TAXATION AND FINANCIAL DEVELOPMENT IN TRINIDAD AND TOBAGO

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Introduction

The development and efficiency of the financial system is almost universally accepted to have a positive impact on the economic development (Beck, deminguck – kurt and Levine 1999; Beck, Levine and Loayza 2000; King and Levine 1992; Levine 1999; Levine, Loayza and Beck 2000; King 1993, Pagano 1993 and Modeste 1993).

The gross stock of financial assets, as well as the range of financial assets available appear to have a positive causal relationship to economic growth and development (Fry 1995). The efficiency of financial intermediation is a key factor in the growth process, quite apart of the aggregate level of financial services provided. Any factor which impedes this efficiency, therefore, also has negative implications for growth.

Analyses of the financial sector are often done without reference to the impact of taxation on performance and effectiveness of the sector, inspite of the importance impact taxation system can have on the overall development of this sector. For example, the taxation system (both implicit and explicit) in the past being used to drive developments in particular sub-sectors of the system and, to encourage the holding of a variety of instruments. The taxation of the financial sector can also have serious impacts on the efficiency and the development of the sector. Taxes affect the efficiency of the financial sector by imposing a wedge between the returns to savers and the return on the investments which are eventually financed by these savings (Tanzi and King 1995).

This wedge is created by taxes on a range of activities by individuals in the course of transacting business in the financial sector. Taxes in the financial sector is also pervasive, with taxes imposed on the full range of transactions including the purchase of assets, the holding of assets, the income and capital gains from assets and the sale of assets. The system of taxation for the financial sector also covers the full range of sub-sectors, with the imposition of taxes in areas as diverse as banking, insurance, mutual funds, stock markets, credit unions and government securities markets.

The taxation of this sector deserves special treatment because it provides an unusual variety of avenues for the imposition of taxation for revenue generation. These avenues are in most cases fully exploited by governments, especially by authorities in developing countries where limited taxing capacity exists. Identifying, interpreting and quantifying these taxes in terms of standard tax categories is a very challenging task but one which enables authorities to assess the level of distortations caused by these taxes. Last but by no means least, is the fact that this market is prone to market failures, some of which can be ameliorated by "corrective" taxes. In this regard, an appropriate taxation regime for the financial sector is very important to development and growth of the sector. Any appropriate taxation system should:

(1)   be corrective of known distortations (asymmetric information)
(2)   minimise the distortation it creates for a given revenue yield

(3)   avoid pushing taxation collection from this sector beyond the point where the marginal costs exceeds those elsewhere in the economy.

In this context, and in light of the fact that few studies have explored this issue in an explicit way in the Caribbean, this paper seeks to evaluate how the taxation regime for the financial sector has impacted on this development in Trinidad and Tobago.

This paper is structured as follows. Section 2 reviews some of the issues posed by the financial sector, Section 3 evaluates the changing structure of the taxation regime for the financial sector and how it has impacted on the evaluation of the financial sector in Trinidad and Tobago. Section 4 attempts to distill some policy implications for and appropriate strategy for the financial taxation regime and Section 5 concludes.

Theoretical Issues

The main theoretical issues surrounding the taxation of the financial sector are contained in the literature on the excess burden of taxation and a design of optimal tax systems. Very simply, to design an optimal tax system for the financial sector would involve the system which keeps tax distortaiton to a minimum, subject to the restrictions flowing from the need to raise revenue and maintain an equitable tax burden.

There are a variety of effects that taxes have when impose on the financial system. These include:

(1)   the reduction of the level of financial assets in the formal financial sector as funds flow to the low tax sub-sectors (informal and foreign sectors) as investors practice tax arbitrage. At the level of institutions and assets, this phenomenon of arbitrage also comes into play when investors place their funds in institutions and assets which are tax less. The tax system therefore has an important impact and portfolio selection and the choice of financial institutions through which people save and invest.

(2)   Taxation can also impact on the distribution of savings in both the household and corporate sectors. In the household sector it impacts on the portfolio composition as well as their preference for current consumption *vis a vis* savings. In the corporate sector, it affects their corporate financing decisions, especially their pre-disposition to use debt relative to equity finance.

