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**ECONOMIC INTEGRATION AND THE TRANSFORMATION OF THE TAX MIX:
CYPRUS 1990-2001**

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Abstract

This paper outlines the steps that the Government of Cyprus took to transform its tax system between 1990 and 2001 in order to prepare itself for admission into the European Union. Cyprus has many of the same economic features as the countries of the Caribbean and Central American regions. In the case of Cyprus, the reforms were focused on the introduction and expansion of the Value Added Tax, a restructuring of the excise tax system and a modernization of its income tax system. By 2002 it has virtually completed the transformation process. The paper also discusses the situation of Belize, which is preparing to begin a similar transformation. Although the required changes might appear very large, a set of reasonable options are presented for consideration.

ECONOMIC INTEGRATION AND THE TRANSFORMATION OF THE TAX MIX: CYPRUS 1990-2001

Background

The proposals made for economic integration through the Free Trade Area of the Americas (FTAA) have many of the same implications for the fiscal systems of the participating countries as now faced by those countries preparing to gain entry into the European Union. The principal change in the tax mix involves a movement away from taxes on international trade to some combination of sales taxes (usually VAT), excise taxes, and income taxes.

For small countries that earn much of their foreign exchange through tourism and whose imports arrive through a small number of entry points, import tariffs along with a few selected excises are a very convenient way to collect a significant share of public sector revenue. The number of personnel required by the Customs and Excise tax administration to collect and process the taxes and duties at the Customs points is relatively modest. For very small countries, the levels of tariffs have in the most part not been sufficient to induce significant domestic production in many importable commodities. Hence, they have not felt the same urgency on economic efficiency grounds to move the indirect taxation away from the taxation of imports to a consumption type sales tax or VAT system.

The dangers of continuing with this type of tax system arise in a number of dimensions. First, there is usually a wide range of tariff rates, including zero, that open the opportunity for false misclassification in order to have the item taxed at a lower rate. Second, these tax systems tend to be revenue inelastic with respect to income because the consumption of services is usually very lightly taxed under such a tax system. Third, with the increasing move toward economic integration on either a bilateral or multilateral basis a regime of tariffs develops where for the same commodity the rate will be different depending from which country it is imported. In such a situation there is a considerable erosion of revenue and market pressure to move the all the rates of tariff towards the lowest rate that might apply to the commodity. Finally, artificial incentives are created that alter both production and consumption decisions, hence, economic inefficiencies will be created. All of these factors combined tend to make the country's revenue system unstable, necessitating frequent tax changes in tax rates and ad hoc measures to change the tax base.

This paper examines the evolution of the tax system of Cyprus after it began preparations to enter into the European Union and compares its situation over time with the present one of Belize. Cyprus has a number of common characteristics to Belize and many of the countries in the Caribbean regions. First, they inherited the British system of public administration and a similar mix of taxes. Second, they are small countries with economies that rely heavily on providing tourism services. Finally, after operating for many years with policies which were inward looking, Cyprus embraced a policy of free

trade and economic integration with the rest of the world through its application and preparation towards entry into the EU by 2004.

The Cyprus Economy

The island Cyprus, located in the northeast corner of the Mediterranean sea, is divided with approximately 680,000 inhabitants of predominately Greek ethnicity living in the southern part of the country and approximately 210,000 inhabitants of predominantly Turkish ethnicity living in the northern part. Although the experiences over the past decade in the evolution of the tax systems have been somewhat similar in both parts of the island, for the purposes of this paper the discussion will deal only with the experiences of South Cyprus¹.

Table I provides an outline of some of the key descriptive statistics for Cyprus for the period from 1995 to 2001. Briefly, in 2001 the per capita income of Cyprus was about US\$13,500, with receipts from tourism averaging about 20 percent of GDP and imports averaging about 45 percent of GDP. The rate of inflation has averaged less than 3.0 percent, with rate of unemployment averaging 3.2 percent over the same period. Since 2000 the fiscal deficit has averaged below 3 percent of GDP. Between 1995 and 2001 the average real rate of growth of GDP has been 4.2 percent. In summary Cyprus has had a very healthy economy during a period of significant transition.

Fiscal Adjustment in Cyprus

In 2001 the public sector revenues in Cyprus, excluding social security contributions, was equal to approximately 30.5 percent of GDP. Of this amount about 23.5 percentage points of GDP was raised through tax revenue, and 7.0 percentage points of GDP was raised by non-tax revenues. The public sector budgetary deficit in that year was equal to 2.8 percentage points of GDP. However, this rosy picture was not always the situation. In 1990 and 1991 the total size of the public sector was approximately the same share of GDP, but in these years the deficit was equal to 5.3 and 6.8 percentage points of GDP, respectively. Hence, one of the main outcomes of the fiscal changes undertaken during this period was to reduce the size of the public sector deficit².

