain. Firms so exempt will furnish invoices which do not have a tax component. Consequently, the subsequent firm will pay the VAT on its total sale price, but be unable to claim a credit.

Use of the credit method will result in an increase in the cumulative VAT paid — when compared to the true value-added in the entire production chain. While extra revenues are collected, the intermediate producer is penalized. In summary — the government will face no drop in revenues by exempting intermnediate producers. However, excusing an intermediate firm from filing a VAT return causes a tax penalty.[39]

When using the subtraction method, precisely the opposite defect appears. The cumulative VAT is now less than the VAT rate on the total value (value shown at the retail sale).

The credit or the invoice method can correct this problem by requiring all exempt firms to file returns, and have them zero-rated. Neither the subtraction of the addition method has any easy means of recouping the lost revenue.

To illustrate let us consider a three firm production chain (firms A, B and C). Let the value addition at each stage be \$100, with a VAT rate of 10%. Firm B, is the intermediate firm exempt from VAT. In the credit method \$10 will be collected from A on a price of \$100; B pay no VAT and not get any input credit either selling it product for \$210; firm C adds \$100 in value to reach a tax exclusive price of \$310, as it gets no input credit for VAT in previous stages, it will pay \$31 as tax. The net revenue collection is \$42.

If the subtraction method were employed, firm A will continue to pay \$10 as tax, firm B will pay no tax and not claim any input credit either. The principle difference is in the computation of firm C's VAT liability i.e

$$(310 - 210) \times 10\% = \$10.$$

The net revenue collected is thus only \$20, compared to \$42 in the credit method.

This example also illustrates an important benefit of the credit method. Even if VAT is missed at a particular stage it can be picked up in a subsequent stage.

The increase in overall VAT burdens by firms in the subsequent stage can also result in political pressures for some form of tax relief or benefit. If granted this will further complicate the system.

The following three points describing structural differences in the practical application of the subtraction method and the credit method involve the use of multiple rates. Rather than risk being interpreted as implicit support for multiple rates, the following should be considered as arguments against both multiple rates and the subtraction method.

(ii) Multiproduct firm with different tax rates

In the case of a multiproduct firm with different products taxed at different rates, administrative difficulties are faced with the subtraction method. Under the subtraction method an apportionment of the purchases to the different products is required, in order to establish the tax base for each differentially taxed product. Besides increasing the cost of compliance, enterprises can use creative accounting to gain an unfair tax-advantage.

Under the credit method as long as all the sales are subject to tax, all the tax on inputs is creditable irrespective of the product for whose manufacture they were purchased.

To illustrate, let us assume a firm producing two products X and Y having tax-exclusive prices of $200 and $300 respectively, and subject to a tax rate of 10% and 20%. For simplicity, let us consider only a single input purchased at $200 (tax exclusive price, $220 with 10% tax). Under the subtraction method the computation of the final tax burden will require that the input be apportioned; if product X uses $80 of input and product Y uses $120 of input we compute a tax liability of $48:

$$(200 - 80) \times 10\% + (300 - 120) \times 20\% = \$36.$$

If the credit method were used the tax would be computed on the ex-factory price with a credit for input tax paid. i.e.

$$200 \times 10\% + 300 \times 20\% - \$20 = \$60.$$

The amount of taxes collected in both the cases vary widely, and the tax paid in the subtraction method can be minimized by appropriately adjusting the proportion of input.

<u>(iii) Degree of vertical integration and total tax liability</u>

The subtraction method in conjunction with differential tax rates, provides an incentive to vertically integrate production i.e. the enterprise can end up paying a lower effective rate of tax on the final product by vertically integrating. The tax rate under the credit method is unaffected by the degree of vertical integration. To illustrate the problem under the subtraction method - if the tax rate on an intermediate good is lower than that on a final good, then the overall tax collected on the production of the final good will be less if the intermediate good is produced by a separate company, than if the intermediate good production is integrated with the final good production in the same company.

(iv) Zero-rating of Exports

A major shortcoming of the subtraction method is the difficulty in zero rating sales. This can be an expensive and pervasive problem where exports need to be zero-rated. If indeed one could assume that all prior stages of the exported good had paid VAT, and at just one rate - that one rate could be applied to the sales figures on the invoices of the exporter and a refund easily computed. But these assumptions are all rarely correct. Hence, there will be either a net subsidy given when inputs have not borne the full tax or a penalty wil be imposed if the rate of input tax is greater than the assumed nominal rate of tax.

(F) Products, Firms, or Sectors to be VAT Exempt

Choosing goods and services that are to be kept free of the value-added tax is both a political, as well as, administrative issue. Once the items to be preferentially treated in this manner are decided, the choice between exempting versus zero-rating them is another major design consideration. This distinct issue of selecting exemption or zero-rating as the means for excusing VAT liability, is dealt with subsequently. This subsection addresses the motivations, practices, and associated problems in according this treatment to specific goods and services.

In practice, there are three ways to justify exemptions and zero-rating.[40] First, there are exemptions that may be designed to change, rightly or wrongly, the progressivity of the VAT. Second, there are those goods and services that are "meritorious" deserving to be tax free.[41] Thirdly, some goods and services are administratively just too difficult to tax, making sense to keep them free of the tax. Some goods can be justified on all three grounds; for instance, farmers are difficult to tax, the food they produce can be meritorious, and exemption of food may improve the progressivity of the tax.

These concerns are generic and do not stem from any specific issue of design. The practical solution to some of these generic problems has narrowed the tax base and diminished the neutrality of the tax system. A few of the sectors and firms are examined below.

(i) Small Businesses

In most countries there are a large number of small businesses which contribute very little to the total VAT revenue but greatly complicate its administration. In developing countries this situation is further aggravated by the rudimentary level of business and accounting practices.

Since the revenue loss is relatively small, especially compared to the cost and effort of administration, many countries have exempted them from tax. For example seven EEC countries exempt small firms completely from registering, collecting taxes, and filing returns.[42]

Compliance costs to small traders can also be disproportionately large. Estimates for the UK indicate that they can be between 31% and 78% of net revenue obtained.[43] There is also the issue of economies of scale, the same study also estimated mean compliance costs for establishments of different sizes: For traders with taxable turnover of less than 50,000 pounds per year mean compliance costs were 1.17% of taxable turnover, whereas for those with turnovers in excess of 100,000 pounds it was only 0.21% of taxable turnover.

Some EC nations exempt the small firms from the payment of the tax — but not from registration. Under this system, all firms are registered, but firms with sales volume below a certain figure merely invoice forward to their customers the tax paid on their purchases.[44] It is normally advantageous for certain small businesses to register and collect tax, particularly those who supply goods and services to registered firms. Since purchasers cannot claim input credits in respect of purchases from unregistered small suppliers, they may be more inclined to deal with registered suppliers.

A practical alternative to complete exemption would be to estimate the tax base from the value of purchases. Since small businesses purchase goods from a relatively few suppliers, the value of sales may be approximated as a given percentage markup over and above the cost of purchases, including VAT paid on inputs. For the small trader, this is a simple operation and requires very minimal book keeping. It is relatively easy for the tax administration to audit selected cases to maintain the integrity of the system.

Sometimes such a presumptive fixed markup can be higher than the trader's markup, increasing his tax burden. On the other hand, a fixed markup that is too low encourages traders to continue this method rather than adopt normal procedures. If large organizations follow this method, as has been the case in the UK the loss in revenue can be significant.

A high markup will minimize revenue loss and encourage traders to keep proper records and participate in the full VAT system. High markups will thus provide the right incentives in the long-run. In any case, the success of such a method depends upon the co-operation of the trader, through his estimation (or records) of his cost of purchases.

Korea, until recently (1986), treated small businesses whose VAT inclusive annual turnover did not exceed Won 24 million (about US$ 27,000 in 1986) as "special taxpayers". These businesses had a special VAT rate of 2% levied on their turnover rather than on value added. Those who did business by proxies, agents etc. with a turnover of Won 6 million or less (about US$ 7,000 in 1986) paid 3.5% VAT on their turnover.[45] These special rates co-existed with the standard 10% VAT rate (In 1987, the rate was raised to 13%). In 1987, "special taxpayers" filed 68% of total VAT returns but accounted for only 4% of the VAT revenue. The tax base i.e turnover was determined by the tax authorities as - amount of purchases, as shown in the purchase invoices of the firm, plus a fixed rate of markup imputed by the tax authorities for the type of business. This system discouraged small traders from obtaining tax invoices on purchased goods. The system was modified allowing special taxpayers to deduct from their VAT liabilities up to 5% of the taxes they paid on purchases, provided they submit the tax invoices to the authorities. As a result the practice of issuing invoices can be sustained as there is no direct reason for the small business to refuse tax invoices.[46]

Chile provides special treatment for retailers, artisans, and various service activities. These entities are eligible if their average sales per month during the preceding twelve months are less than twenty tax value units. A published tax table indicates the fixed monthly tax payment for each bracket of sales, from which is subtracted the tax paid on purchases. There are only five brackets for these special quotas, and thus the tax only very roughly approximates the amount of tax that would be due under the regular system. The tax value units are notified monthly by the tax administration on the basis of price level changes.[47]

In Argentina, purchasers from unregistered small businesses are required to withhold from the price a final tax calculated on 40% of the net price at the ordinary rate. The withholding agent can take a credit computed by applying the ordinary rate to the net price on which the withholding tax is calculated. This substitutes for the VAT these unregistered small firms would normally pay if registered.[48] This tax is estimated to be fairly high, causing small businesses to register themselves. It is reported, however, that these firms though registered, file no returns.

A common feature of most of these systems is that these simplified schemes incur a heavier level of taxation than the regular system of imposing the VAT.

Amongst the other modes of taxing the small business sector, is the forfait system. Estimates of sales under the forfait system are usually done on the basis of trading results for the previous year, deductions are base on presumed purchases and adjustments for general factors affecting all businesses and factors that might have relevance only to the particular trader.[49] Many of the Francophone countries use this system - Niger, Madagascar, Ivory Coast, and Senegal. While it is recognized to be a very inexact system it is regarded as a necessary evil.