(3)   Taxes interact with existing imperfection in financial markets, sometimes to accentuate the distortions but sometimes helping to ameliorate these distortions.

(4)   Taxes can also impact on the level of savings and the inter-temporal allocation of resources. This effect is quite different because it operates through the relationship between capital accumulation and growth. This is very controversial because this analysis hinges on the interest elasticity of savings.

In this paper, we concentrate on (1) above, that is the impact of taxes on portfolio composition and the choice of financial institutions through which agents save and invest.

A tax (except in the lump-sum form) reduces consumers' welfare by transferring resources from the consumer to the government (direct cost) and through a rise in the after-tax prices of taxed products relative to non-taxed products (indirect cost). The direct cost produces an income effect while the indirect cost generates an income effect plus a substitution effect based on relative price changes.

The excess burden (or deadweight loss) of a tax refers to the excess of the reduction in the consumer's welfare above and beyond that which can be accounted for by the payment

of the tax. Excess burden is also referred to as efficiency loss of the tax. Note that the excess burden arises purely from a tax induce change or distortion in the relative prices of taxed and non-taxed product.

Two important implication follows directly from this. Firstly, even if the individuals demand for the tax commodity is such that it is not affected by the tax induce change in the prices they face (the demand curve for the tax product is inelastic), the tax will still involve an efficiency loss because of the induced relative price change. Secondly, if all products are taxable and are being taxed at the same rate, then there is no relative price change and no excess burden.

A simple way of measuring excess burden is to use the Dupuit-Marshall-Harberger Measure. This focuses on a single tax product for simplicity. This measure relies on the concept of consumer surplus as a measure of the agent net welfare in the use of a particular product. A detail review[1] of this measure of excess burden is not replicated as this is not the focus of the paper. Importantly though, the excess burden in this measurement framework is shown to vary positively with the price elasticity of demand for the product in the pre-tax situation and the square of the tax rate applied to the products.

The structuring of this argument in terms of the demand and supply for loanable funds in the financial sector, highlights how this concept works in the context of this sector.

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[1] Interested readers are referred to Auerbach and Hines (2001) for a comprehensive of this issue.

Figure 1. Excess Burden of Financial Taxes

Rate of return

r_1

r^* F

B

E

r C

0

Loanable funds

S

A

D
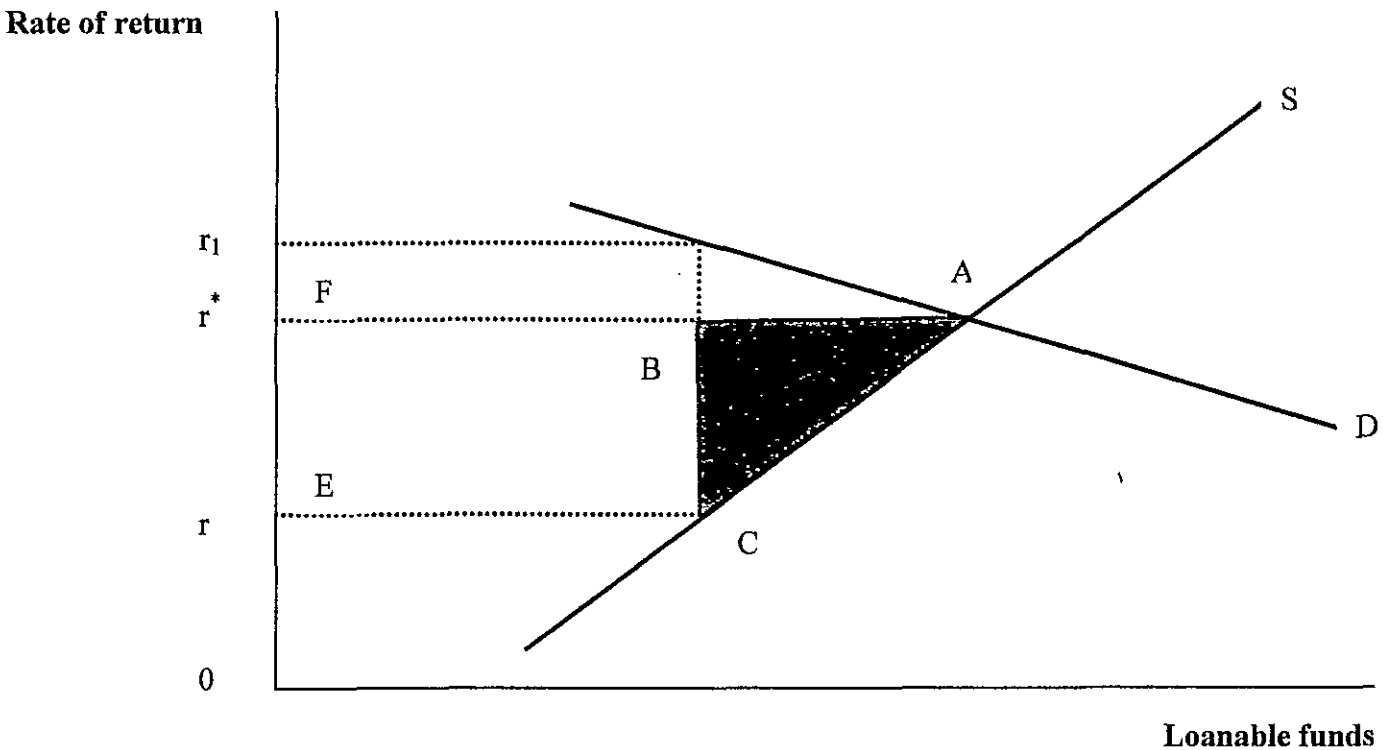
The demand for loans in the financial sector could be seen as a function of the marginal productivity of capital while the supply of funds depends on the rate of return on deposits and the opportunity costs of using the funds. The impact of taxation on the level of savings is excluded here to concentrate on the allocation of savings. Th rate of return on deposits can be approximated by the rate of return on loans, net of operating costs, assuming that operating costs per unit of funds is constant. These parameters are reflected in the demand and supply functions for loanable funds in figure 1.

