CENTRAL BANK OF TRINIDAD AND TOBAGO RESEARCH DEPARTMENT

TOWARDS A TAX EXPENDITURE BUDGET FOR TRINIDAD AND TOBAGO

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Abstract

Government incurs a loss in revenue whenever it offers preferential treatment to groups or sectors, which provide a facility that would have otherwise been undertaken by the government through a direct expenditure programme. This form of indirect expenditure implies that government forgoes revenue and is referred to as a tax expenditure. The main objective in this paper is to examine the issue of tax expenditure and to provide estimates of tax expenditure for Trinidad and Tobago with specific emphasis on the energy sector. Based on the research we found that revenues forgone via fiscal incentives in the energy sector represent the largest proportion of tax expenditure. The main implication is that it is a burden on the treasury and if attention is not given to rectify this problem the tax base will be eroded.

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I INTRODUCTION

A tax expenditure may be considered a fiscal instrument that serves as an alternative to monetary subsidies or direct spending programmes by any government. This refers to government revenues forgone through special tax provisions that are specifically designed to provide incentives or relief to certain activities, sectors or individuals. The effect of any tax expenditure is often identical to an explicit expenditure programme, that is, assistance can be given to an industry either through direct expenditures or concessional tax treatment. Tax expenditures do not require formal annual approval by the legislature and, once introduced, are not typically subject to the same degree of scrutiny as actual expenditures. Although tax expenditures are by no means a new concept there has been little or no research on its application in the Caribbean region.

The aim of this paper is to contribute towards overcoming this shortcoming by examining the issue of tax expenditures and to provide estimates of tax expenditures through the personal income tax system and the corporate income tax system as it applies to the energy sector in Trinidad and Tobago. Section II focuses on the tax expenditure concept while Section III considers the underlying assumptions that must be made in the identification of a tax expenditure list. Section IV provides a brief discussion of the various components of the tax expenditure list and Section V contains tax expenditure estimates for Trinidad and Tobago provided together with a discussion of pertinent issues. Section VI concludes the paper with suggestions for further research.

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The authors of this paper are Economists at the Research Department of the Central Bank of Trinidad and Tobago. Views expressed are those of the authors and not necessarily those of the Central Bank.

II THE TAX EXPENDITURE CONCEPT

Governmental bodies utilise their revenue raising powers to augment tax levels and they subsequently purchase goods and services with these funds. However if the authorities consider that raising taxes in order to undertake a programme of direct public spending is too expensive they may opt for an indirect form of public spending. For example, the government may decide that it is too expensive for it to provide technical training for certain groups of workers and may persuade the private sector to provide some level of technical training in return for tax incentives. These incentives which may be based on special allowances available to businesses result in government revenues foregone. The government thus incurs an indirect cost, equivalent to the amount of revenue forgone. The term tax expenditure refers to this indirect cost.

A tax expenditure is therefore an indirect expenditure which generally takes the form of special exemptions, deductions, credits, preferential rates and/or extensions. Exemptions represent income or other items excluded from the tax base. Deductions are sums deducted from the gross income in calculating the taxable amount. Credits are deductions from the amount of tax payable. Preferential rates are lower tax rates depending on the type of taxpayer, industry, activity or location. Extensions represent an extension of the repayment period – this is equivalent to an interest free loan.

All governments recognise the need for quantitative information concerning tax expenditure. However there is no consensus as to the most appropriate way of disseminating such information. Furthermore there is no agreement as to how this information should be used or how it should be incorporated into budgetary accounts in the Caribbean region. Hence while tax expenditure budgets have stimulated much discussion and debate, the issue remains on the backburner as far as the formulation of tax and budgetary reforms is concerned.

Since tax expenditures are concerned with special provisions in the tax system, an obvious concern is how best to categorise the components that are regarded as special. That is, how do researchers decide on the items which should constitute a tax expenditure list? One way forward is to make a value judgement about how the system would look if it were free from special provisions. This is called the "normal" structure. Any item that is not part of the normal structure is a deviation, and as such it is viewed as special.

The issue of tax expenditure raises several concerns. One argument says that direct expenditure is often a better way of achieving government objectives. Tax expenditure programmes are often thought to be of a lower quality and are second-rated. This indirect form of government expenditure represents a substitution of visible tax policy instruments by less visible instruments. Since the level of government involvement is not accurately reflected, this approach lacks transparency and has implications for corruption.

Tax expenditure estimates are important since they provide an opportunity to examine alternative costs, that is, we can calculate the cost of undertaking a project indirectly against the cost of a direct undertaking. This, of course, must be weighed against the quality of the undertaking and it must be noted that in some instances programmes under the indirect scheme may not necessarily be second-rated. In fact achieving certain objectives by way, of tax incentives and tax subsidies may be more efficient than through direct expenditure. To this end the tax expenditure list can be seen as a tool for improving government efficiency rather than a shopping list for reform. This does not however exclude the fact that an expenditure list may help in identifying items in need of reform.

There are many advantages to developing a tax expenditure list as governments can choose to affect economic activity directly or indirectly. Such a list raises awareness of the activities of the government which in turn allows the public to follow and assess changes in government policy more easily while at the same time focusing on a country's tax structure.

In addition to serving as a reminder of how a tax system deviates from a more normative tax structure and whether such deviations are justifiable, some consideration can also be given to issues of distribution and equity. It can lead to a reassessment of the tax structure as well as a comparison of the direct and indirect means of achieving a particular objective.

An identification of tax expenditure may help to ensure that programmes working through the tax system are fully considered and explored by suitably qualified personnel before they are undertaken. Tax expenditure estimates provide a way of revealing previously "hidden expenditure". It is believed that the government will become more accountable to the people as a result of the increased awareness by the public about government affairs. The size of the public sector is checked as it affects the balance of power between the private and public sector. Also, discussion of tax policy will be stimulated and it will be an opportunity for a greater input by private individuals and organisations. Since the use of the tax expenditure budget leaves more of the decision making process in the hands of the private sector, in a highly competitive environment this is likely to stimulate innovation, creativity and diversity.