Some nations do not set specific sales limits or other codified conditions, which if satisfied exclude an enterprise from VAT liabilities. It has been found that the executive power could be given the authority to design procedures to tax this small business sector. This flexibility allows the tax administration to set up special and easier compliance requirements for small taxpayers. The Bolivian VAT for example has no legislated minimum size of enterprise that is not subject to the tax, but clearly there are administrative limitations on the size of the establishment from whom it is worthwhile to collect the tax. A similar provision is part of the VAT reform recommendations in the Dominican Republic.

The thrust of the discussion so far focused on the available means of taxing small firms, and the problems in practice. Another practical problem is one of definition, more specifically, what is a "small" firm. Generally this determination has been made on the basis of sales volume. If this were the only criterion it might not present a fair picture of the enterprise. Some firms may have a high level of value-added but a lower turnover than others, with high purchases of intermediate goods but low value added.

Furthermore, firms with highly fluctuating turnover or growing levels of turnover are difficult to regulate on an equitable basis. Thresholds of sales that differentiate a "small" firm from one which is taxable has been referred to as the "poverty trap" for small firms in the United Kingdom. Basically, as soon as a small business crosses the line and becomes liable to VAT, the tax liability will reduce profits; to earn the same profits net of VAT as he did before, the trader has to have a large increase in turnover, which, of course, is unlikely. Under these circumstances, small traders are likely to suppress sales figures that take them above the limit, and larger traders are likely to perceive the system as unfair and feel further penalized.

Thus, to develop a fair, and comprehensive set of criteria by which to base the definition for a small-firm, we must include sales, number of associated firms, and a measure of value added itself. Indonesia has a specified annual turnover limit and (about US$ 19,000) a capital limit (US$ 8,000) — based on 1986 exchange rates. Firms must meet both requirements to be exempt. Austria uses all the three criteria noted above: a turnover limit (US$ 205,886); an asset limit (US$ 52,940); and a profit limit (US$ 114,700). Columbia outdid the rest, moving to a total of four criteria: a legal identity, net income, gross assets, and a limit on the total number of establishments. In Morocco, while the only criterion is the turnover, the limit differs according to the firm's function.

Limits of this type are nearly always controversial. Producers will always try to manipulate borderline cases to escape taxation. Although each country differs in its policy, the most popular criterion is the turnover of the firm.

It is evident that there is no single elegant solution to the issue of exempting small firms or entities. However, as stated the need for a system to exempt small enterprises is imperative.

(ii) Financial Institutions

The financial sector is often perceived as being highly renumerative and thus worth including in the revenue base. Arguments for exemption do not meet most of the criteria outlined at the beginning of this section. Financial services cannot be considered "meritorious" goods, nor are they consumed largely by low-income groups warranting exemption on grounds of progressivity. The fact remains that despite any arguments for its taxation, its taxation is administratively extremely difficult, given existing levels of information processing, and accounting in even the most sophisticated banks.

Primary in the debate is question of what constitutes value added in the financial sector i.e. how does one determine the tax base. Charges for services often do not reveal their full price, except for specific services such as the provision of safe deposit vaults and traveller's checks. The charges for many services is reflected in the interest rates charged on loans and paid to depositors. Thus, the difficulty lies essentially in distinguishing a tax upon the financial services from a tax upon the return of the capital.[50] Taxation of the full amount of interest charged would amount to taxing the depositors for the use of their capital, in addition to the value of services rendered by the financial institution.

There are however, a number of reasons for wanting to tax the "explicit" service component of the overall package provided by financial institutions. By the very nature of business, financial institutions consume and pay tax on a range of inputs - office equipment, computers, stationary, telephone charges, rents, and electricity. As a result of being exempt, these institutions are forced bear the burden of this tax, without being able to claim it as a credit against an output tax. Of course, the tax burden will be largely borne by consumers who pay higher interest rates. If the financial institution were made taxable on services, and allowed to claim credit for input VAT - the FI's will be inclined to unbundle or separate the cost of services form the margin they build into interest spreads. By paying output tax on services provided, the FI's can reduce the spread in their borrowing/lending interest rates. The advantage to the government is that coverage is broadened by including financial institutions in the tax net. Consumers in turn will now be able to claim a credit for VAT paid on bank services. There will thus be additional pressures on financial institutions to unbundle their services, and as matter of fact, pressures to increase the size of the explicit service component, so that their business customers can subsequently claim credits.

On a broader economic neutrality dimension, this would have uniform applicability to financial institutions and non-financial firms providing financial services.

Very few countries have attempted to tax the financial sector using the VAT. Israel tried from 1976 to 1979, and now uses a tax which is distinct from the VAT. It is essentially an addition type of VAT base, with the tax being imposed on wages and profits. To effect complete integration of the financial sector in the VAT system credits should be generated by the payment of tax. Additionally, the invoice chain should remain unbroken to facilitate common administration.

The most persuasive argument against a VAT on the financial sector is the cost of tax compliance. There are two facets of this problem; firstly, the cost imposed on the financial institution in determining its tax liability can be a substantial portion of the tax revenue generated; secondly, the cost to the tax administration in monitoring and auditing the accuracy of the return can also diminish the net benefit. Based on similar reasoning, the sixth directive of the European commission provides that insurance services are to be exempt.[51] New Zealand and Israel are the only two countries that tax general insurance (life insurance is exempt). New Zealand has however abandoned the thoeretical nicety of determining the true value added by the insurer's intermediation activities.[52] The full GST rate is multiplied by the premium and the tax is then remitted to Inland revenue. If the payer is subject to GST, he claims an input credit. When the insurer pays a claim, the amount is grossed up the GST and the insurer claims an input credit for one eleventh of the amount, even though no invoice showing GST has been received.[53]

The globalization of financial markets continue to pose several other challenges to the tax authorities. They relate to the allocation of profits when funds are borrowed in one jurisdiction and lent in another, when securities are bought in one jurisdiction and sold in another, or when financial institutions resident in one jurisdiction transact with a branch or subsidiary in another. Such problems, while in concept applicable to transactions in any goods or services, are particularly acute in the case of financial services which do not involve any material use of "real" resources or factor inputs and cannot be measured as a basis of income allocation.[54]

(iii) Real Property Construction & Rental

Housing, while having the characteristics of a tangible physical good presents unique features of both economic and administrative complexity. Firstly, if all housing were rented, the taxation would be straightforward. But, a segment of housing is owner-occupied and changes hands infrequently. The absence of regular market transactions between taxable parties can make this tax difficult to administer. Second, the same real estate can be used for the production of goods and services by taxable firms or for final consumption. Thirdly, real estate is used for both consumption and investment. An ideal value added tax would distinguish between the two. Finally, the construction industry by its very nature presents special difficulties primarily because it produces goods (buildings) for both capital (business) purposes and consumption (housing) purposes.

For the maintenance of a broad base, neutrality and simplicity, it is desirable to treat this sector the same way as any other business. This industry is also particularly complex, consisting of contractors, subcontractors of varying sizes, contractual obligations, and organizational characteristics. The problem is further complicated when governments seek to hold down the tax element in housing for social reasons. To the extent that taxable services and housing are substitutes, by keeping housing tax free, there is an incentive to substitute housing services for other forms of consumption.

A theoretically elegant solution has been proposed by Conrad, in the form of the Stock-VAT, or the S-VAT.[55] The S-VAT has one major advantage in that it does not change the incentive for the allocation of real estate between owner-occupiers and renters or between residential and nonresidential use. Under the S-VAT, the first purchaser after the VAT is introduced pays VAT on the entire capital value of the sale. In effect, this one-time payment is a prepayment of all future taxes regardless of whether future use is for investment or consumption. When the property is re-sold at some future date, the seller will be able to demand and receive from purchasers the remaining balance of the prepaid taxes. The allocation of residential property between owners and renters would not be affected. Renters would still pay the value added tax over the period of the lease - technically repaying the owner for prepayment.

The main drawback with this proposal, in the absence of a credit system, would be transactions between registered payers of value added tax or between registered taxpayers and consumers. A credit system can easily be instituted to solve this problem.

The administration and collection of this tax would involve two steps. First, when the real estate is sold, the title search (or deed) should contain information on whether a value added tax has ever been paid. No subsequent record is necessary. If the tax has never been paid the in the past, the tax is paid on this transaction independent of the tax status of the buyer or seller. If tax has been paid in the past, the tax status of the seller must be identified. If the seller is a payer of value added tax, the government collects the funds and keeps them; if not the government collects the funds and gives them to the seller in the form of a refund for prior taxes.

Self construction will continue to remain a problem with the S-VAT, as with any other form of value added taxation. However, it is worth noting that the value of labor is captured in the price of housing, and will be taxed when the proceeds are realized.

One method of taxing the sector partially is to tax the purchases of contractors rather than the entire contract price - but this is not suitable for business purposes. Some countries attempt to circumvent the problem by offering special concessions depending on the type of work i.e. construction, repairs, maintenance, fixtures etc. Experience in Sri Lanka, shows that the ambiguity of these definitions can result in litigation and revenue losses.[56]

The UK has found that often taxpayers attempt to gain the advantages of the zero-rated construction of repairs and maintenance on work that should be liable to a normal rate.

Administrative rulings and listings of such transactions cannot be comprehensive. Nor are large-scale physical inspections feasible. In such cases the tax auditors often find the matter not worth pursuing and accept the return, as filed.

Related to this issue is the situation of the same builder accepting various types of work. The builder will himself find it difficult to maintain separate accounts when common labor, inputs and equipment are used for all activities. Additionally, the builder's objective is to maximize his profits, not to assist the tax administration. A practical way to handle the problem is to compute the full value-added as if due and to allow a deduction in proportion to cost of tax favored construction, to total value of construction during the period. This method will roughly compute the value added by both sectors of the business individually.

The Belgian solution has been to make the purchaser of a house liable for VAT in the event the builder fails to pay the tax. This ensures that the purchaser will not act in collusion with the builder to avoid VAT. However, the builder must add the VAT to his selling price, collect the money and disappear. Must the purchaser pay again? If purchasers are required by law to withhold the VAT when the purchase price is paid and remit it directly to the Tax Department this problem will not arise. A clearance certificate for VAT payment should be a precondition for the issuance of a permit for occupancy.