The taxation of financial assets creates an additional loss that increases the spread between lending and deposit rates. This loss in efficiency can be measured by the area of the Harberger triangle in figure1. The efficiency cost of the tax is measured by the changes to the demand and supply of loanable funds schedules induced by the imposition of a tax. The lower bound of this efficiency cost can be approximated by the area of the triangle ABC in Figure 1. This area is equal to

$$(1) \qquad ECD = (1/2)(r^* - r)\Delta D$$

where r* is the real pre-tax rate of return on deposits, r is the post-tax rate of return and ΔD is the reduction in deposits which is induced by the imposition of a tax on deposits. This expression is useful for measurement purposes because information on the interest elasticity of loan demand is often not available. It nonetheless underestimates the efficiency loss by the amount

$$(2) \qquad UECD = (1/2)(r_1 - r^*)\Delta D$$

where r_1 is the post-tax marginal efficiency productivity of investment. If the tax wedge is large, the value of the real net interest rate r can be negative and the interest rate gap $(r^* - r)$ is probably much larger than the difference $(r_1 - r^*)$. The measurement of excess burden through the Harberger formula is of second order to the tax rate and therefore also with respect to tax revenue. The average efficiency cost increases linearly with the tax rate but the value of the marginal cost increases with the tax wedge (increased spread between the lending and deposit rates). If there is a small change in the net rate of return on financial assets, which has an impact dD on the level of the asset held by agents, the marginal efficiency cost (MEC) is equal to

$$(3) \qquad MEC = - (r^* - r)dD.$$

Tax revenue (R) is equal to $(r^* - r)D$ and the marginal change in tax revenue is equal to

$$(4) \qquad dR = (r^* - r)dD - Ddr.$$

The approximate marginal efficiency cost per unit of additional revenue (MECR) is therefore the ratio of these two expressions:

$$(5) \qquad MECR = \{(r^* - r)[D'(r)/D(r)]\}/\{1 - (r^* - r)[D'(r)/D(r)]\}.$$

The sign of D' is positive, which means as expected the marginal efficiency cost increases with the interest gap (r* - r) and with the response D'.