Furthermore the formulation of a tax expenditure list can lead to a reassessment and refinements to a tax structure. Direct expenditure programmes by the government may suffer from infrequent appraisals in spite of the need to ensure efficiency in the allocation of resources. For example, certain features may become embedded in the tax system and be viewed as unalterable but the tax expenditure list may assist in introducing new programmes and expanding existing ones.

To summarise tax expenditures can be defined as: "concessions or exemptions from a "normal" tax structure that reduce government revenue collection and, because the

This is not to say that government is necessarily less involved in an activity. It does mean however that the budgetary estimate for this activity is less than it would have been if it were a direct programme.

government policy objectives could be achieved alternatively through a subsidy or other direct outlays, the concession is regarded as equivalent to a budget expenditure"².

A tax expenditure budget is an important element of the budgetary exercise in most OECD countries. In particular key issues pertain to periodicity, coverage of tax expenditure, method of estimation and the manner of its inclusion in the budget. The authorities in many OECD countries are legally bound to produce annual reports of tax expenditures. All the countries report tax expenditure in relation to taxes on personal and business income and indirect and direct taxes including taxes on capital. Furthermore all countries use ex post measurements of tax expenditure. This makes it possible to calculate the amount by which tax revenue is reduced as a result of particular provisions³. While there are difficulties in cost estimation, reporting the estimated cost and making the basis of the estimates available for independent scrutiny can significantly enhance the transparency of fiscal management. In some countries the reports are presented separately, while in others they are an integral part of the budget formulation process. Trinidad and Tobago in particular and the Caribbean region as a whole can learn important lessons about preparing reports on tax expenditure from the OECD countries.

III ASSUMPTIONS IN THE IDENTIFICATION OF TAX EXPENDITURES

Certain assumptions must be made in preparing the list of items to be included as tax expenditures. These include assumptions pertaining to basic exemptions, the taxable unit, the separation of taxes for corporations and individuals, the normal tax structure and inflation.

See "Manual on Fiscal Transparency", International Monetary Fund.

³ The use of other methods such as the *ex ante* method and the equivalent expenditure method pose problems of calculation and uncertainty.

Personal Exemptions

Personal exemptions are generally perceived to be part of the normative tax structure since this allows for the provision of fundamental and essential facilities for a family - housing, nourishment, medical care, education, etc. However this issue may not be straightforward as it appears since the size of the allowance for necessities is a subjective matter, for example a luxury to a poor person may be a necessity to a rich person.

Furthermore there is the need to examine the size of the deduction in context of the degree of "regressivity" or "progressivity" of the system. For example, deductions of equal size result in greater tax savings for a high bracket taxpayer than a low bracket taxpayer. Conversely, when a dependent "leaves home" the tax bill of a high income bracket taxpayer increases more than that of a low income bracket taxpayer. Other debatable issues include whether there should be a larger deduction for the first child than for subsequent children and whether there should be an increase in the deduction for a dependent child as the child becomes older. If these issues are not regarded as a part of the normative tax structure they will serve to increase tax expenditure estimates.

Taxable Unit

The choice of a taxable unit is a difficult and controversial one but a normative tax structure must identify a proper unit for taxation purposes. An individual or a family may be viewed as the taxable unit and dependent on the choice this may lead to lower taxes and as a consequence tax expenditures estimates may be higher or vice versa. For example, consider the scenario wherein gifts between taxable units are considered income under the normative structure. If the taxable unit consists of a family, gifts between members of the unit will not affect income. If however individuals are considered as the taxable unit then any preferential treatment will result in larger tax expenditure as income is forgone.

Even where the family is the taxable unit a complicating factor is the splitting of income. One critical issue is whether income should be pooled or split between members of the unit before applying tax rates? The more income is split the lower the marginal tax rates

are likely to be and thus splitting provides an incentive for larger family size. Another complicating factor is the extent to which the earnings of minor children should be included in the calculation of family taxable income. However to the extent that these serve to lower taxes, then tax expenditure estimates may increase.

Corporation Income Tax

Although the existence of separate taxes for corporations and individuals is assumed to be part of the normal tax structure there are several critics of this practice. Some analysts suggest that the only way to have a fair and efficient income tax system is to integrate fully corporate and individual income taxes. To view individuals and corporations as separate when it comes to taxation is a deviation from the normative income tax system. This view, based on the Haig-Simons concept of income suggests that taxes should be based on consumption plus change in net wealth. However in practice the corporate tax system is viewed as part of a "generally acceptable structure of an income tax" despite the inconsistency with the Haig-Simons definition of income.

· Rate Structure

For any economy one may argue that there is an income tax rate structure which is assumed to be equitable and not lead to inefficiencies. This applies to individuals and corporations not qualifying for special treatment of some sort. Exceptions from the application of these rates may result in tax expenditure of a particular size.

Inflation

Inflation has a number of effects on the income tax system as it alters both the tax base and the structure of income tax rates. The value of exemptions, credits, deductions and allowances fixed in nominal terms decreases in real terms. Inflation causes losses for those holding cash while at the same time rewards debtors and penalises creditors. Thus some of the distributional consequences of inflationary conditions may reduce the effectiveness of planning by business. As such adjustment for inflation should be viewed as

part of the normative tax structure especially where failure to make adjustments results in higher taxes and as a result negative tax expenditures.

IV FORMULATING THE TAX EXPENDITURE LIST

The first stage in the estimation of tax expenditure is the development of a normative tax structure. A normative system developed by one economy may differ from that of another but failure to achieve complete agreement should not preclude the development of a tax expenditure list and budget. One way of presenting the tax expenditure list is to follow the Haig-Simons definition of income as the sum of current consumption plus all accretions in economic power, that is, income equals consumption plus change in net worth. This principle is accepted by many analysts as an appropriate way of measuring ability to pay and at the same time the tax system meets the goals of horizontal and vertical equity. Furthermore the individual and corporate sector can be treated separately even though both are viewed as part of the normative structure.