Another objective of the fiscal adjustments was to bring about a reduction in the share of revenues coming from import duties, and to reform its system of excise duties into a modern system of excise taxes. As we can see from table 2, in 1990 the revenues received from tariffs on imported commodities were equal to 3.4 percentage points of GDP. By 2001, revenues from this source have dropped to about 1.3 percentage points of GDP, and are projected to drop to less than 0.5 of a percentage point by 2005³.

¹ For the rest of the paper references to Cyprus will refer to the south part of the Island of Cyprus

² The EU convergence criterion (Maastricht) for the maximum size of the public sector deficit is 3 percent of GDP.

³ Republic of Cyprus, Cyprus Central Government (Consolidated) Budget , 2002

Table 1: The Cyprus Economy, 1995 - 2001.

Years	1995	1996	1997	1998	1999	2000	2001	Average 1995- 2001
GDP at current market prices (million CYP)	4,006.6	4,159.5	4,369.2	4,693.7	5,018.7	5,486.9	5,867.2	-
GDP at constant 1995 prices (million CYP)	4,006.6	4,081.7	4,179.6	4,388.7	4,590.1	4,824.2	5,017.3	-
Per Capita GDP at current prices (\$)	13,780.5	13,738.9	14,733.9	13,727.2	13,870.0	13,165.8	13,524.5	-
Real GDP growth (%)	6.1	1.9	2.4	5.0	4.6	5.1	4.0	4.2
Inflation rate (%)	2.6	3.0	3.6	2.2	1.7	4.1	2.0	2.7
Unemployment Rate (%)*	2.6	3.1	3.4	3.4	3.6	3.4	3.0	3.2
Domestic Savings / GDP at current market prices (%)	20.2	17.0	15.2	13.3	16.6	14.9	14.0	15.9
Investment / GDP at current market prices (%)**	22.0	22.3	19.8	20.8	19.3	19.1	18.5	20.2
Public Deficit / GDP (%)	1.0	3.4	5.2	5.5	4.0	2.7	2.8	3.5
Tourism Receipts / GDP (%)	20.2	18.8	19.3	18.7	20.4	21.8	21.8	20.1
Imports, CIF / GDP (%)***	41.9	44.9	43.8	41.9	44.9	43.8	41.1	43.2
Exports, FOB / GDP (%)***	13.9	15.7	14.8	13.9	15.7	14.8	11.9	14.4

Notes:

* Ratio of Registered Unemployment at the District Labour Offices to total labor force.

** Excluding ships and aircraft.

**** Source data for years 1995-1997 was International Financial Statistics Yearbook, IMF.

Sources:

Ministry of Finance / Statistical Service Department database, Government of Republic of Cyprus, 2002.

International Financial Statistics Yearbook, International Monetary Fund, 2000.

With the introduction of the VAT in 1992, Cyprus also reorganized its excise tax system to apply these commodity specific taxes at the same rate to the sales of both imported and domestically produced quantities of these items. From 1992 to 2001 the role of excise taxes in revenue mobilization has been very consistent with an annual yield of about 3 percent of GDP. Hence, both objectives of reducing the size of the public sector budget deficit, and reducing the dependence on import duties have been achieved. But it has taken a decade of very active reform of the entire tax system in Cyprus to bring about the changes that were needed in order for the country to be ready to enter into the European Union.

Unlike many developing countries the Cypriot income tax system has been quite effective as an instrument for revenue mobilization. Direct taxes as a percentage of to the total of direct plus indirect taxation started in 1990 at 44.9 percent. The movement toward the fiscal restructuring began in 1991 with a reform of the income tax. The immediate impact of this reform on revenues was to reduce the share of GDP collected by the income tax from 5.3 to 4.5 percentage points of GDP. However, these income tax measures served to accommodate the introduction of the value added tax which came about in 1992.

Following the introduction of the VAT in 1992 and the raising of the VAT rate in 1993 from 5 to 8 percent, the share of direct taxes in total tax revenues fell over time so that by 1995 they were only 39 percent of total tax revenue. However, after the income tax reform of 1996 their share in total revenue mobilization gradually increased again to 47.7 percent by 2001.

The share of revenues collected from the corporate sector has increased over time from about 17 percent in 1990 to about 35 percent of the total direct tax revenues in 2001. In 2002 a major reform of the income tax has been undertaken to bring it into full conformity with the EU guidelines. This has resulted in a substantial lowering of the personal and corporation income tax rates and the elimination of many incentives and exemptions from the system⁴. With the rate of VAT increasing to 13 percent in 2002 and 15 percent in 2003 it is likely that less emphasis will be given to the income tax system as an instrument of revenue mobilization in the future.

The value added tax played an important roll in enabling the government to bring about the fiscal adjustments outlined above. It was introduced in 1992 at a single rate of 5 percent on a consumption base with exports of commodities being zero rated. It is interesting to note that the VAT was applied fully to the purchases of tourist services in Cyprus, without any subsequent refund being given to foreign tourists. This “excessive” taxation of the tourist sector, has served to somewhat offset the pressure for the upward movement of prices of beachfront land as the demand for Cypriot tourist services increased during the 1990’s.