This issue of excess burden or efficiency loss is also linked to the optimal taxation issue. The central issue in the theory of optimal commodity taxation is determining the structure of taxes on various commodities to raise a given amount of tax revenue with a minimum of tax induced efficiency loss described above. The solution to this problem is summerised in a number of tax rules, the validity of which depends on assumptions regarding the feasible scope of taxation and the nature of the consumer demand function for these commodities. Three of these rules have implication for tax policy in the financial sector. These are the Proportionality rule, the Ramsey rule and the inverse elasticity rule.

The Proportionality rule argues that if all commodities are taxable, then the optimal structure would be one where the tax on each commodity is the same. The economic rationale behind this rule is easy to explain by reference to the discussion on excess burden above. The efficiency loss or excess burden is generated by tax induced changes in relative prices of commodities. If all commodities are taxable and taxed at the same rate, relative prices do not

change and therefore no efficiency loss can arise. Since taxing all commodities equally seems to be the simplest tax regime, which can be implemented, the Proportionality rule seems to be the best combination of theoretical optimality and administrative simplicity. This is, however, not the case. The optimality of the proportionality rule depends on the government's ability to tax all commodities equally, since this is seldom possible in a realistic policy environment where information asymmetries are a problem, tax policy based on this rule may be difficult to implement.

Equity considerations would also argue against a tax policy based on this rule. Additionally, this analysis abstracts from the issue of tax incidence under different market structures. The excess burden of a tax would be affected by the market structure in the sense that in some structures the producer would pass on the tax to the consumer while in other structures they may absorb the tax induced price change. More importantly, in cases where markets are far removed from full efficiency, that is, there are many structural features which distorts the behavior of economic agents and increases transactions costs, there may be instances in which the imposition of a tax may improve welfare (Stiglitz 1991). This is an argument which has been advanced in the case of reserve requirements and taxes on short term capital flows.

The Ramsey rule argues that for a tax structure to be optimal, the proportional tax induced reduction in the quantities demanded of a taxed commodity (as measured along its compensated demand curve) should be the same for all taxable commodities. This rule emphasises changes in quantities not relative prices, since relative price changes are only the means through which the quantity changes are effected. The Ramsey rule also stated in terms of compensated demand curves and measures of excess burden under this framework is based on Hicksian measures and not on the Dupuit-marshall-Harberger measure used above. This rule operates by reducing the sum of the excess burden across commodities by changing the tax rate on individual commodities so that the increase in excess burden occasioned by an increase in the tax on one commodity is more than offset by a decline in the excess burden from a reduction in the tax rate on another commodity. No further reduction in excess burden would be possible when the point is reached where changes to tax rates produces equal changes in compensated demand across all commodities. At this point the tax structure is considered optimal. This implies that an optimal tax structure under this framework would invariably be comprised of different tax rates on different products. The weakness of this framework is that the compensated demand functions are not directly observable so for all practical purposes tax policy based on this framework would be difficult to implement. The Inverse Elasticity rule states that the optimal tax rates for commodities are inversely related to their own-price elasticity of demand. This rule depends on the assumption that the demand for each taxed commodity is independent of all commodity prices except its own. This assumption is unrealistic especially in the financial system where financial assets have close substitutes and prices changes in one product invariably affect the demand for close substitutes. This rule therefore argues that tax induced efficiency losses would be lower, if the authorities apply relatively higher tax rates on those financial assets which are relatively price inelastic and, relatively low rates on those products which exhibit high price elasticities of demand. This, however, abstracts from the issue of equity.

The main guidelines for tax policy emanating from the above analysis are that:

(1)   Taxation impose an efficiency cost on agents the size of which varies positively with the price elasticity of demand of products in the pre-tax situation and the square of the tax rate itself.

(2)   The efficiency loss from taxation is more onerous in cases where the price elasticity of demand is relatively higher, therefore, tax policy should in principle impose relatively lower tax rates on products which have high elasticities. In most cases this is relevant in markets where there are many close substitutes for the products to be taxed and therefore many opportunities for tax arbitrage[2].

(3)   Taxes impose costs on consumers and the authorities must always be cognizant of the need to minimise these costs in their efforts to achieve particular objectives in terms of tax revenue yield.

(4)   A policy which tax various products at rates which are broadly similar, especially in product markets where there are close substitutes, seem the best way to minimise distortions and still meet the need to raise revenue.