Sometimes private citizens build their own homes, acting as their own general contractors, purchasing inputs (materials and labor). In developing countries individuals will at times build the houses themselves, or use community help without paying renumeration. Administratively, this can be a nightmare to register, leave alone the issue of collection.

There are also timing problems related to the input tax credit. Housing might take years to complete. If credits are delayed till completion, cash flow problems can be generated.

The practices adopted by countries is as diverse as the issues discussed. Optimal solutions depend largely on the economic level of the nation, and administrative resources. Most developing countries prefer to tax building inputs alone.

(iv) Treatment of Government Entities:

Government organizations account for a substantial amount of consumption expenditure in most nations. There is an inclination to exempt government entities from output taxation, on the grounds that it would merely constitute a transfer within the same entity. While this is true in a very aggregate sense of the term, the inefficiencies that can result from exempting government entities, do not justify this gross simplification.

Unless Government operations face the same prices, including taxes, as the private sector comparisons of the size of activities is distorted. In particular if the public sector can relieve itself of taxes its true size and influence on the rest of the economy is understated.[57]

Additionally, competition between the public and private sectors gets seriously distorted or biased against the private sector in the provision of goods and services. Most European VAT regimes, in an attempt to reduce distortions in competition between the public and private sectors, essentially ring fence the trading activities between public sector organizations. A supplementary issue is one of self-provision of certain services. Entities that are tax free are drawn towards the self-provision of services like laundry, cleaning, and transport. This can result in the inefficient use of resources, and disadvantage independent producers of such services.

From the administrative perspective, exempting public bodies necessitates the determination on a case by case basis of which functions constitute "activities of a commercial nature", and the extent of these functions. The wide range of interpretations that can be ascribed to the term "activities of a commercial nature" and the difficulties in allocating costs (and even revenues) between commercial and non-commercial activities imposes significant costs both on the Inland Revenue Department in administering the tax and the public body in complying.

One of the primary determinants of a elastic source of revenue is that it be comprehensive in its coverage. If the VAT is to be a comprehensive tax applied to the widest range of goods and services the exemption of the public sector detracts from this goal. By taxing Government consumption and production for consideration the broad-based approach is reinforced. If the Government exempts services which it consumes a strong case can be made for applying concessions to other forms of supplies and therefore weaken the commitment to the broad-based approach.

The New Zealand Approach to the Taxation of Government Entities

The New Zealand GST represents a perferred model for a VAT with comprehensive coverage and also for its treatment of the government consumption and public sector entities. It treats all government departments, local authorities and other public bodies as suppliers of goods and services to both the private sector and the crown. Distortions caused by second best approaches like the arbitrary ring fencing of trading activities are avoided. It also ensures that no unrelieved tax enters into the final price of goods sold in New Zealand or exported from New Zealand. Finally, in areas where public bodies compete side by side with private firms, such as in refuse removal and gas supply, neither party obtains a competitive advantage (or competitive disadvantage) from the application of GST.

Administratively, public bodies are subject to the same requirements as other taxable traders regarding returns and records. The value of supplies to the private sector is measured by the revenues received by way of fees and charges. The value of supplies to the Crown i.e. Government is represented by the Crown's contribution towards the operating expenditure (i.e. the cost of providing goods and services to the Government).

The administrative benefit of this virtual 100 percent coverage with no exemptions, is that a government entity will not have to distinguish between taxable and exempt supplies made or received. Thus there are no complex issues of apportionment.

<u>Taxation of Government Entities — Paving the way for Privatization:</u>

In a number of developing countries there is a growing trend toward the privatization of state-owned-entities, and services. Many of the problems faced in privatizing some of these enterprises, is that they have operated in environments characterized by being zero rated or in some way being able to sell free of value added taxation. In this context when a firm faces the prospect of privatization it may also have its goods subject to VAT, implying a substantial increase in its sales prices. If when instituting a VAT (or VAT reform) the coverage is expanded to cover all public sector entities, subsequent privatization of some of the commercial ones will be somewhat easier, as the act of privatization will not involve a change in tax status.

IS THE VALUE-ADDED TAX A REGRESSIVE TAX?

The most frequent objection to a value-added tax, is that it would be unfair to lower income individuals and families. In other words those opposed to a VAT attempt to garner support by describing the tax as regressive.[58] A valid starting point for the discussion is to define the term "regressive". A regressive tax, broadly defined, is one in which the poor pay a larger proportion of their incomes in tax than the rich. Income is essentially composed of consumption and savings.

Income is usually considered the most appropriate measure of taxpaying ability, but consumption is more suitable in assessing the relative incidence of a broad based consumption tax such as the VAT. More importantly, consumption forms a larger proportion of the incomes of lower-income groups i.e. the rich save more and consume less of their overall income, relative to the poor, who consume almost their entire income.

Most analysis of tax incidence focusses on annual consumption or income, wherein lies a major limitation. From this perspective in is not particularly important whether we look at consumption or income in the analysis — attention is being drawn to the distinction between annual and lifetime tax burdens. As mentioned, the view usually held is that taxes like the VAT are regressive. However evidence for this view can depend largely on the time horizon used in incidence analysis. According to Joseph Pechman

"...whether regressivity of [indirect] taxes with respect to income would remain for accounting periods longer than one year is not known. It seems clear, however, that the regressivity shown at the lowest income level would be moderated, if not completely eliminated, over the longer period."[59] Basically, the thesis is that household income when measured over long horizons is less variable than annual household income. This implies that low-income households in one year have some chance of being higher-income households in other years. Thus, even if the share of income consumed by the lowest-income group is higher than that for higher-income groups, taxes on consumption may be less regressive than calculations based on annual income suggest.[60] While lifetime incidence studies are scarce to begin with, almost none are available on developing countries. In Canada it was found that the average burden of the sales and excise taxes for the lowest-income decile falls from 27 percent when annual income is used to 15 percent with lifetime incidence.[61] The advantage of lifetime incidence analysis over annual calculations is (1). lifetime incidence incorporates predictable lifecycle patterns in earnings, asset accumulation, and consumption, yielding more sensible inferences with respect to tax burdens; (2). lifetime incidence averages over many years, reducing the importance of variations in annual earnings due to unemployment or changes in family status. In effect, calculations based on annual income may provide particulary unreliable guidance on a central tax policy issue — such as regressivity.

A value-added tax can be regressive with reference to consumption only under a limited number of circumstances - a single rate tax with no zero rates (except for exports) and few exemptions. Of course these circumstances are unlikely to be encountered in practice, as a any VAT will have a large non-taxed base e.g. informal sector production of goods and supply of services, small-holder agriculture etc. A VAT can however impose a less than acceptable burden on the better-off if the items consumed by higher income groups go untaxed. This often results when agriculture and manufacturing are taxed, but items like electricity, telephones, financial services, entertainment etc. are not. While certain services might be excluded from the net for administrative convenience, most of the goods and services consumed by the higher income groups should be taxed. Apart from promoting progressiveness, this will make the base more comprehensive with associated revenue and elasticity gain.

In analyzing the degree of progressiveness, or designing a progressive tax, certain micro-level distinctions are important. The existence of formal and informal sectors, as well as, the element of market and non-market time must be recognized.

Distinction Between the Formal and Informal Sectors

It is useful to disaggregate the consumption element into those items that are taxed and those that remain outside the tax net. Individual consumption items should be examined on the basis of whether they are produced/provided by the informal or formal sector. In general, the informal sector is free of tax, whereas, the formal sector is by definition taxed.

The importance of this distinction is that effective VAT rates depend crucially upon observed differences in consumption patterns. Though a commodity may be classified as taxable, the actual tax content will differ substantially between highly monetized urban areas and essentially rural subsistence sectors of a developing economy. Rural families usually purchase most of their goods from local small-scale (informal) producers whose output escapes taxation, while urban families are likely to buy more processed goods sold through outlets that tend to be taxed more effectively. Obviously, patterns of VAT burden will differ accordingly.

Distinction Between Market and Non-Market Time in the Consumption Basket

This distinction is fundamental to the more commonly used examples delineating processed and unprocessed food. Similar to the previous case of formal and informal sectors; non-market time is untaxed, and market time is by definition taxed.

Poorer consumers substitute substantial amounts of non-market time in lieu of taxed inputs. For instance, lower-income households expend more time in cooking their purchases of basic unprocessed food than do higher-income households, who prefer to buy time-saving ingredients which have undergone some processing e.g. dressed chicken in lieu of live chicken. In many countries taxes on clothing is considered regressive. However, poorer households tailor most of their clothes either by themselves, or purchase untaxed tailoring services within the community. Laundry services once again are used by higher-income households — the poor use their own non-market time as a substitute for these taxed services. House construction, painting, repairs etc. are usually undertaken on a self-supply basis by the poor, wealthier households hire contractors to do the work.[62]

The economic explanation for such seemingly natural behaviour is that the low-income are relatively more productive in market activities with respect to their wage than are the high-income earners. A lawyer making $100 per hour, is <u>relatively</u> less productive cleaning his home than his maid who earns $10 per hour. This helps explain why a poor household would do most of their cooking from basic unprocessed inputs, whereas, a rich household will prefer purchasing processed inputs to reduce the amount of non-market time — or in other words, increase their relative productivity.

<u>Progressivity through Tax System Design</u>

A few of the commonly employed measures to increase progressivity are discussed below.

(a). Exemption of food and other necessities

Food purchases as a percentage of income tends to decrease as income levels rise. It follows that households at the bottom of the income ladder spend a larger share of their disposable income on food. Consequently, most countries completely exempt food for distributional, as well as, administrative reasons. Farmers are difficult to handle as taxpayers. Exempting food alone and taxing agricultural inputs such as fertilizer, insecticides, seeds, etc. does not totally eliminate the burden of the tax. Many countries thus exempt both food as well as agricultural inputs.