Once the normative tax system is established the next step is to examine exemptions, deductions, credits, and preferential rates with the aim of deciding whether or not they should be included in the tax expenditure list. To the extent that an allowance is special and constitutes a deviation from the norm it should be included in the tax expenditure list. In trying to produce a list of tax expenditure there are likely to be several problems, for example, problems of measurement, the inclusion of items that seem insignificant, omissions due to administrative and political reasons, and the inclusion of contentious deviations.

More specifically, seven criteria have been established to determine whether a provision counts as tax expenditure. A provision may be deemed tax expenditure as long as the provision: (i) has an impact on a tax that is applied country-wide; (ii) confers preferential treatment; (iii) results in reduced tax revenue in the applicable fiscal years; (iv) is not an appropriation; (v) is included in the defined tax base; (vi) is not subject to an

alternative tax; and (vii) can be amended or repealed by a change in the country's law alone. If a provision is not preferential then this cannot be deemed to a tax expenditure. For example the personal exemption is not preferential because each person receives the same amount of exemption. Similarly the graduated tax structure of the individual income tax is not a tax expenditure because each tax payer with the same tax base pays at the same rate.

Exemptions

Exemptions refer to income items that are not included in calculating the total taxable income. One such item is income from household services and the size of this item can be expected to be quite large. However if this is included then logically leisure ought to included as well although it is unlikely that a consensus would be reached for placing a value on leisure when measuring taxable income. Further even if income on household services were to be included the actual worth may be questionable. In addition the exclusion of this item leads to no serious inequity in the distribution of the tax burden. Finally there would be great difficulty in estimating the value of household services or leisure. For these reasons income from household services is excluded from the tax base and the tax expenditure list. Imputed rent is also often omitted because of administrative difficulty in determining the exact amount; as has been discussed above the inequity associated with omitting this item is negligible. Whether government assistance and benefits are omitted from the taxable income and included in the tax expenditure depend on the income of its recipients. When this form of income flows to individuals with a zero marginal tax rate its exclusion from the taxable income results in no tax expenditure.

The status of several items⁴ - contributions by employers to group sickness, accident insurance, income from winnings, mortality gains from insurance policy plans, foreign currency gains, and gains from the sale of personal property - are a matter for the country's tax statutes and administrative discretion. The estimation of these potential tax

⁴ Each country has a separate and distinct tax structure. Thus items within the tax structure of one country may be different from that of another country. While this paper draws attention to many items an exhaustive list is not provided. Instead various examples are used to illustrate a

expenditures should assist the authorities in assessing whether certain exclusions should be continued. Gifts and bequests constitute another debatable item but administratively it may prove to be difficult to include most gifts in the taxable income of the recipient.

Deductions

Once the total taxable income is estimated tax rates can then be applied. However before this can be done certain deductions are appropriate. For example, the personal exemption and exemption for spouses and dependants are acceptable as part of the normative structure. There are other items that are more contentious and these may include moving expenses, childcare and unemployment benefits. One can argue that the first two are refinements to the personal income allowance while in some countries unemployment benefits may be deductible and are part of the normative system. Some items which may need some consideration are depletion and other business deductions, assistance for the aged, medical expenses for the disabled and charitable donations.

Tax Deferral

A tax deferral may be a temporary postponement of taxes, in which case this is equivalent to a reduction in taxes or it may be a definite postponement, in which case it is equivalent to an elimination of the tax. Thus the worth of the deferral depends on the length of the deferral. The deferrals which result in deviations from the normative tax structure increases tax expenditure. Accelerated depreciation is a form of tax expenditure widely used by developed and developing countries as a means of stimulating business investment. Carried to an extreme, accelerated depreciation may be equivalent to an elimination of the income tax.

Other items in this category include education expenditure, deductions for pensions and savings for retirement, capital gains, and foreign income. While some or all of these items may be regarded as part of the normative structure, the magnitude of these

point. Furthermore even though it is possible to identify items on a tax expenditure list, it may not be possible to obtain the relevant data.

allowances may not⁵. This is because the size of the allowance may be perceived as a deviation from the normative structure and hence contributes to increasing the tax expenditure budget. In those instances where the item as a whole represents a deviation this is included in the tax expenditure in its entirety.

Tax Credits

Tax credits are deductions from the tax payable and there are a number of tax credits that are viewed as part of the normative tax system and hence excluded from the tax expenditure list. For many countries these include the dividend tax credit, credit for foreign taxes and a credit for each child under the age of eighteen. Some examples of tax credits which are normally considered as tax expenditure include credits for political contributions, investment tax credit and credits for new jobs. In each case the government forgoes taxes that would otherwise be payable and provides funds to political parties, business investors and those creating jobs.

Preferential Tax Rates

Preferential tax rates are reduced tax rates that are usually applied to sectors (agriculture or manufacturing) or activities (small businesses) that the government wishes to promote. As noted above while these may not be considered a deviation from the normative tax structure in their general form, the magnitude of the preferential treatment may lead to its inclusion as tax expenditure.

The tax system can also be used to discourage certain actions by taxpayers. This is the opposite of tax expenditure and results in negative tax expenditure. For example, while a deduction for a legal spouse may be allowed there may be no such deduction for a common law wife. Similarly a deduction for child-care payments made to a common law wife may not be permitted. Overall though the largest negative tax expenditure appears to be the failure to adjust capital gains, capital allowances and inventories for inflation.

⁵ In this context magnitude refers to the percentage of the actual amount that is deferred or the period of time of the deferral.

V TAX EXPENDITURE ESTIMATES

In this section we examine the allowances encapsulated in the tax structure in order to develop a tax expenditure list for Trinidad and Tobago and estimate the tax expenditure budget. While the main focus of this paper is a tax expenditure budget for the energy sector some attention will be paid to the personal income tax structure.

Personal Taxation

With respect to the individual income tax under the current tax regime in Trinidad and Tobago the following deductions apply: (i) personal allowance, (ii) interest on loans in respect of owner occupied property, (iii) contributions to the government widows and orphans fund, (iv) contributions to the approved pension fund, (v) contributions to the approved deferred annuity plan and national insurance, and (vi) contributions to alimony/maintenance payments⁶.