(5)   In cases where there are imperfect markets and/or when conditions are far removed from full efficiency, the standard approaches to excess burden and optimal tax system may not be applicable. In particular, when markets already face many distortions and structural weaknesses, the imposition of specific taxes may actually improve welfare.

The review of the theoretical issues surrounding taxation, especially as it refers to efficiency and the pattern of demand, has highlighted some policy concerns of relevance to the taxation of the financial sector. In particular, tax arbitrage and its impact on portfolio composition and the choice of institutions and market through which agents save and invest is especially important issues for the financial sector. These microeconomic issues are often not aired in a sufficiently comprehensive manner in our efforts to develop the financial sector. We now turn to a review of the taxation of the financial sector and an evaluation of how this has impacted on the development of this sector.

Tax Policy in and Development of the Financial Sector in Trinidad and Tobago

Financial innovation in Trinidad and Tobago has generated a significant increase in the variety of financial instruments (Zephirin and Seerattan 1997). Financial assets are often purchased and held directly by individuals but indirect holdings through banks and other financial institutions have become more important. This occurred as economic agents became more sophisticated and their changing risk/return preferences led them into other financial assets and away from traditional bank deposits. Partly as a result of this trend it has become increasingly difficult to assess the overall impact of taxes in the financial sector. For example, taxes may be imposed on the costs of acquiring assets, on the holding of assets, the flow of income derived from financial assets and on the sale of these assets. These tax

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[2] Tax arbitrage is a process where economic agents avoid products, institutions and markets which are subject to relatively higher taxes for alternatives which attract relatively lower rates of taxation to minimuse their net tax burden and improve their welfare.

provisions generally differ depending on whether the assets are held directly by individuals or indirectly through financial institutions. To put these taxes into perspective, let us assume that an individual spends one unit of his own resources to acquire a financial asset at the beginning of the period, and disposes of the asset at the end of the period with its accumulated pre-tax returns P. The acquisition may be taxed at the rate t_a and/or attract a tax relief t_r. The value of the asset acquired at the beginning of the period will therefore be $(1 - t_a)/(1 - t_r)$. If the holding of the asset is taxed at t_w, its income is taxed at t_y and its disposal taxed at t_d, then the after tax return (R^t) on this asset for one period would be

$$(6) \qquad R^t = [(1 - t_w) + P(1 - t_y)]*(1 - t_a)*(1 - t_d)/(1 - t_r)$$

We now turn to a review of development in the tax system for the financial sector in Trinidad and Tobago.

Tax policy in the financial sector in Trinidad and Tobago in the last two decades has evolved largely as a result of ad hoc changes designed to either raise revenue or facilitate development of particular sub-sectors in the system. The more organised tax reforms, which occurred between 1989 and 1996, attempted to dismantle the system of numerous allowances and replace them with a few tax credits. These reforms sought to rationalise and simplify the tax system mainly for administrative efficiency reasons but also sought to remove distortions which gave some institutions and asset categories an advantage over others. In this section we review the various changes that have been made over the last two decades and the impact of these changes on financial development.

Tax revenue derived from tax on incomes have dominated total tax revenues but tax reforms have increased the importance of indirect taxes on goods and services, the category of tax revenue in which taxes on the financial sector would normally be reflected. Taxes on this sector, mainly in the form now of withholding taxes, are easy to administer since it is collected at source, that is at the financial institution level. This reduces opportunities for evasion since the authorities collects from a small number of financial institutions rather than from large numbers of individuals, which reduces the opportunities for evasion, as well as compliance costs. Tax policy in this sector has also been characterised by a number of exemptions from taxes and incidences where the holding of certain financial assets created opportunities for deductions against the income tax. This was evident in the 1980s when the government was more proactive in its attempt to develop the financial sector. Since then the policy has emphasised simplicity, administrative efficiency and competitive neutrality.

In the 1980s the significant tax policy developments were the one aimed at widening the choice of financial assets by the introduction of new institutions and developing institutions other than the dominant commercial banks. The most important included the tax incentives granted to credit union and the Unit Trust members for increasing their investments in these institutions, this in an attempt to make these institutions more attractive to consumers vis-a vis commercial banks. Credit unions had already benefited from the high rates of growth in the late 1970s and early 1980s. This, together with the tax credits helped to put the credit

unions to compete more effectively with commercial banks, which had to modify their strategies to meet the challenges from the credit unions.