Distinguishing between processed and unprocessed[63] foods also helps to limit the exemption to items consumed by low/middle income groups. It is in theory, possible to introduce an element of progressivity by exempting only unprocessed foods. In practice this is difficult to administer effectively, as the distinctions are at times difficult to make and enforce. From a practical standpoint the easiest distinction one can make is to tax any food that comes out of a registered taxpaying production facility e.g. canaries, processing plants, soft-drink bottlers, large bakeries, ice-cream plants, candy factories etc. More generally have a manufacturing stage tax. Though some small-scale processing of similar food products will be occuring, they will be mostly below the taxable threshold and hence escape the tax net anyway. Thus, rather than get into complex schedules and pages of legislation defining processed and unprocessed foods, one can exempt food in general, and tax the output of large scale plants, who would be inclined register as they probably use a large share of non-food inputs (i.e. electricity, machinery, packaging materials etc.), and therefore be eligible to claim credits for input tax.

Basic nutritional studies show that upper income households substitute more processed food for other inputs like labor and unprocessed food. If the above guidelines are adopted the degree of progressivity can be increased without creating adminstrative or legal complications.

The Dominican Republic exempts all unprocessed food, some processed items like pastes and sauces, and agricultural inputs.

(b). Provision of a Refundable Credit

Another alternative, used by several developed states, is to provide a credit against the income tax for an amount which represents the VAT paid on the consumption of goods and services necessary to maintain a minimum standard of living. The objective is to eliminate the VAT from an essential level of consumption. If the available credit exceeded one's income tax liability, it would be refunded in cash.[64]

The Turkish authorities use a variant of this system. Consumers must present receipts showing purchases of "eligible" items (food, clothing, consumer durables, residential fuel, education, transport) on a monthly basis. They then get VAT rebates on the sales purchase price based on a sliding percentage scale.[65] The complex system seems to encourage compliance and should help lower-income households, but the cost is huge. The total VAT revenue represents some 24 percent of Turkish tax revenue; the consumer rebates repay about 12 percent.[66]

Multiple rate structures have been used in an attempt to impart a degree of progressivity to the VAT. Usually, food, clothing, and select services considered important in the low-income consumption basket are taxed at a lower rate. Experience has shown the multiple rate system requires high compliance and administerative costs to function.

Despite the existence of these measures to dampen any regressivity in the VAT structure, there are more fundamental questions that need to be answered.

Firstly, is the VAT more regressive than the alternative? The alternative is of often the sales tax, tariffs, or other form of turnover tax being replaced, which is undesirable for reasons of economic neutrality. In this context it is revealing to examine the impact of not having a VAT.

Secondly, is the VAT necessarily the appropriate instrument to provide progressivity in the system. Tait argues that the VAT is intended to be a neutral, efficient, buoyant revenue raising tax. It is not designed to correct for income or wealth inequalities; other parts of the system are supposed to do that; like the personal income tax.[67] However, in developing countries the income tax base is so small as to be totally ineffective.

It is felt that the tax system in general and the VAT in particular can be made more progressive if countries do use tax expenditures judiciously and with moderation.

Policymakers considering the adoption of the VAT are at times interested in studies providing numerical results on who bears the burden of the tax. Incidence studies use economic theory and provide best guesses about the incidence of various taxes among such broad groups as consumers, workers, owners of capital etc.. At times the level of dissaggregation can be carried further delineating consumers of particular products, workers in a given industry, or corporate stockholders. It is easy to see the potential usefulness of such information. Unfortunately to be indicative of reality, the quality of the data and assumptions underlying their use are important. Most developing nations are unable to provide the requisite data to make any such analysis meaningful. More work needs to be done in this very important area. In fact, further work on the distributional impacts of taxation will depend entirely on such studies. In their absence normative judgements will continue to be made, with questionable influence on tax policy.

Part II

VALUE ADDED TAX REFORM IN THE DOMINICAN REPUBLIC

INTRODUCTION & HISTORICAL OVERVIEW

The Dominican value added tax, called the *Impuesto a Las Transferencias de Bienes Industrializados y Servicios* or ITBIS - the tax on the transfer of goods and services, was enacted in January 1983. It became effective in November 1983.

Unlike the experience in most countries where the value added tax usually replaced a cascading turnover and/or manufacturers' sales tax, the Dominican Republic did not have a sales or turnover tax in place. The ITBIS, was therefore to be an entirely new source of revenue. It was designed to strengthen the tax structure by way of easing the burden and, in effect, the excessive reliance on customs duties. In part this change reflected IMF pressures for a tax reform (Meyer and Due, 1988). A further motive was the belief that information contained in the ITBIS return would be useful in cross checking reported incomes, an objective that has yet to be realized.

Although, strengthening and stabilizing the tax system did imply an elimination of a plethora of existing indirect taxes, this was not done. Many distortions thus remain in the system in the guise of excises, and special levies. Consequently, the ITBIS viewed in isolation has its many advantages which have to a significant extent been diluted by the prevailing tax mix.

Originally, the ITBIS was conceived as a broad based, multistage tax extending to the retail level. It was to be applied on most imports, domestic manufacturing, the commercial sector, and selected services. For administrative ease, and to exclude very small enterprises, a minimum threshold of $RD 60,000 in annual gross sales was planned. Real estate, and financial services were not to be part of the tax coverage.

The original law[1] provided for a uniform single tax rate of 6% - a rate that has remained unchanged to this date. On a comparative scale the rate is at the low end of tax rates prevailing around the world.

Opposition from the commercial wholesale and retail sectors, however, forced modifications before the tax came into force. On becoming effective in November - only those commercial firms with receipts in excess of $RD 300,000 were required to register as taxpayers. This was accomplished through a decree by the executive

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[1] Republica Dominicana, Ley No. 74, Del Impuesto a las Transferencias De bienes Industrializados (ITBI), January 15, 1983.

power, though the law itself remained unchanged. More fundamentally, the principle of "value added" was rejected in favor of an ad-valorem tax on their purchases during the year. This levy on gross purchases became the de facto VAT or ITBIS on the commercial sector. Though it was presumed to be temporary, a later effort by the Government to reinstate the law in 1986 failed.

The Dominican experience is not unlike the administrative and political dilemmas faced by other nations in dealing with the commercial sector. In many ways the Dominican compromise typifies changes Governments are forced to make under pressure.

In 1989, the tax on the wholesale and retail sector was modified so as to be computed on the basis of sales as opposed to purchases. The threshold for the commercial sector was also raised to $RD 600,000.

STRUCTURE OF THE DOMINICAN ITBIS

(A) Coverage of Goods & Services

The tax as it stands today has relatively few official exemptions. The major exemptions from the tax are basic food items, medicines, agricultural inputs, petroleum products and electricity sales. The exemptions are slightly different for domestic and imported goods.

Exemptions of Imported Goods & Goods Produced in the Country:

1. Products of the primary sector (agriculture, cattle raising, lumbering, hunting, fishing, mining) when no processing has occurred, except that necessary to conserve the product in its natural state e.g. frozen meats remain untaxed.
2. Milk in all forms, poultry and eggs.
3. Sugar, cocoa, coffee, bread, edible oils, condiments, legumes, cereals, salt, honey,
4. Books, periodicals, paper for periodicals.
5. Soap, toothpaste, matches.
6. Medicines for humans and animals.
7. Fertilizers, seeds, animal feeds, fungicides, herbicides, insecticides.
8. Petroleum and petroleum products.

Exemptions of Imported Goods Only:

1. Imports by the public sector when the output is exempt.
2. Inputs, raw materials, and packaging for exempt goods.
3. Equipment and Machinery for agriculture, industry and mining when free of customs duties.

(B) The Input-Credit System

With the exception of the ITBIS tax on the commercial sector, the tax is designed to be administered using the credit method. In using the credit method, enterprises apply the 6% tax rate to their total sales of taxable goods, and then subtract taxes paid on purchases. The tax is imposed on a destination principle - with exports being zero-rated but imports being fully taxable.

Input credits are disallowed for taxes paid on capital goods. This amounts to the double taxation of capital - once on the purchase price of the capital item, and next, on the sales price of the taxed commodity that is produced by the capital. This results in a bias against investment.

Capital or investment bias, is a fundamental structural concern often debated when introducing a VAT. It must however, be kept in mind that an input tax credit for capital purchases by producers can be given under most sales tax systems. Thus, the VAT is not the only means of eliminating the anti-capital bias.

Another feature of the Dominican ITBIS input tax credit system is that no cash refunds are made. Occasions for cash refunds arise in the case of exporters - who despite being exempt from output tax, still pay input tax, consequently, accumulating excess input credits. Regulations permit the credit to be carried over to future periods. Exporters have also been permitted to deduct ITBIS tax credits against income tax liabilities. Other firms such as producers of exempt commodities may only deduct ITBIS paid on purchases from income, while computing taxable income.

The law requires that the tax be quoted separately on the invoice on sales to registered firms. On sales to final consumers, however, the administration allows a single tax-included price to be used. The retailer may show the tax separately at his option. Insisting on separate quotation for tax on sales between registered firms has obvious administrative merit , since it serves as the basis for determining the amount of input tax credit, without factoring out the tax amount for subsequent computations. It also provides a transparent audit trail for control of the various firms in the production chain. On an invoice for final sales, separate quotation of the tax is technically unnecessary. Consequently, most nations do not require and some categorically prohibit it. This is because there is a political benefit in keeping the taxpayer unaware of what he actually pays as tax

(C) Base of Tax on Imports

In the case of imports, ITBIS is levied on a commodity value that includes -

- The customs value of the goods, which is normally the cost and freight i.e. CF price, converted into $RD using the exchange rate. All the way until the end of 1990, the Dominican Government used a "special" exchange rate for this valuation.[2] This special exchange rate was often overvalued, with different rates being used for each class of goods. This

[2] Until September 1990, the Government used a schedule of exchange rates depending on the good being imported. The degree of overvaluation of the exchange rates used ranged from over 200% to a few cases when the exchange rate used was close to the market-clearing level.

practice had been in use for many years for all imported goods for the computation of the excise and import tariff base.