If all of (i) to (vi) are regarded as expenses towards basic living costs then they do not constitute a tax expenditure list. On the other hand, if all of the deductions apart from the personal income allowance are special (and so count as deviations from the normative tax structure) then tax expenditure increases as the tax revenue based on these contributions is foregone.

TABLE 1
INFIVIDUAL INCOME TAXES
TAX EXPENDITURE ESTIMATES, 1997
TT\$ thousands

Household Income Class)	Total Chargeable	Tax Liability	Total Deductions	Tax Rate (%)	Tax Expenditure
(1)	(2)	(3)	(4)	(5)	<u> </u>
:					
20-50	1,339,165	374,820	94,870	28	26,563.6
More than 50	988,571	312,318	43,760	35	12,252.8 - 15,316.0
Total					38,816.4 - 41,879.6

Source: Board of Inland Revenue, Trinidad and Tobago

⁶ Appendix 1 shows the evolution of the individual income tax structure and the changes in the system of tax credits and allowances.

Table 1 shows tax expenditure estimates for tax year 1997. Total chargeable income (column 2) represents earnings from all sources less deductions. Tax liability is derived by applying the tax rate to the relevant chargeable income. The Trinidad and Tobago tax structure is such that each individual is given a personal allowance of TT\$20,000. This is regarded as part of the normative structure since it represents an allowance towards essential living needs and does not contribute towards tax expenditure. Income in the class TT\$ 20,000 - \$50,000 is taxed at a rate of 28 per cent and any income above this is taxed at a rate of 35 per cent8. The chargeable income class (Column 1) starts at TT\$ 20,000 since income below this level has a tax rate equivalent to zero per cent

Total deductions (column 4) includes items (ii) to (vii) above. Ideally some of these components should be recognised as part of the normative structure as they represent contributions to the basic living needs. However the data for deductions is not available in a disaggregated format⁹. Hence either all components must be treated as deductions constituting preferential treatment and hence increasing tax expenditure or deductions constituting part of the normative structure. If the latter were to be regarded as valid then tax expenditure based on personal income taxation would be zero.

To the extent that the deductions are regarded as deviations from the norm then the relevant tax rate is applied to each category in order to calculate tax revenue forgone. Tax expenditure for income class TT\$20,000 - TT\$50,000 is estimated at TT\$26.56 million. With respect to the higher income bracket the calculation is not as straight forward since part of this income is taxed at 28 per cent and part at 35 per cent. We therefore consider two extreme scenarios. In the first scenario we apply a tax rate of 28 per cent to total

⁷ Based on the available information the most recent data was obtained for 1997.

The total tax liability in the more than TT\$50,000 category is not equivalent to exactly 35 per cent of the chargeable income since individuals earning income in this category are taxed at 28 per cent (for income between TT\$20,000-TT\$50,000) and 35 per cent (for income above TT\$50,000). For example, there are 9,459 claimants in the higher income group. This means that 9,459*TT\$50,000 (TT\$472.95 million) of total chargeable income is taxed at the 28 per cent while the remainder TT\$515.621 million (TT\$988.571 million-TT\$472.950 million) is taxed at 35 per cent.

⁹ The data deficiency suggests that tax expenditure estimates will be an overestimation.

deductions in calculating tax expenditure and in the second scenario we apply a tax rate of 35 per cent. With respect to the first scenario tax expenditure is estimated as TT\$12.25 million, while tax expenditure in the second scenario is TT\$15.32 million. Total tax expenditure estimates based on personal income taxation for 1997 given the first scenario is TT\$38.82 million and TT\$41.88 million given the second scenario. As an alternative we can assume that deductions serve to reduce chargeable income in the higher income tax bracket as such income forgone is calculated by applying the tax rate of 35 per cent to the deductions. Given this assumption total tax expenditure is equivalent to TT\$41.88 million. 10

Corporate Taxation

Internationally, countries provide numerous and varied fiscal incentives to support and encourage the development of local industry. In Trinidad and Tobago, the fiscal system grants tax provisions through allowances, deductions and exemptions which are applicable to all resident corporations. However, through the tax mechanism, more preferential treatment by way of fiscal incentives is extended to specific activities and entities allowing them to benefit from total or partial relief from taxation usually in the form of tax holidays, exemptions or reductions for a period of time. These added concessions are available for hotel development, free zone areas, export promotion, approved small companies, regional development companies, special-use companies such as shipping and airline companies, insurance companies and property development companies and approved industry activity. The latter category mainly encompasses multinational corporations engaged in energy-related activities (petrochemical companies). Furthermore, concessional treatment is afforded petroleum companies via a special tax regime which has a distinct tax rate structure and custom made tax relief measures.

¹⁰ Based on similar calculations the tax expenditure estimate for 1994 is estimated at TT\$45.45 million. The differences in the tax structures between 1994 and 1997 were taken into consideration when calculating tax expenditure for 1994. In order to maintain consistency with the 1997 calculations of tax expenditure alimony, pension and national insurance contributions were not considered as part of the normative tax structure in 1994.

Appendix 2 provides details on corporate taxation with specific reference to Trinidad and Tobago.

The Petrochemical Energy Sector

Trinidad and Tobago offers various incentives to investors who wish to invest in the petrochemical industry. To the extent that any of the incentives are a deviation from the normative tax structure (for example in terms of percentage value or the time period over which the preferential treatment is given), then these are included in the tax expenditure list and hence the tax expenditure budget estimates. Table 2 provides details of incentives to petrochemical companies in Trinidad and Tobago.