The other major development in the financial sector in the 1980s was the introduction of the Unit Trust Corporation in 1982. The unit Trust was intended to provide the small investor with a vehicle to indirectly invest in the stock market while mitigating the risk of this type of investment. This was to be done through the pooling of risks and through the use of professional managers who were better equipped to deal with the complexity of the market. This institution was provided with an additional fillip of tax incentives. Specifically, this institution enjoyed a privileged tax status both at the corporate tax level and at the level of unit holders. The corporate income of the Unit Trust was completely tax exempt while unit holders' income from the First Unit Scheme was tax exempt up to a level of $5,000.

These incentives did not insulate the Unit Trust from difficulties. Sales in the First Unit Scheme which had opened strongly 1n 1982 with sales of $36 million dropped sharply to $3 million and $1.4 million in 1983 and 1984 respectively. The offer prices for units also declined from $10.1 to $5.9 between 1982 and 1996. These declines occurred as the economy slipped into a recession driven by falling oil prices. By 1986, the sale of units had recover to $12.4 million due in large part to the introduction of tax incentives for the purchase of units in that year. In particular, in 1986 the purchase of units was now tax deductible up to a limit of $2, 500 per annum. This was later changed to a system where tax credits were provided for the purchases of units. The stimulus provided by this incentive continued to boost sales in the scheme and the offer prices continued to recover in spite of continuing negative real growth rates. In 1989, the Unit Trust launched its Second Unit scheme saw remarkable growth on its introduction.

The development of the Unit Trust had important competitive implications for the commercial banks since units were close substitutes for bank deposits. Between 1989 and 1995 commercial banks' gross loans and deposits grew by 1% and 3.5% respectively, while the net interest margin moved from 4.7% in 1989 to 3.5% in 1995. In the same period, sales of units increased from $61.3 million to $974 million, while the offer price for units moved from $6.70 to $14.50. The commercial banks had to respond to maintain market share. They responded by introducing mutual funds of their own, managed through their trust company subsidiaries. The competition has continued in terms of foreign currency denominated mutual funds. Tax policy therefore not only served as a catalyst to widen and deepen the financial sector but to increase the level of competitiveness in the sector[3].

Sales increased strongly from the inception of the Second Unit Scheme's inception to reach $811.2 million in 1995 but declined to $537.6 million in the following year. This was largely due to a change in tax policy as the authorities began dismantling tax incentives in the financial sector. In 1994, tax credits were removed from unit holders in the Second Unit

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[3] In this same vein, retirement savings plans (annuities) which were first offered by insurance companies and which exploited the clause in the income tax laws which allows 1/6 of assessable income to be tax free if contributed to a retirement annuity. Moreover, since these products are classified as insurance products, they are not subject to the 15% withholding tax imposed on bank interest income. The popularity of these products led the commercial banks and the Unit Trust to offer similar products (Sergeant 1995).

Scheme. By 1996, the tax credit scheme was discontinued altogether and the dividend income allowance that investors in the First Unit Scheme had benefited from since 1984 was eliminated. Furthermore, in an effort to encourage competitive neutrality, the authorities imposed a broad based 15% tax on interest income earned in the First and Second Unit Schemes. At the same time a 15% tax was also imposed on interest income from bank deposits and a 15% transaction tax was imposed on financial transaction excluding loans and deposits. This trend to the removal of deductions and exemptions have also manifested itself in the reduction in the limit on tax deductible mortgage interest payments per annum from $36,000 in 1988 to $18,000 at present. Even the contributions to approved pension plans and annuities have been affected. The contributions to these plans are deductible against personal income tax up to a limit of 1/6 of chargeable income but subject to a maximum deduction per annum which have dropped from $18,000 to $12,000 per annum.