- Customs duty and other taxes payable at import. These taxes are computed based on the fob price of the import.

For administrative simplicity the freight margins used for the calculation of the ITBIS can be approximated at 15% of the fob values for imports. Though imperfect, problems like underinvoicing the freight component can be eliminated.

The proposed amendments have indicated the need to include insurance in the import VAT base. Though insurance was conventionally used in determining the tax base, it is not specifically stated in the legislation.

The VAT due on imports is due at the time of importation or when the goods technically cross the border. Control is better at the ports, customs officials levy the VAT at the same time as other formalities are completed, and goods are not physically released until the tax is paid.

(D) <u>Treatment of Exporters and Duty Free Zones</u>

Firms in duty free zones may import goods free of tax and are free of tax on their export sales. This provision extends to firms outside the duty-free zone as well who produce solely for export. Domestic sales by a firm operating in such a zone are treated similar to imports and taxed accordingly. Registered entities with export sales in excess of 70%, may import free of ITBIS, collecting and paying taxes on any sales made within the Dominican Republic.

REVENUE HISTORY & PERFORMANCE OF THE ITBIS

(A) <u>The Taxpaying Population</u>

As of July 1989, there were 4621 firms and 1216 individuals registered as ITBIS taxpayers (Secretario Finanzas, Dec 88/Jul 89). Of these only 3000 were classified as being active taxpayers. A significant portion of the revenue i.e. 70-75% was being collected from a group of about 200 enterprises.

(B) <u>Revenue Performance</u>

Contribution of ITBIS to total government revenue has been encouraging. From the period 1984 to 1990, ITBIS collection has grown from around 7% of total revenue to above 13%. It is interesting to note the composition of ITBIS revenues in this period. The importance of ITBIS on imports has dropped from being over half of total collections to about a quarter (Table 2.). Two factors explain this change in composition - (a) the equalization of the administrative exchange rate used to determine the base of the ITBIS on imports, and the market exchange rate; and (b) a concerted broadening of the range of domestic goods and services that constitute the base of the tax.

Since the inception of the ITBIS the Dominican Government has been using the schedule of special exchange rates, historically employed to value the import base. The most direct link between the real value of the exchange rate and the level of taxation is the relationship between the level of the real exchange rate and the base on which ITBIS on imports (or import levies in general) are calculated. Given the official domestic volume of imports coming through official channels, the real value of imports, measured in domestic prices, falls as the exchange rate appreciates.

As noted the exchange rates employed to value imports were often overvalued in relation to the market. This led to an implicit erosion of the import VAT base. Consequently, the revenue from ITBIS on imports grew slowly. In fact the growth in revenues was negative in real terms with rising inflation.

The exchange rate policy underwent reform in September 1990, with a move towards market determined exchange rates. Table (3) shows the impact of this change clearly. Within one month of the change, in September, import ITBIS revenues rose by 50%.

A taxonomy of base broadening efforts are indicative of tax policy successes of the Government since 1984. The initial law was extended in 1985 to include a range of services such as hotels, telex and cable TV.[3] In April 1986 the telephone services were

[3] Law No. 304, September 29, 1985.

TABLE 2.

REVENUE HISTORY OF ITBIS & TRADE TAXES - 1980-90
(in million Dominican Pesos)

	ITBIS IMPORTS	ITBIS DOMESTIC	TOTAL ITBIS	Other IMPORT TAXES	EXPORT TAXES	TOTAL FISCAL REVENUE
1980				227.77	59.28	1,063.79
1981				183.79	87.95	1,087.41
1982				174.89	10.32	1,024.38
1983	3.81		3.81	236.95	6.43	1,172.60
1984	47.48	39.91	87.39	268.56	19.45	1,316.45
1985	81.67	73.89	155.56	423.07	40.06	1,910.38
1986	89.68	98.54	188.22	496.88	104.78	2,515.40
1987	168.78	148.75	317.53	887.67	77.57	3,085.36
1988	176.43	284.94	461.37	1,470.51	178.68	4,780.66
1989	172.19	472.81	645.00	2,045.46	128.69	9,661.33
1990	215.40	638.53	853.93	2,170.60	4.93	6,402.81

REVENUE PERFORMANCE OF ITBIS & TRADE TAXES: 1980-90

	% of TOTAL ITBIS IMPORTS	% of TOTAL ITBIS DOMESTIC	% of TOTAL REVENUE ITBIS	% of TOTAL REVENUE IMPORT TAXES	% of TOTAL REVENUE EXPORT TAXES	TOTAL REVENUE as % of GDP
1980				21.41%	5.57%	
1981				16.90%	8.09%	
1982				17.07%	1.01%	
1983	100.00%	0.00%	0.32%	20.21%	0.55%	
1984	54.33%	45.67%	6.64%	20.40%	1.48%	12.71%
1985	52.50%	47.50%	8.14%	22.15%	2.10%	13.67%
1986	47.65%	52.35%	7.48%	19.75%	4.17%	15.94%
1987	53.15%	46.85%	10.29%	28.77%	2.51%	15.79%
1988	38.24%	61.76%	9.65%	30.76%	3.74%	16.86%
1989	26.70%	73.30%	6.68%	21.17%	1.33%	22.79%
1990	25.22%	74.78%	13.34%	33.90%	0.08%	

Source: Government Statistics - Dominican Republic

TABLE 3.

REVENUE HISTORY OF ITBIS & TRADE TAXES - MONTHLY 1990
(in million Dominican Pesos)

	ITBIS		TOTAL	Other		TOTAL
			ITBIS	IMPORT	EXPORT	FISCAL
	IMPORTS	DOMESTIC		TAXES	TAXES	REVENUE
JAN	14.89	54.36	69.25	162.67	0.65	504.57
FEB	14.53	53.71	68.24	163.49	0.88	506.35
MAR	15.17	48.04	63.21	170.68	1.29	515.61
APR	15.38	51.94	67.32	173.30	0.51	606.84
MAY	18.56	52.78	71.34	193.64	0.26	547.20
JUN	18.12	51.93	70.05	190.78	0.21	619.99
JUL	19.64	46.38	66.02	217.22	0.04	644.32
AUG	21.89	75.10	96.99	224.41	0.21	641.03
SEP	18.31	74.36	92.67	231.64	0.16	594.20
OCT	27.40	68.68	96.08	228.61	0.37	548.39
NOV	31.45	60.82	92.27	240.56	0.33	674.25
DEC						
TOTAL	215.40	638.53	853.93	2,170.60	4.93	6,402.81

Source: Government Statistics - Dominican Republic included in the net,[4] followed by leasing and car rental services in October 1987.[5] Finally in 1989 - cigars, cigarettes, alcoholic beverages, and soft drinks were included in the tax base, as were all the packaging for these items.

Proposed structural and administrative reforms can potentially make the Dominican ITBIS the chief source of government revenue together with customs duties.

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[4] Law No. 15-86, April 15, 1986.

[5] Law No. 139-87, Article 1 (f), December 29, 1987.

APPROACH TO THE DOMINICAN ITBIS REFORM

The ITBIS as it stands today has a number of features that reflect fundamentally sound design. In stressing a systematic approach to the reform it is necessary to evaluate the ITBIS against the framework outlined in Section 2. As the ITBIS has been operational for the last 7 years, we have the benefit of an ex-post assessment of policy successes and failures. Furthermore, one can also get a sense of the political economy of reform, based on which workable strategies may be defined.

Timing is often a major consideration in most tax reforms. With a comprehensive reform of the tax system planned, far-reaching changes can be advanced with greater ease. This is important in the context of an overhaul of the administrative structure. Many administrative issues dealing with staffing, and the layout of functional procedures are closely connected to policy decisions underlying the structure of the VAT. It is usually best to carryout this administrative change in conjunction with structural change.

The reform of taxpaying procedures in particular have been identified as being important for the stabilization of the ITBIS, as well as for revenue gains. Taxpaying procedures include provisions specifying how taxpayers shall comply with their tax obligations, and the administrative structure governing the execution of responsibilities of tax officials. Amongst the ITBIS reform recommendations is that payments be collected and processed by the banking system.

The future development of tax administration lies in the use of strategic information processing. Emphasis is often given to the "systems" approach to tax reform. More simply this relates to the integration of the economic and administrative structures of the various taxes. Electronic exchange of information can facilitate this planned integration.

The subsequent sections are organized as follows.

- Notable Features
- Structural Defects
- Aspects of the Base Broadening Debate
- Discussion of reform recommendations
- Future revenue potential (with reforms in place)

NOTABLE STRUCTURAL FEATURES OF THE ITBIS

The Dominican ITBIS embodies a number of features which reflect good VAT design. In pursing a reform the positive aspects of a VAT provide a good starting point to define what has succeeded. Amongst them are:

1. <u>The Choice of a Single Tax Rate over Multiple Rates</u> -

   A uniform rate of 6% on all goods and services subject to ITBIS, has simplified both administration from the perspective of the government, as well as, minimized compliance cost to the taxpayer. Single rates greatly reduce the number of forms that need to be used, the format of the return, and the associated liability and credit computations.

   Related in some sense to the choice of a single rate, was the use of a fairly low rate. This provides political leeway to increase the rate to a suggested 10% level. This position is reinforced by the absence of any evidence that there would be any less compliance at the 10% rate compared to the 6% rate.

2. <u>Limiting the number of exemption:</u> Diverse exemptions have the undesirable feature of increasing administrative cost with zero or marginal revenue benefit. Because the tax that is paid at one level of manufacturing or processing is carried forward to the next level, the tax authorities are forced to evaluate

what is or is not being taxed at various stages. Of course certain exemptions can be justified from the administrative perspective alone.

The Dominican ITBIS has limited the number of **goods** exempt to unprocessed foods (some processed foods are exempt as well), and a fairly narrow group of other items. The exemption of food is amongst the most common exemptions worldwide. Agricultural inputs and machinery are exempt as well to minimize the tax burden on food to the greatest extent possible. Thus, barring a small amount of tax embodied in few non-exempt inputs, food except for restaurant meals in larger establishments is almost completely free of any tax. Administratively this is both pragmatic and cost effective.