TABLE 2
TRINIDAD AND TOBAGO: FISCAL INCENTIVES TO PETROCHEMICAL COMPANIES, 1995

Type of fiscal incentive	Details
Profit-based	Reduction of the standard corporate income tax and Tax holidays Allowing losses incurred during the holiday period to be written off against profits earned later Exemption from withholding taxes on remittance of profits, dividends and other distributions
Capital investment based	Accelerated depreciation Investment and reinvestment allowance
Labour-based	Deductions from taxable earnings based on number of employees or on other labour related expenditure
Value-added-based	Corporate income tax reductions or credits based on net local contents of outputs Income tax credits based on net value earned Exemption of VAT on local contents of outputs
Sales-based	Corporate income tax reduction based on total sales
Based on other expenses	Corporate income tax deductions based on, for example, expenditures relating to marketing and promotional expenses Exemption of stamp duty on certain instruments
Import-based	Exemption from import duties on capital goods, equipment on raw materials, parts and inputs relation to the production process. Exemption of VAT on imports for the production process
Export-based	Output related, e.g. exemption from export duties, preferential treatment of income from exports (export allowance), income tax reduction for special foreign income earning activities or for manufactured exports; tax credits on domestic sales in return for export performance. Input related, e.g. duty drawbacks, tax credits for duty paid on imported materials or supplies; income tax credits on net local content of exports; deduction of overseas expenditure and capital allowance for export industries

Source: UNCTAD, Division on Transnational Corporations and Investment.

Some Critical Issues

Since fiscal incentives are often the largest component in the tax expenditure budget it is important to discuss some relevant issues within this context which reveals the importance of estimating a tax expenditure budget with emphasis on fiscal incentives.

One critical purpose of fiscal incentives is to attract investors who would not otherwise invest in a particular country or activity. However, it may not be in the public interest to grant incentives that exceed the value of the public benefit, that is the cost of the incentives should not outweigh the benefits. To determine whether incentives are economically efficient it is necessary to undertake a cost-effectiveness assessment. However, this approach has a basic shortcoming in that it does not allow precise measurements of costs and benefits, and some element of uncertainty remains. This problem is further exacerbated in the case of marginal investments. In addition to the analytical difficulties there are political pressures that affect the ability of government to execute incentive measures effectively. There is also the need for an administrative capacity that allows for efficient implementation and monitoring.

The justification for granting fiscal incentives lies in the fact that most businesses require some relief in the early years of their operation. Equally government expects that after the first few years the business will have achieved its target level of profitability and begin to contribute to national revenues. Some critics have suggested that Trinidad and Tobago pays too high a price for attracting such investment. That is, in some instances the entire revenue stream accruing to the government is lost without a proper evaluation of the inherent cost or an analysis of the extent to which these concessions are warranted. In fact, "...in most of the cases under review there is no evidence that attempts have been made to evaluate the economics of the project with a view to determining the extent to which fiscal incentives should be granted." 12

¹² See Report on Fiscal Incentives for the Petroleum Industry, February 1997.

Furthermore it seems that prospective investors in the energy sector expect to be awarded fiscal incentives. While the agency responsible for granting incentives is the Ministry of Trade and Industry, it is the Tourism and Industrial Development Company of Trinidad and Tobago (TIDCO) that is responsible for advising the Minister of Trade and Industry on the extent to which incentives should be granted. TIDCO evaluates the local value added for the purpose of determining the tax holiday. However, it is unclear as to the extent to which this evaluation fully considers the costs and benefits relative to the fiscal incentives.

There appears to be no provision that requires a business to satisfy the authorities that it needs fiscal incentives *per se* neither does it need to justify why it should have total rather than partial relief from corporation tax and customs duty should be granted. According to the records most businesses are granted a five-year tax holiday with total relief from corporation tax and custom duty, even though the option of granting only partial relief exists. Consequently there is a perception that the granting of a tax holiday and fiscal incentives is a formality as long as a business meets the criteria described in the application form. This situation prompts concern over the preservation of tax revenues as Trinidad and Tobago runs the risk of undermining its tax revenue base if it continues to manage fiscal incentives in this way.

Due to the generous nature of the concessions an investor may utilise more than one incentive option at various times thus creating a situation where the investor may be exempt from all taxes in perpetuity, for example, the investor may also expand the life of his concessions through plant expansion. In the light of this it is essential that the performance of companies that are recipients of fiscal incentives be properly monitored. This is necessary to ensure that obligations to Trinidad and Tobago as a corporate citizen and stakeholder are met.

Given the above, government should consider establishing policy guidelines to inform the criteria for determining the extent to which fiscal incentives should be granted.

One key consideration should be the economic viability of potential projects. This will help determine whether there is a legitimate justification for government to forego its revenues. A careful examination of projects will allow the fiscal system to provide fair returns to both industry and the country especially since the returns to the country are often quoted as one of the benefits of providing fiscal incentives to investment in the energy sector.

In short, fiscal incentives are only economically justifiable if the benefits gained outweigh the costs. An estimation of tax expenditure enables us to quantify the costs of the fiscal incentives to the government. The key issue that needs to be addressed is whether the revenues forgone are sufficiently compensated for by the accrued benefits in terms of employment generation, foreign exchange earnings, the transfer of technology, the upgrading of skills of nationals, and so on. In conducting such an analysis one must bear in mind the substantial up front impact that the deduction of exploration and development expenditure has in the computation of petroleum profit tax. This though is too ambitious an undertaking for now, hence this investigation simply concentrates on calculating the revenue forgone by the government in the energy sector as a result of the fiscal incentives.

The creation of a harmonised investment environment towards the establishment of a single market and economy for the Caribbean Community (Caricom) by the year 2005 also has implications for the existing fiscal incentive package. Furthermore, in the pursuit of trade related policies consistent with the World Trade Organisation (WTO) agreement of 1995, Trinidad and Tobago is required to eliminate five trade related investment measures which are linked to the country's incentives to attract investment. Given this the WTO has provided guidelines in the formulation of an investment policy which would be acceptable at a multilateral level.

The data obtained from the Board of Inland Revenue (BIR) for the energy sector was categorised into petrochemical¹³ and petroleum companies. Given the current structure we

¹³ A list of these companies are given in the appendix together with other details. In order to maintain company confidentiality the data is in an aggregate form

expect the latter to be the larger contributor to tax expenditure estimates. The main problem encountered in calculating tax expenditure for the energy sector was data unreliability and unavailability.