The tax on interest income on deposits has since come down to 10%. This was driven by the fact that interest income from US dollar deposits of residents attracted a 10% tax, which created incentives for residents to substitute US dollar deposits for TT dollar deposits. This had implications for the demand for US dollars and dollarisation. More importantly though, was the possibility that this could put pressure on the exchange rate given the relative demand for US and TT dollars. These concerns led the authorities to equalise the tax rate at 10% across these deposits to remove these possible sources of distortions.

This was part of a larger tax reform programme which sought to simplify, rationalise and generally make tax administration more effective. The main objectives of this programme were:

(1)   to broaden the tax base through the adoption of a broad based sales tax, while at the same time lowering the tax rate on corporate and personal incomes

(2)   to eliminate as much of the exemptions and deductions which complicated tax administration and created many opportunities for tax evasion

(3)   to encourage competitive neutrality by as far as possible by applying broadly similar tax rates on commodities and products which were close substitutes.

This manifested itself in the introduction of the Value Added Tax (VAT) system in 1990 at a rate of 15%. At the same time the corporation tax from 40% in the 1988-94 period to 35% at present. The top marginal rate of personal income tax has also come down from 45% in 1989 to 35% at present.

The last objective in particular was supported by commercial banks, which argued that the tax system had given certain institutions an unfair advantage in markets where the banks competed. They further argued that this tax structure accentuated an already unfair situation where banks faced relatively higher reserve requirements and tighter regulations compared to other institutions.

These tax-induced changes in the financial sector seem to have contributed to the development of the financial sector in Trinidad and Tobago. Tax policy in the financial sector was used successfully to encourage savings through new instrument and institutions. This of course reduced the tax revenue yield of the fiscal authorities and put commercial banks at a competitive disadvantage.

The development of the financial sector manifests itself in many ways. As mentioned above one measure is an increase in the range of financial institutions and instruments. The development of the new institutions such as the Unit Trust and the Home Mortgage Bank, owe much of their growth and development to favorable tax treatment. The emergence and growth of instruments such as retirement savings accounts and annuities filled a gap in the market for individual retirement accounts, however, they were also driven by a tax policy that increased their after-tax rate of return to the holders. This increased their effective demand relative to other savings instruments. In this regard, we focus on indicators of financial development that highlight these features. In particular, we look at the share of commercial bank assets in total assets, a declining share buttressed by the increasing share of non-banks is seen as a measure of development of the sector (Fry 1995). The faster growth rate of newer institutions is also symptomatic of the fact that agents in the market are becoming more sophisticated and require a wider menu of financial assets which are often provided by these institutions. These two trends usually combine to ensure that the financial system grows faster in terms of assets at times when new institutions and instruments emerge.

Using these indicators to compare a period when tax induced changes were most significant to a period when they were not can give us a sense of whether tax induced changes accelerated financial development.

Table : The Percentage share of financial Assets in the Financial System (%)

Institution	1980	1985	1990	1995	1999
Central Bank	46.7	23.0	22.0	18.0	13.1
Commercial Banks	33.9	41.9	38.2	47.1	40.6
Finance Companies and Merchant Banks	3.2	5.1	3.7	4.9	6.2
Trust and Mortgage Finance Companies	4.3	7.7	5.7	8.8	7.5
Development Banks	1.9	4.0	3.4	2.4	1.6
Credit Unions	1.4	2.9	5.4	5.9	4.3
Insurance Companies	5.2	8.4	11.6	11.4	13.1
National Insurance Board	3.4	6.5	7.6	7.7	7.4
Unit Trust Corporation	Na	0.1	1.1	3.1	4.3
Home Mortgage Bank	Na	Na	0.9	1.5	1.2

It is obvious from the table that commercial banks still maintain a dominant position. We are, however, interested in what happened to the percentage share in those years when the authorities were actively promoting the sector through tax incentives. This period basically corresponds to the period 1985 to 1995. The percentage share for credit unions seemed to have increased relative to the periods before and after the period suggesting that these tax incentives had a positive impact on their development and by extension the development of the sector as a whole. In the case of the Unit trust Corporation, however, there does not seem to be a significant difference between the 1985 to 1995 period and the period before and after this period.