Exemptions as pointed out attempt to meet certain social goals that may or may not be clearly articulated. Indicative of such motives is the exemption of printed matter (newspapers, books, periodicals) both imported and domestic, and the inputs such as paper.

3. Gradual broadening of the base Since its introduction in 1983, the ITBIS base has been steadily broadened to include previously exempt goods and services. This has been particularly true in the case of services. The reason why this broadening has been phased as opposed to contemporaneously introduced are difficult to pinpoint. The government could have felt that gradual broadening would dampen the resistance

to the new tax. Alternatively, there is also a notion that gaining administrative expertise with the tax should precede expanded coverage. In the Dominican Republic where the ITBIS was an entirely new tax, this sentiment may have been more important. Either way, the fact that the government has displayed this commitment is a policy success in its own right. The expansion of the VAT base has contributed to increased elasticity of the revenue source.

STRUCTURAL DEFECTS & DEFICIENCIES OF THE ITBIS

The ITBIS in force in the Dominican Republic has many features that are not consistent with a desirable VAT structure. Some in particular need immediate attention, while others can be rectified over a preset time schedule. They include:

1. Absence of a Cash Refund System: The primary structural defects of the ITBIS arise because of the Government's reluctance to pay cash refunds to registered taxpayers who have accumulated more tax credits from their purchases of taxed inputs than the tax they owe on sales. With the decision to avoid a refund system the government has perhaps been lead to incorporate other distorting features in their design of the ITBIS. Examples include: the policy to provide no relief for tax on capital equipment purchases; no cash credit being given to exporters who have a surplus of ITBIS tax credits in a period.

   To reduce the incidence of the firms being unable to absorb their unused ITBIS tax credits, it has been necessary to exempt certain imported inputs from ITBIS when these inputs are being purchased by firms who export 70 percent of their production. This provision adds a great deal of administrative complexity to the tax, and increases the opportunity for evasion.

For enterprises selling goods that are exempt from tax, the ITBIS tax paid on purchases can be deducted as an expense for the calculation of taxable income for income tax purposes.[68]

If the aredit balances are of a temporary nature, the problem is easy to solve; they will be offset by debit balances in a relatively short period of time.[69] In the case of exporters, credit balances are not only created, but naturally tend to keep growing. A VAT is intended to be a tax on consumption and not a tax on business. Failure to provide timely refunds in effect alters the nature of the VAT by making it, in part, a tax on business.

To operate a VAT system that will support a policy of promoting manufacturing exports, it is very important to have an effective and efficient system for issuing refunds to taxpayers who have an excess of tax credits. No country to date has been able to operate a VAT in a manner that does not hinder exporters, unless a system of cash refunds is implemented for exporters.

One of the solutions, albeit second-best, is to permit those with accumulated credits to use the balances against other tax liabilities. This is in effect what is being done in the Dominican Republic, where some companies have been allowed to use their ITBIS credits as withholding payments for the prepayment of income taxes during July and November of each year. In principle it should be allowed, but the administrative dimension can be hampered without a streamlined system of cross-matching ITBIS and income tax returns. Presently no such system is in place. Even if this can be justified, a closer comparison with a regular cash refund system needs to be carried out.

A variation of the above system is to permit the free transfer of these credits to taxpayers with VAT liabilities. The credit is thus in effect converted into a transferable fiscal note.

The Bolivian Government has used a scheme of transferrable fiscal notes. Here an exporter is given the face value of his credit in the form of negotiable instruments which can be freely traded. Thus he is able to sell the note to a person with a ITBIS tax liability. Experience has been shown that there has been considerable falsification of these fiscal notes - a usual problem in other countries with such notes.

If a system of fiscal noted is to be continued, then a system of control should be instituted that is exactly the same as would be used under a cheque refund system in an efficient administration. Each fiscal note should be uniquely numbered with the date of issue and the name of the taxpayer and taxpayer number to whom issued. The taxpayer who uses the fiscal note to cover a tax liability should also be identified on the canceled note. If a fiscal note is submitted to the tax authorities that is forged, then the credit should be denied to that taxpayer and the taxpayer should be subject to a penalty. Even if it is later found that the fiscal note submitted does not match any of the fiscal notes issued, or it was created by the overstatement of amount of tax credits to be refunded to the taxpayer, the credit should be canceled and the taxes and penalties collected from the taxpayer who submitted the note. In effect the taxpayer is held responsible for the integrity of the note.

It is not difficult to appreciate why a system whereby the government issued refund cheques will be preferable to a transferable credit note mechanism. The administrative resources needed to mail refund cheques will be equivalent to issuing fiscal notes. When compared to a credit note mechanism, a refund system avoids the loss of revenue that can arise from false notes. In terms of auditing, only the taxpayer claiming a refund need be closely monitored. If transferable notes are used one might have to audit or verify many more transactions, increasing administrative cost.

2. <u>Lack of a Zero Rating Provision for Domestic Producers:</u>

The Dominican legislation defines suppliers of goods and services are either taxable or tax-exempt. The zero-rating provision is restricted solely to exporters. The fundamental characteristic of an exemption is that it does not provide complete relief from the tax.

Producers of exempt goods and services do not get the benefit of an input tax credit. From the perspective of the government this might be interpreted as a way of imposing a some tax burden on these items, thereby not eroding the revenue base to the extent outright zero-rating would. In addition, it saves the enormous administration costs incurred with the zero-rating of goods sold in the domestic markets.

Under these circumstances a firm producing only exempt goods, is either denied a credit or allowed to treat taxes on inputs as a deductible expense for income tax purposes. Despite being allowed to claim the tax as a deductible expense, a portion of the tax[6] will still be embodied in the final goods. Firms that produce both taxable and exempt goods will attempt to claim the input ITBIS credit on exempt production, against ITBIS due on taxable production.

The other imperfection in the system is that the government at times permits firms to claim exemption on their inputs. This needlessly provides relief to these suppliers.

Export production has been rightfully zero-rated. This measure unfortunately does not allow exporters to claim a refund for their excess credits. It is from this perspective that the need for a refund system becomes all the more important.

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[6] (1 - Income Tax Rate) x Input ITBIS

3. <u>Non-uniformity in the exemption of imports and domestic production</u>

As we drew attention to earlier - the Dominican VAT is creditably characterized by very few exemptions. However, the list of exempt goods for domestic production are not identical to those for imports. In effect, a few items are taxable when imported but not when domestically produced; and a few are exempt when imported but not when purchased domestically.

Though this is a relatively minor problem, it is worth pointing out its disadvantages. These differences can distort preferences between domestic and import demand. Additionally there is the danger of reclassification of imports in order to evade the ITBIS. While the ideal solution or treatment would be to give no exemption on imported goods being used for domestic consumption or production, at the very least there are administrative arguments to eliminate the differences in the exemption schedules.

3. <u>No Credit for Tax on Capital Inputs</u>

The Dominican ITBIS is closest to a stylized Gross Product VAT, which disallows a deduction of input tax on capital goods and depreciation. This results in a strong discrimination against the use of capital goods. In many countries where a VAT was used to replace a sales tax that taxed capital, the substitution was in some sense motivated by a desire to favor investment over consumption. In the context of the Dominican Republic this seems to indicate an element of inconsistency with the role of the tax structure in long-term growth policy, It is only possible to conjecture what could have influenced this rather striking departure from the norm of a consumption tax base. Considering the budgetary pressures at the time of introduction in 1984, it was probably a notion that the revenue gain outweighed any loss in investment.

Many countries try to avoid giving relief for VAT on capital goods purchases, as it can result in a substantial drop in revenue.

In a number of European countries, the cost of relief for inventory stock and capital goods held at the introduction of the VAT were so high that relief had to be spread over a few years. The transitional non-budgetary issues that need to be addressed when capital relief is given, include; bottlenecks on capital goods orders, as companies postpone purchases till the capital relief law comes into effect. The transitional issue is but minor from the structural sense. The simplest means of dealing with this is not to give any credits for capital purchases prior to the date of introduction.

4. Treatment of Public Sector Enterprises:

The notion that having the Government pay tax amounts to the transfer of resources within a single entity, can result in a number of bad policy decisions. By treating the

Government and public sector entities any differently, administrative complexities and distortions are introduced. This is particularly true in activities that are not the exclusive preserve of the public sector.

In the Dominican ITBIS, the purchase of imported inputs by state-owned-enterprises producing exempt goods are not subject to the ITBIS, but if the same inputs were purchased domestically by these enterprises they would be subject to tax. The distortion and incentive are apparent. The same treatment is used for goods and services being procured by the Government for its various Ministries and Departments.

This tax-free treatment of imported inputs to the public sector makes it more difficult to administer the ITBIS with integrity, in addition to giving the wrong incentives to purchase imported goods rather than to buy local substitutes i.e. if the local supplier is not able to take a credit for the taxes paid on inputs used to produce the goods sold in the local market.

It is recommended that public corporations not be exempt on input purchases. A government entity that makes both taxable sales and exempt sales should be permitted to credit only input tax attributable to taxable sales.

Apart from problems with distortions in the purchasing behavior of public corporations, the differential treatment can also encourage inefficient management. For example when an enterprise has a cost advantage that is not available to other manufacturing entities, there is no incentive to pass the benefit down to the consumer. In effect the management is given this additional financial cushion to operate with, and associated inefficiency.

In setting guidelines on what should be considered as a taxable government activity, it is very easy to impose the "sales for monetary consideration" test. If a government entity charges a fee or charge for the sale of property and services it shall be considered a taxable transaction.[70]

The comprehensive treatment of government entities provides a model that can be adopted in whole or part by the Dominican Republic in the long run.

Pressure is being put on the ITBIS tax administration to not charge the tax on the sales of the telephone company which are made to the government. It would be a serious ,mistake to accede to this request.