Partial Estimates of Tax Expenditure for Petrochemical Companies

Based on the information provided by the BIR the tax expenditure estimate for 1995¹⁴ for the petrochemical companies is TT\$211.1 million¹⁵ (see Table 4). The following items are treated as part of the normative tax structure: remuneration to directors, salaries and wages, severance pay, bad and doubtful debts, gross payments, rates and taxes, advertising, contributions to approved funds, wear and tear allowance, balancing allowance, rents and other deductions. As a result these do not contribute to tax expenditure. All other deductions are treated as being non-normative items (denoted by an asterisk)¹⁶. These include export allowance, initial allowance, payments under covenants, and reliefs. The latter consists of double tax relief and tax holiday.

In order to arrive at the tax expenditure figure quoted above the standard corporation tax rate (38 per cent) was applied to the non-normative items to give a total of TT\$91.55 million (see column 4). This was then added to the value of the tax holiday relief (TT\$119.96 million) (see xxiv). We can now compare the tax expenditure estimate to the actual tax liability of TT\$17.43 million. The former is more than twelve times larger than the latter. In other words, the cost incurred by the government in attracting these companies is very large compared to the tax revenue earned. This provides a vivid indication of the generous nature of fiscal incentives given to the non-petroleum companies. As noted above this figure would be of greater value if we have some notion of the benefits accrued to the country as a whole.

¹⁴ A complete data set was only available for this year.

¹⁵ Customs Duty and Valued Added Tax (VAT) on imports are not included among the deductions because of data unavailability. Under normal circumstances this data would constitute part of the non normative structure and hence increase tax expenditure. Because of this omission the tax expenditure estimate is underestimated.

¹⁶ These items are viewed as non-normative since they are not perceived as contributing to the operating expenses of the companies. More importantly other domestic companies are not recipients of these benefits hence it represent preferential treatment to this sector.

TABLE 4 TAX EXPENDITURE ESTIMATES FOR THE PETROCHEMICAL SECTOR, 1995 TT\$ Million

(1)	Details (2)	Amount (3)	Estimated Tax Expenditure (4)
i.	Net total income	1,105.035	
ii.	Remuneration of Directors	0.018	
iii.	Salaries and Wages	33.937	
iv.	Severance pay	4.884	
٧.	Bad & Doubtful Debts	0.062	
vi.	Gross Payments	155.796	
vii.	Rates and Taxes	2.711	
viii.	Advertising	0.680	
ix	Contributions to Approved Funds	0.760	
x .	Export Allowance*	114.769	43.612
xi. ,	Initial allowance*	126.130	47.929
xii. ··	Wear and Tear Allowance	149.131	
xiii.	Balancing Allowance	6.240	
xv.	Rent	0.746	
xví.	Other Deductions	142.345	
xvii.	Total Deductions ¹	738.207	
xviii.	Net Income less Total Deductions	366.828	
xix.	Payments under Covenants	0.025	0.010
xx.	Chargeable Profits ²	366.803	
xxi.	Loss Relief	6.206	
xxii.	Chargeable Profits after Losses ³	360.598	
xxiii.	Corporation Tax ⁴	137.027	
xxiv.	Tax Holiday relief*	119:597	119.597
xxv.	Corporation Tax Liability	17.430	
xxvi.	Total Tax Expenditure	,	211,148

Source: Board of Inland Revenue, Trinidad and Tobago.

Sum of ii to xvi.
 xviii less xix
 xx less xxi
 xxiii multiplied by 38 per cent.

The Petroleum Energy Sector

With respect to the petroleum companies tax concessions take the form of deductions based on the direct cost of drilling exploration wells, preparatory geological expenses and dry hole expenses as well as capital based investment incentives. These include an investment allowance, marine thermal recovery investment allowance, enhanced recovery allowance, workover allowance, heavy oil allowance, first year allowance and an initial allowance (see Table 3). Apart from these, the 'sliding scale' nature of the Supplemental Petroleum Tax (SPT17) to which the companies are liable also contributes to some degree of preferential treatment.

TABLE 3
FISCAL INCENTIVES TO PETROLEUM COMPANIES

Type of fiscal incentive	Petalls Details
Exploration based	Deductions based on the direct cost of drilling exploration wells Deduction based on preparatory geological expenses Dry hole expenses
Capital investment based	Investment allowance Marine thermal recovery investment allowance Enhanced recovery allowance Workover allowance Heavy oil allowance First year allowance and Initial allowance

Source: The Petroleum Taxes Act Ch. 75.02 and amendments: (No. 5 of 1981); (No. 26 of 1985); (No. 27 of 1988); (No. 15 of 1992).

The SPT is applied to gross income from the disposal of crude oil production (land and marine operations) less deductions and losses brought forward. In 1991 the rates for base crude oil were 55 per cent and 15 per cent for marine and land respectively and 20 per cent and 5 per cent for additional crude oil. In 1992 a sliding rule was formulated so that SPT varies depending on the average price of oil. For example if the price of oil was less than US\$13, SPT was 0 per cent.

Partial Estimates of Tax Expenditure for Petroleum Companies

Based on information provided by the Board of Inland Revenue of the Ministry of Finance for the petroleum sector (see Table 5 below), tax expenditure was calculated for the petroleum companies in 1995. In calculating the tax liability of the petroleum companies the SPT is applied to gross income from the disposal of crude oil production (land and marine operations) less deductions and losses brought forward. These companies are also levied a Petroleum Profits Tax and an Unemployment levy on their incomes from oil and gas sales after adjusting for allowances and deductions specific to the tax regime of the industry. The tax liability for the petroleum companies in 1995 was TT\$ 1,108.3 million. The tax expenditure estimates were calculated using three scenarios.

In the first scenario we removed the preferential treatment (see Table 3)¹⁸ conferred to the petroleum companies while adopting the current tax rates (SPT) depending on the price of oil. In the second scenario we removed the preferential treatment but applied a SPT of 31 per cent. In the third scenario we applied a SPT of 55 per cent. Differential rates were applied in order to take into consideration varying degrees of preferential treatment.