The relative growth rate of the assets of these institutions in the relevant period could be more instructive. When one looks at the growth rate for the 1980 to 1985, the 1985 to 1990, 1990 to 1995 and the 1995 to 1999 periods. It appears from these comparisons that the highest rate of occurred in the 1980 to 1985 and 1985 to 1990 when the tax measures were actually in place. In the case of credit unions the period 1980 to 1985 saw asset growth of 46.2%, it was 29.6% in the period 1985 to 1990 and it was 9% and 3% respectively in the following two period. The impact seem to have been most significant in the period when the measures were actually implemented but the effect faded even in a period when the measures were still in force. In the case of the Unit Trust, the period 1982 to 1985 saw a diminution in the value of assets of the magnitude of 17.5%. Asset growth picked up dramatically (294.6%) in the period 1985 to 1990 after the introduction of the tax measures in 1984. Asset growth was 58.6% in the period 1990to 1995 and 28.6% in the period 1995to 1999. This compared to the commercial banks whose assets grew by 19% in the period 1980 to 1995, 4% in the period 1985 to 1990, 12.9% in the period 1990 to 1995 and 8% in the period 1995 to 1999. These institutions faced essentially the same economic environment with the notable exception of the tax treatment, both at the corporate income level and at the level of their savings instruments. It seems, therefore, that these tax measures had a significant impact on the growth of these institutions but not so much on the overall growth of the sector given their small share of total financial assets.

If there was any developmental impact of these taxes, it seemed to hinge on the dynamic competitive game that it elicited between the commercial banks and these institutions. In particular, it seem to have been the case that the real benefit was generated by the fact that the commercial banks responded to the threat presented by these new institutions and instruments, which generated better after-tax rate of returns and, therefore, competed in the banking market for deposits and loans. The creation of new products to met this threat in particular served to widen the menu of financial assets available to consumers. The competitive response of the banks therefore seemed too counteract the tax incentives for these non-bank financial institutions, as the fading growth in these institutions' assets seem to attest to.

The main lesson from the differential taxation of the financial sub-sector seems to be that it does provide a fillip to institutions and instruments that are treated favorably. Invariably though, the response of other institutions that compete in the same market will level the playing field by introducing products which are also eligible for the tax incentives. This is particularly easy to do in the financial sector, where the fungibility of finance means that

institutions can easily repackage products to provide close substitutes to the tax favored instrument. This implies that this strategy can only work for a limited time, to do otherwise would only lead to a dimunition in your tax revenue yield as more institutions and products qualify for the tax incentives in the form of exemptions and lower marginal tax rates.

This review has concentrated mainly on the impact of taxation on the credit unions and the Unit Trust primarily because of data limitations and the fact that tax policy developments in these sub-sectors seemed to have had the most profound impact on the development of the financial sector[4]. The insights which emerges from the utilization of tax policy to achieve financial development objectives and the theoretical review of the issues underpinning the taxation of the financial sector has many policy implication for tax policy in the financial sector in the Caribbean. We turn to this in the next section.

Appropriate Approaches to Tax Policy for the Financial Sector

There are insights which emerge from a review of the tax induced changes in the financial sector and the theoretical issues related to taxation of the financial sector are useful guides for tax policy in this area. In particular, the central issue is that taxes in the financial sector impose excess burdens and competitive distortions. Tax revenue yield must therefor always be careful to minimise these distortions for any given revenue yield.

It also appears that excess burden varies inversely with the interest elasticity of demand therefore financial products which have many close substitutes and are therefore highly price elastic should be taxed at the lowest rates possible to minimise excess burden.

It should also be noted that in situations where the environment is not first best, there are taxes which could improve welfare. These is obviously the case where there are missing markets. They improve welfare by improving the menu of financial assets and the level of competitiveness in the financial sector. The competitive impulses this set in train, however, generally leads to the original beneficiaries not being able to reap the benefits of the tax incentives as close substitutes emerge to benefit also. After this point there is no susstantive impact because all institutions have products which qualify for the tax incentive, in this case the only impact is in terms of a decline in tax revenues. It is therefore practical to equalise the tax structure after some critical mass has been achieved. In other words they should ideally be used as short term measures.

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[4] There are obvious tax induced changes in the life insurance sector, primarily in terms of annuities and pension funds, which can have significant implications for the development of the financial sector but the absence of a good data set in this area frustrates this type of analysis.