ASPECTS OF THE BASE BROADENING DEBATE

1. Taxation of Petroleum and Petroleum Products:

Existing ITBIS legislation exempts crude petroleum and petroleum products from the tax base. The Dominican Republic imports all of its crude requirements, and also a significant share of its product demand. As with a limited number of commodities, petroleum represents both a intermediate input, and a consumption good. There is thus an economic neutrality argument for exempting business purchases of petroleum products from tax, and taxing only its final consumption. Presently, an excise called the "differencial" is imposed on crude, which is based on a weighted basket of crudes. Final products also bear an excise giving allowance for a reasonable refiners margin, with controlled market. To instill an element of progressivity - gasoline and aviation kerosine bear additional imposts.

The prevailing excise structure ensures that, business use of petroleum products bears the excise at purchase, and the goods so produced bear the ITBIS at sale. Thus there is a cascading of the tax. While, arguments may exist for taxing domestic use of petroleum, exports sales of manufactures will be adversely affected.

To assist in the true zero-rating of export production, and also to avoid cascading, the inclusion of petroleum in the ITBIS net is suggested. Experience has however shown that there is potential for abuse - businesses purchasing tax free products can dispense the same to their employees, and perhaps in the market, thereby benefitting from economic rent that should rightfully translate to government tax revenue. To prevent such abuse would impose an expensive auditing cost on the administration.

The ITBIS may be designed to exempt certain products predominantly used as industrial inputs eg. diesel, fuel oil etc. However, this could be construed as unfair by those businesses using inputs like gasoline i.e. transportation/distribution companies.

Based on these conflicting considerations, it is felt that it is preferable to use a modified excise tax for petroleum, rather than include it in the ITBIS net.

2. Taxation of Electricity Undertakings

Most countries that have a value added tax, levy this tax on sales of electricity. In the Dominican Republic electricity companies do not pay ITBIS, nor pay tax on final sales. Taxing electricity has many positive features as it is relatively easy to collect and tends to make the overall tax burden more progressive. Higher income individuals in developing countries spend a larger proportion of their income on electricity use than do those with lower incomes. If imports of petroleum products were taxed then the electricity company would receive a credit for the taxes it pays. Furthermore, industries that use electricity would in turn be able to receive a credit for the ITBIS.

PROPOSED REFORM RECOMMENDATIONS & LEGISLATION

The product of the economic, administrative, and operational investigation of the Dominican ITBIS system is a series of proposed changes, as well as a draft tax law. These changes range from relatively simple modifications of the structure like rate increases, to more far-reaching recommendations like the implementation of a scheme of tax collection by banks.

These recommendations are designed to move the ITBIS in the direction of conventionally accepted standards of a "good" value-added tax. One of the considerations in some tax sytem reforms, is whether the changes recommended should be phased in gradually or implemented contemporanouesly. Since the reforms proposed here are in a sense minor, it is suggested that they be adopted contamporaneously. It is useful to bear in mind that it is preferable to institute reforms of other indirect tax system in conjunction, to ensure that the effect is at least revenue neutral, if not revenue enhancing.

The principal recommendations are:

(A) <u>Implement a Scheme to Provide Cash Refunds:</u>

Earlier in this section the disadvantages of operating a system without a mechanism to reimburse those with excess credits was discussed. Apart from providing the basis for sound design, the refund system would help in rectifying some of the other ad hoc measures taken to compensate those who are in a position of excess credits. Thus from this stand point, a refund mechanism would be the first step to a more comprehensive reform of the system.

Amongst the refund schemes discussed in part I were options to permit offsetting VAT credits against income tax liabilities, and the use of negotiable fiscal notes. In assessing the administrative significance of these options it was found that the operational and hence net revenue impact was a major consideration. Fiscal notes in particular are beset with problems of forgery, and consequent revenue loss. Offsetting the credit against income tax involves the costs of cross-checking both input and output liabilities, as well as credits claimed on income tax returns. A straight refund system involving reimbursement via treasury cheques is thought to be the least expensive. This is because in addition to the standard cost of cross-checking input and output tax liabilities there is only the cost of mailing out refund cheques. Furthermore, the use of this option will reduce the potential for exagerrated refund claims and forgery.

By providing a scheme for timely cash refunds the implicit operating costs for export oriented units is reduced. This would remove an obvious impediment that discourages entrepreneurs from engaging in export production.

(B) Increase ITBIS tax rate to 10%

As a revenue measure, it is strongly recommended that the ITBIS rate be raised from its present level of 6%. Very few countries in the world operate a value added tax at rates of less than 10%. There is no evidence that a value added tax levied at a 10 per cent rate is any more difficult to administer than one at 6 per cent. Although rates in the range of 15 to 20 percent have proven more difficult to administer.

If the Dominican Republic were to increase its ITBIS rate to 10%, revenue will rise by over 60%.

(C) Taxing Government Entities

Tax those public sector enterprises, and government agencies that provide goods and services for monetary consideration. The advantages of doing so include; the elimination of production biases in favor of public sector corporations, revenue gains, development of efficient production and service sectors through undistorted competition, and also aiding future privatization if at all.

An immediate change required is that public sector corporation not be permitted to import goods tax-free, unless the same provision extend to the private sector as well.

(D) Increase in the minimum threshold for ITBIS payment eligibility

The proposed legislation specifies a higher threshold of RD$ 30,000 in average monthly gross receipts for all persons engaged in non-commercial sector activities. This new threshold will replace the existing threshold that has been set very low. A higher threshold will reduce the administrative burden of tracking a large number of small taxpayers. As the net revenue gained can be insignificant, if not negative, the administrative resources thus released can be used more effectively. The minimum threshold for those engaged in purely commercial activities i.e. wholesalers, traders, and retailers, has been retained at the existing level of RD$ 50,000 per month in gross receipts.

All importers irrespective of size will be required to pay ITBIS.

It is also proposed that these thresholds be indexed annually by the appropriate inflation rate.

(E) Collection of ITBIS by banks

One of the principal administrative reform changes suggested is the use of banks to perform the collection function. Besides streamlining the cumbersome paper-intensive procedures now used, resources can be released to undertake neglected activities like auditing, registration etc.

SALIENT FEATURES OF THE PROPOSED LEGISLATION

As with the other titles of the proposed tax code, the articles are numbered providing gaps so that future amendments can be inserted without renumbering all subsequent articles. This will also ensure that cross references within the code, and the numbers and cross references contained in the regulations will not have to be modified.

1. Extension of Authority of the Executive Branch

The code gives the executive power i.e. the tax administration to set special and easier compliance requirements for small taxpayers. This authority would give the administration much needed flexibility in dealing with this difficult-to-tax group.

2. Leasing of Tangible Personal Property

It is recommended that the law be broadened to encompass all tangible personal property. The leasing provision contained in the existing Dominican Law 74 allows for only the leasing of vehicles, machinery, and equipment. This expanded provision will allow an expansion of the tax base. Items like the leasing of storage space (i.e. warehouses, industrial liquid tankage etc.) will thus not be exempt.

3. Consolidation or Pooling of Activities

The executive power has been authorized to pool the activities of individuals or entities. On establishing that two or more entities are substantially owned or controlled by the same person, the executive power may require, or may permit that such entities be treated as one taxpayer. This provision can reduce the compliance costs of the taxpayer in question. The reduction in compliance costs would result as intra-group activities will not have to be disaggregated and reported.

4. <u>Inclusion of Insurance Margins in the Tax base for Imported Goods</u>

In practice insurance margins are used in the determination of the ITBIS base for imports. It has, however, not been explicitly stated in the existing law. Consequently, to ensure completeness it is proposed that a clause specifying this requirement be added.

5. <u>No Exemption of Inputs to Exempt Sectors</u>

An anomaly in the operation of the ITBIS is the ad hoc exemption of input VAT for firms that are exempt on their output. While this might reduce the burden of tax on the final output, its selective use gives an unfair advantage to those who get the benefit. Besides complicating administration, there is also a loss in revenue. There is no reason for allowing this practice to continue, and to prevent special treatment in this manner, it should be firmly banned by law.

REVENUE IMPACT OF THE REFORM

Experience with the VAT in most countries has borne out its advantages of being a buoyant and elastic source of revenue. In many of them the VAT is also the single largest and by extension the most important source of central government finance. The capacity of the VAT to generate a given level of collections is a function of its administrative and structural features.

In the Dominican Republic the VAT currently accounts for about 15% of total tax revenues. In contrast the import duties represent about 39% of central government revenues. This translates to about 1.63 and 4.11 percent of GNP respectively.

Simple, yet important inferences can be made from these figures when contrasted with the revenue mix and fiscal experience in other countries: Firstly, the government is excessively reliant on import duties to finance its expenditures. These revenues will therefore fluctuate in accordance with prevailing terms of trade. The consequence of unstable revenue inflows include —uneven quality of public services, and expensive time and cost-overruns in crucial sectors of education, health and infrastructure. Secondly, if industry is to develop and engage more actively in international trade, it will be necessary for the average levels of tariffs to be reduced. The inefficient economic behavior that such trade taxes induce are generally not consistent with the development of a modern and efficient industrial sector. Further, as countries develop the traditional pattern is a shift in their instruments of taxation from taxes on trade to general indirect taxes (such as VAT and excise) and to direct taxes on income and property.

In the following discussion the revenue mobilization potential of the ITBIS is analyzed. Estimates indicate that proposed changes in ITBIS administration and structure can probably double total revenue collections. If prudent perspective planning is undertaken, these changes can also be used as an opportunity to shift some of the burden of taxation away from taxes on international trade.

(A) Extending the Coverage to Imports of Petroleum

In 1989 imports of petroleum and mineral fuels amounted to about $US 415 million. If the ITBIS were applied fully to these imports, but the final petroleum products were to still remain exempt from ITBIS, then revenues would increase by a further $RD 158 million. As petroleum imports are completely canalized through a few entities, inclusion of petroleum imports in the base can be easily institutionalized. Petroleum imports are part of the VAT base in virtually all oil-importing nations. This measure would increase total VAT contributions to central government revenue from 14% to 17.3%. In terms of total ITBIS collections, a rise of about 23.6% would have been experienced.