All three hypothetical scenarios produced results which are considerably higher than the actual taxes accruing to the government in 1995 from these companies. Tax expenditures are estimated to be TT\$ 383.3 million in scenario 1, TT\$ 648.9 million in Scenario 2 and TT\$ 1,054.0 million in Scenario 3. The estimated tax liability in the first scenario is approximately 35 per cent higher than the actual tax liability. Corresponding values for scenarios 2 and 3 are 58 per cent and 95 per cent.

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These allowances listed therein are indicative of some preferential treatment. Hence they do not form part of the normative structure as such they contribute to tax expenditure.

TABLE 5
TAX EXPENDITURE ESTIMATES FOR THE PETROLEUM SECTOR, 1995
TT\$ Million

	Existing	Scenario 1	Scenario 2	Scenario 3
Computation of Supplemental Petroleum Tax				
Gross Income from Disposal of Crude Oil production Deduct	4,396.5	4,396.5	4,396.5	4,396.5
2 Royalties	510.6	510.6	510.6	510.6
3 Exploration allowance	210.9	0.0	0.0	0.0
4 Investment allowance – (marine and land)	259.2	0.0	0.0	0.0
5 Geological & Geophysical allowance 6 Marine Thermal Recovery Investment allowance	33.8	0.0 0.0		0.0 0.0
7 Enhanced Recovery allowance	0.0	0.0	0.0	0.0
8 Corrosion Inhibitors	0.1	0.0	0.0	0.0
9 Total Deductions (sum of lines 2 to 8)	1,014.6	510.6	510.6	510.6
10 Income After Deductions (line 1 minus line 9) Add	3,381.9	3,885.9	3,885.9	3,885.9
11 Total Recaptured allowances (sum of i and ii) (i) Marine investments (ii) Enhanced Recovery	27.2	27.2	27.2	27.2
12 Income After Recapture (sum of lines 10 and 11) Less	3,409.1	3,913.1	3,913.1	3,913.1
13 Losses brought forward	160.4	160.4	160.4	160.4
14 Income Subject to Supplemental Petroleum Tax	3,248.7	3,752.7	3,752.7	3,752.7
15 Supplemental Petroleum Tax liability Less	366.2	439.6	982.4	1,762.4
16 Discounts (Prod/Small Field) 17 Supplemental Petroleum Tax liability (Adjusted)	21.8 344.3	439.6	982.4	0.0 1,762.4
Unemployment Levy	5 400 0	F 400 0	5 400 0	5 400 0
1 Crude Oil and Gas Sales 2 Other Income	5,493.9 34.8	5,493.9 34.8	5,493.9 34.8	5,493.9 34.8
3 Total income	5,528.7	5,528.7	5,528.7	5,528.7
Deduct	, 0,0011	0,02011	0,02017	0,02011
4 Operating expenses	1,276.6	1,276.6	1,276.6	1,276.6
5 Miscellaneous expenses	390.5	390.5	390.5	390.5
6 Royalties	521.6	521.6	521.6	521.6
7 Capital allowances 8 Workover allowance	753.2 397.0	753.2	753.2 □ 0.0 →	753.2 0.0
9 Production levy	19.6	19.6	19.6	19.6
10 Heavy of allowance	77.3	**************************************	0.0	0.0
11 Exploratory and Development dry hole expense	144.7	0.0	0.0	0.0
12 First year allowance	0.0	0.0	0.0	0.0
13 Initial allowance	0.0	420.6	0.0	0.0
14 Supplemental Petroleum Tax 15 Currency Exchange	344.3 71.3	439.6 71.3	982.4 71.3	1,762.4 71.3
16 Total Deductions (sum of lines 4 to 15)	3,996.1	3,472.4	4,015.2	4,795.2
17 Income after deductions (line 3 minus line 16)	1,532.6	2,056.4	1,513.5	733.5
Less				
18 Losses brought forward	157.9	157.9	157.9	157.9
19 Income Tax Base (line 17 minus 18)	1,374.7	1,898.4	1,355.6	575.6
20 Petroleum Profits Tax rate	50% 687.3	50% 949.2	50% 697.2	50% 356.4
21 Petroleum Profits Tax (line 19* line 20) 22 Unemployment Levy rate	5%	949.2 5%	5%	5%
23 Unemployment Levy (line 17* line 22)	76.6	102.8	77.6	43.5
			_	

TABLE 5 (CONT'D)

Summary of Taxes	Existing	Scenario 1	Scenario 2	Scenario 3
Supplemental Petroleum Tax liability	344.3	439.6	982,4	1,762.4
Petroleum Profits Tax	687.3	949.2	697.2	356.4
Total Petroleum Taxes	1,031.7	1,388.8	1,679.6	2,118.9
Unemployment Levy	76.6	102.8	77.6	43.5
Total Tax Liability	1,108.3	1,491.6	1,757.2	2,162.4
Tax Expenditure		383.3	648.9	1,054.1

Source: Board of Inland Revenue, Trinidad and Tobago.

VI CONCLUSION

This paper has sought to estimate tax expenditures for both the personal and corporate energy sectors. Based on our research, the petroleum companies account for the largest proportion of taxes foregone by the government. Total tax expenditures for personal income¹⁹ and the energy sector in 1995²⁰ amounted to TT\$ 902 million. This represents approximately 3 per cent of gross domestic production²¹ and 17 per cent of government expenditure. The petroleum sector alone accounted for 72 per cent of the total tax expenditure. Not surprisingly, tax expenditure for individual incomes accounted for less than 5 per cent.

While it is generally agreed that incentives assist in attracting foreign investment the degree of incentives is a more contentious issue. As aforementioned the number and

Although estimates were not obtained for 1995 for personal income, we used a ballpark figure based on estimates for 1994 and 1997.

ldeally a time series of tax expenditure estimates would be more useful in examining general trends and relative contribution by each sector. Unfortunately due to data unavailability it was impossible to accumulate such a series.

Based on data for Brazil tax expenditure represent 1.85% of GDP in 1998. Unfortunately due to a lack of data for Trinidad and Tobago a year to year comparison is not possible. However given that the amount of companies benefiting from fiscal incentives in 1998 was greater than that in 1995 we expect no reduction in tax expenditure to the GDP ratio, in fact it is likely to be higher. As such we can conclude that tax expenditure as a percentage of GDP is at least 62% higher than in Brazil.

degree of fiscal incentives offered to companies in the petrochemical energy sector are highly concessional. As a result there is the need for improved monitoring and review of the incentive package otherwise, Trinidad and Tobago runs the risk of eroding its tax base. Moreover, alternative government programmes which may have engendered social and economic development are foregone. Nevertheless the purpose of a tax expenditure budget serves solely to provide information on the revenues foregone by the government and does not serve to draw conclusions or suggest whether tax provisions should be amended or removed.

This research represents exploratory work in estimating tax expenditure for Trinidad and Tobago. Future endeavours can bring about fine-tuning of the estimates together with an analysis of the benefits arising from the fiscal incentives package. This would bring us a step closer towards completing the process of evaluating the relative economic contribution of such incentives. However, research on tax expenditure should not be applied to Trinidad and Tobago in isolation given the prospect of Caribbean integration. Hence there is also scope for research into the harmonisation of incentives in the Caribbean Community.

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LEGISLATION

- The Income Tax Act Ch. 75.01 (as amended).
- The Income Tax (Aid to Industry) Act Ch. 85 (as amended).
- The Petroleum Taxes Act Ch. 75.02 and amendments: (No. 5 of 1981); (No. 26 of 1985); (No. 27 of 1988); (No. 15 of 1992).

APPENDIX 1

PERSONAL INCOME TAXATION

TABLE 1.1

COMPARISON OF INDIVIDUAL INCOME TAX RATES

1988-1999

Chargeable Income (TT\$)	Tax Rate %	Chargeable Income (TT\$)	Tax Rate %				Chargeable Income (TT\$)	Tax Rate %	
	1988		1989	1990- 1991	1992- 1994	1995	1996		1997- 1999
0-2,000	5	0-12,000	5	5	5	5	5	0-50,000	28
2,001-4,000	10	12,001-20,000	20	15	15	15	15	Over 50,000	35
4,001-6,000	13	20,001-40,000	40	30	35	33	30		
6,001-8,000	18	Over 40,000	45	35	40	38	35		
8,001-10,000	23								
10,001-15,000	28								
15,001-20,000	33								
20,001-25,000 ·	38								
25,001-30,000	43								
30,001-40,000	48								
Over 40,000	50								

Source: Board of Inland Revenue, Trinidad and Tobago

APPENDIX 2

CORPORATE INCOME TAXATION

TABLE 2.1 CORPORATION INCOME TAX EXEMPTIONS

- Dividends and other distributions, with the exception of preference dividends, received by a Company from a Resident Companies;
- (ii) Profits of an investment company;
- (iii) Profits from a local authority arising from its activities as such as well as from any trade or business carried on by such local authority;
- (iv) Profits from a trade or business carried on by a registered co-operative society;
- (v) Profits of any approved²² "sporting body of persons" derived from subscriptions or donations or from sporting event admission charges or from the sale of refreshments at these events;
- (vi) Profits of a registered²³ Trade Union whose rules prevent it from assuring to any person a gross sum not exceeding \$950 or an annuity exceeding \$240 per annum, in so far as such profits are applied solely for the purpose of provident benefits²⁴;
- (vii) Profits of an approved ecclesiastical, charitable or educational institution, in so far as such profits are not derived from a trade carried on by the institution;
- (viii) , Profits of the Post Office Savings Bank and any other approved thrift institutions;
- (ix) Profits of a statutory or registered building or friendly society;
- (x) Profits arising from investment of any approved fund or scheme;
- (xi) Interest receivable on any loan charged on the public revenue which the President has declared to be exempt;
- (xii) Gains of the Council of Legal Education;
- (xiii) Profits of an approved Mortgage Company derived from receipts, fees and commissions received by the company.
- (xiv) Profits arising from the investment of funds established under the National Insurance Act, namely the Employment Injury Benefit Fund, the Short Term Benefits Fund and the Long Term Benefits Fund;
- (xv) Market development grants as defined by the Export Development Corporation Act, 1984;
- (xvi) Profits of the Trinidad and Tobago Development Finance Company Limited (DFC);
- (xvii) Profits of the National Insurance Profit Development Company Limited;
- (xviii) Profits of the Trinidad and Tobago Bureau of Standards;
- (xix) Interest payable on the Trinidad and Tobago Development Finance Company Industrial Bonds issued by DFC;
- (xx) Profits of the Small Business Development Company Limited (SBDC);
- (xxi) 50 per cent of the interest earned by a financial institution in a year of income in respect of a loan to an approved small company;

²² Approval must have been received by the President in writing.

²³ Registered under the Trade Unions Ordinance.

²⁴ Provident benefits are payments made to a member for sickness, incapacity from personal injury,

unemployed, an aged member by superannuation, illness caused by an accident, for loss of tools due to fire or theft, member's, or wife's funeral expenses, provision for children of deceased member.

APPENDIX 3

ENERGY SECTOR

TABLE 3.1 PETROCHEMICAL COMPANIES GRANTED FISCAL INCENTIVES (1997)

Company Name	Incentives Granted	Effective Date	Status
Phoenix Park Gas Processors	Exemption from VAT imports5 year corporate tax holidayImport duty concessions	01.06.1991	In operation
Caribbean Ispat Limited	 Exemption from VAT imports Import duty concessions for 7 years 	01.01.1993	In operation
Caribbean Methanol Co. Limited	Exemption from VAT imports5 year corporate tax holidayLoss offset	01.01.1993	In operation
T'dad & T'gp Methanol Co. Ltd. I and II	 Exemption from VAT imports 5 year corporate tax holiday exemption from stamp duty on items for the construction of the plant Import duty concessions Loss offset 	10.03.1996	In operation

Source: Report on Fiscal Incentives for the Petroleum Industry.