(B) <u>Extending ITBIS to the Sale of Electricity</u>

Besides being conventionally taxed under the VAT in other nations, the taxation of electricity has other compelling justifications. A tax on electricity is relatively easy to collect, as one needs to deal with only a few large entities involved in electricity generation and distribution. Its inclusion can also add considerable progressivity to the overall tax burden. This is particularly so in developing countries, where higher income individuals spend a larger proportion of their income on electricity than do those with lower incomes. Industries that use electricity would in turn be able to receive a credit for value added tax paid on their electricity inputs. If imports of petroleum products were taxed then the electricity company would receive a credit for the taxes it pays. It is estimated that the net increase in revenue from extending the ITBIS to electricity sales would be approximately $RD 13 million per year, or a little under 2% of total ITBIS collections.

(C) <u>Raising the Rate of ITBIS to 10 Percent</u>

It is felt that the current ITBIS rate of 6% being low by International standards, a rate increase to 10% could enhance revenue collections. Steady state estimates of this rate change indicate a potential increase of about 80%. While other taxes might have to be eliminated to ease the political process of a 66% rate increase (6% to 10%), it might help to eliminate the distortions presently created by "additional" taxes and surcharges.

As noted in section 1, vary few countries operate a value added tax at rates of less than 10 percent. Bolivia, Indonesia, Philippines, and New Zealand are countries that have recently instituted a value-added tax with a rate of 10 percent. Most European countries levy a VAT at rates well in excess of 10 percent.

Raising the tax rate to 10% would raise its revenues by a further $RD 606.00 million, or by 12.7 percentage points of the existing total revenues of the government.

VAT EVASION & REVENUE LOSS

On the administrative dimension, the Dominican Republic has been running a system wherein the number of eligible payee's are far in excess of the tax paying population i.e. of 4621 registered taxpayers as of July 1989 only 3000 regularly pay the ITBIS. About 70 to 75 percent of the ITBIS is collected from 200 large taxpayers. Most of the registered taxpayers are in the capital, Santa Domingo, where collection efforts are relatively stronger. The second and third largest cities, Santiago and Puerto Plata with a combined population of over a million have only about 700 taxpayers. These figures while merely indicative, suggest that apart from enforcing collections, substantial scope for consolidating the net of taxpayers is necessary. The problem of non-registration seems to be highest in the commercial sector — hotels, restaurants, and in services. There is evidence that a number of manufacturers remain out of the net, in conjunction with

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The potential revenue yield from more efficient administration and enforcement has not been determined. It is likely to be extremely high.

USING BANKS TO COLLECT THE TAX PAYMENTS

An area of ITBIS administration, identified as being of critical importance and in urgent need of reform is the collection system. Effectiveness of legislation, auditing procedures, and enforcement are intimately linked to the collection function.

Collection very fundamentally is where VAT legislation translates into tangible VAT revenues. The collection function directly provides the crucial information input to facilitate the detection of stopfilers. More subtly, this information also helps deter evasion; furnishes data for establishing criteria for audit selection; and of course enforce the law. Thus the integrity and operation of the collection system will in fact reflect the integrity and efficiency of the value added tax.

Collection being a procedural function by nature, tends to vary from one administrative system to the other. In evaluating the Dominican ITBIS collection system one cannot draw comparisons with a so-called model administrative and collection system. Certain principles can however be used to pinpoint undesirable aspects of the system.

Deficiencies and Problems with the Existing Collection System:

The present collection system is based on a monthly tax period. Taxpayers make their payments to designated local collection centers. These collection centers (collecturias) are operated by the Dominican Internal Revenue Department (Rentas Internas). Information exchange between the collection centers and the revenue office occurs through a internal document control service — receipts, tax returns, and consolidated accounts of collection are physically picked up from the collection offices and delivered to the tax department. Tax payments (cash or cheque) made at the center are required to be deposited at the bank on the same day. Proof-of-deposit receipts are also forwarded through the internal mail service. The bank provides periodic transaction reports, and account summaries to the tax department. This information is relayed to the Treasury which has transaction control on the money in the bank.

After observing the operation of the system, and discussing issues with the related agencies, a number deficiencies were identified. Broadly speaking these problems stem from the way information is handled, exchanged, and protected. There is a very real issue of system integrity that is raised as a consequence. A brief list of the problems is given below:

(a) **Lack of a process or means to identify delinquent taxpayers;** The existing system does not, on a regular basis, consolidate information on those who have paid or not paid their taxes — leave aside the processing of such information by region or district. Thus there is no quick means to detect delinquents. Other indicators like criteria for audit selection, are not necessarily the preferred means of detecting an ITBIS taxpayer who has slipped on a couple of monthly payments.

(b) **Absence of preliminary mathematical checks at the time of return and payment submission:** Presently, the return and payments are accepted by the cashier without any questions. Genuine mistakes, and those made on purpose therefore go undetected. What could be an inexpensive check at the beginning, can result in an immediate loss of revenue, as well as, expensive audits later. In addition, there can be an undesirable signal of an indifferent administration sent to taxpayers. A preliminary check can also serve to impose penalties and interest at the time of filing.

(c) **Use of unreliable, and ineffective channels for information exchange:** By resorting to the use of internal mail systems such as the Rentas Internas Document Control Center, and the regular national mail service, an additional link is introduced into a chain that is not functioning as desired to begin with. While more stringent manual controls and courier links can be instituted to enhance reliability and system integrity, the presence of a human element will limit the effectiveness of such moves. Theoretically, a single point payment system with electronic information exchange will be the least susceptible to information loss.

(d) **Absence of Control on the transitional account:** The transitional account is an intermediate repository for all ITBIS and Customs collections in the Dominican Republic. Together these taxes account for about 80% of the total revenue. Due to the lags in information flow, and no single Agency i.e. the Rentas Internas nor Treasury having a knowledge of the actual account balance, a substantial opportunity cost is incurred. This is because a substantial amount of money languishes in the transitional account earning a low rate of interest[7]. If the true balance in the transitional account were known on a daily basis, the transfer to the Treasury's "definitive" account could be more rapidly completed. Currently, the delay can be anywhere between 1 to 10 months.

(e) **Opportunity for collusion and corruption:** The combination of personal contact between taxpayers and tax officials, together with the imperfect functioning of the information processing system, provides ample opportunities for collusion and corruption.

One feature that seems to standout from the procedures used and problems identified is the sheer amount of time utilized in trying to get the cash management aspect in order. It should be noted that collection does not involve handling payments as an end in itself.

[7]A transitional account is equivalent to a current account and hence earns the lowest rate of interest available.

As a consequence many important tasks are neglected. Furthermore, the tax administration seems to be introducing more checks and regulatory paperwork without focussing on the single task that is causing most of the loss — namely the actual acceptance of the tax returns and payments (i.e. presently being carried out by the local collection offices).

In many ways this inability to recognize a critical bottleneck in the system stems from the existing administrative "mindset". More specifically, as there are few options of doing this differently within a firmly entrenched system, additionally constrained by various checks and counterchecks, the administration is unable to effectively isolate and solve the problem.

In seeking for ways to streamline the acceptance of tax returns and payments it seemed natural to consider the option of having the task done by the banking system. The banking system possesses some distinct advantages, when it comes to handling the collection function. These include the availability of suitably trained staff, necessary infrastructure, and easier adaptation to automation.

In addition there exist a number of external benefits to using the banking system.

(a) **Release of human resources for other functions:** The tax administration uses a major percentage of its human and technological resources to manage the payment of taxes, and handle the related documents. It may be argued that much of this work is not specifically related to its primary activities of increasing compliance, and enforcing of tax laws. Using an analogy to the principle of comparative advantage, it would be more efficient to have other specialized agencies perform the task of collecting money, and monitor accounts. It follows quite naturally, that the most suitable entity to externalize this activity with would be the banking system.

(b) **Gains to taxpayers:** The taxpayer will be exposed to an atmosphere that is dedicated to the provision of a service. Furthermore a streamlining of information flows, and rationalization in the paper intensity of the process will serve to decrease taxpayer compliance cost.

The process is also bound to eliminate the potential for "dialogue" between tax inspector and taxpayer. Public perception of the tax system will be positively influenced, and this could affect compliance of the ITBIS and other taxes.

(c) **Improve security in the handling of payments:** By reducing the physical movement of checks and cash payments form the collection point to the bank, leakages, theft, etc. are minimized — if not eliminated.

ENDNOTES

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4. Alan Tait, Value Added Tax - International Practice and Problems, IMF Publication, 1988, p.19.

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19. The Turkish VAT departs from the pure consumption concept by requiring that the credit for the VAT on the purchase invoice of a capital good be credited against the gross VAT not all at once in the year of purchase, but equally over a five-year period. It thus approaches the income VAT, which allows deduction of depreciation only.

20. See Carl S. Shoup, supranote 16, p.6.

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63. Unprocessed food in normal usage denotes basic food grains, cereals, legumes, vegetables, fruit, meat, and milk. As almost all food requires some degree of processing i.e. rice is dehusked and polished; milk is pasteurized; meat is refrigerated etc. unprocessed food includes those which have been processed to keep it in a natural state. Processed foods are therefore those which go through subsequent value addition stages such as canning, cooking, pickling, baking, etc.

64. U.S. Department of Treasury, Tax Reform for Fairness, Simplicity, and Economic Growth, Report to the President, Volume 3, Value-Added Tax, November 1984.

65. On purchases under Turkish Lira (LT) 30 a month, 20 percent of the purchase price is rebated. Following the sliding scale, on purchase above LT 100 and below LT 1,000, only 5 percent is rebated. For some consumers the rebate may exceed the VAT payment.

66. Alan Tait, VAT Policy Issues, Paper for IMF/UNDP seminar on Value-Added Tax in Asia and Resource Mobilization, Jakarta, Indonesia, March 13-16, 1990. p.14.

67. Alan Tait, supranote 62, p.12.

68. Republica Dominicana, El Congreso Nacional, Ley No. 139-87, Parrafo II.

69. Alan Tait, supranote 4, p.285.

70. Alan Schenk - Reporter, Value Added Tax: A Model Statute and Commentary, A Report of the Committee on Value Added Tax of the American Bar Association, 1989.

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