⁴ Poufos, George Gabriel, *The Cyprus Tax Reform of 2002*, (mimeo) Inland Revenue Department, Republic of Cyprus, September 2002

Table 2: Taxation in Cyprus by Tax, 1990 - 2001.
Expressed as percent of GDP.

Years	1990	1991*	1992**	1993***	1994	1995	1996****	1997	1998	1999	2000*****	2001
<i><u>Direct Taxes:</u></i>												
Income Taxation												
Individuals	3.9	3.2	3.2	3.7	4.0	3.9	3.5	3.6	3.5	3.5	3.4	4.3
Corporations	1.4	1.3	1.4	1.4	1.7	1.7	2.3	2.3	2.7	3.1	3.4	3.9
Total Income Taxation	5.3	4.5	4.6	5.1	5.7	5.7	5.9	6.0	6.2	6.7	6.8	8.2
Other Direct Taxes	2.8	2.8	2.7	2.5	2.6	2.5	2.6	2.6	2.8	3.2	3.4	3.0
Sub-Total	8.1	7.3	7.3	7.7	8.3	8.2	8.5	8.6	9.0	9.8	10.2	11.2
Direct Taxes / Total Taxes (5)	44.9	43.1	40.5	39.3	39.9	39.0	41.0	43.1	44.1	46.7	46.1	47.7
<i><u>Indirect Taxes:</u></i>												
Import Duties	3.4	3.4	3.2	2.5	2.2	2.2	2.0	1.6	1.1	1.1	1.1	1.3
Selective Excises	0.0	0.0	3.1	2.7	2.8	3.0	2.8	2.5	2.6	2.6	2.9	3.0
Value Added Tax (VAT)	0.0	0.0	1.2	3.4	4.6	4.8	4.8	4.7	4.8	4.7	5.4	5.9
Other Indirect Taxes	6.6	6.3	3.3	3.1	2.8	2.9	2.6	2.5	2.9	2.8	2.4	2.1
Sub-Total	9.9	9.7	10.8	11.8	12.5	12.8	12.2	11.3	11.4	11.2	11.9	12.3
<i>Total Direct & Indirect Taxes</i>	18.0	17.0	18.1	19.5	20.8	21.0	20.7	19.9	20.4	21.1	22.1	23.5
Social Insurance Contributions (SI)	4.2	4.4	4.3	4.7	4.6	4.5	4.7	4.7	4.7	4.5	4.4	4.7
<i>Total Direct & Indirect Taxes & SI</i>	22.3	21.3	22.3	24.1	25.4	25.5	25.4	24.6	25.0	25.6	26.5	28.3
<i><u>Non-Tax Revenue</u></i>	5.4	5.6	5.8	6.0	5.8	6.1	6.3	6.9	6.3	6.1	7.4	7.0
<i>Total Revenues</i>	27.6	27.0	28.2	30.2	31.2	31.6	31.8	31.5	31.4	31.7	34.0	35.3
<i>Grants</i>	0.2	0.1	0.0	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0
Total Revenues & Grants	27.8	27.1	28.2	30.3	31.4	31.7	31.8	31.5	31.4	31.7	34.0	35.3

Notes: * Income Tax Reform (ITR)
 ** VAT 5% 1/7/92
 *** VAT 8% 1/10/93
 **** Income Tax Reform
 ***** VAT 10% 1/7/00

Source: Ministry of Finance / Statistical Service Department database, Government of Republic of Cyprus, 2002.

In its first year of operation, the VAT raised revenue equal to 1.2 percentage points of GDP. In 1993 the single tax rate was raised to 8 percent, and the revenues increased to 3.4 percentage points of GDP. With improved tax administration the revenues rose in size to about 4.8 percentage points of GDP by 1995, where it remained until the VAT rate was raised again in 2000 to 10 percent. In 2000 and 2001 the VAT revenues rose to equal 5.4 and 5.9 percentage points of GDP, respectively.

In terms of the effectiveness of the VAT in Cyprus, it has had one of the highest rates of effectiveness of any VAT in the world. Until now it has been levied at a single, low rate, without refunding the VAT on the purchases by tourists. Furthermore, as it is a small island economy with a high ratio of imports to GDP, the VAT administration is greatly facilitated. Over 50 of the total revenue collections of the VAT occur at the initial points of entry into the country. As a consequence, the revenue yield of the VAT in terms of the number of percentage points of GDP collected is relatively high in relation to the magnitude of its statutory tax rates.⁵.

Conclusions from the Cyprus Experience.

One way of summarizing the changing of the relative importance of the various components of the tax system of Cyprus over this period is to estimate the revenue buoyancy of each of the components of the tax system with respect the changes in income that has occurred over time. The estimate of the buoyancy of a tax captures both the tax's underlying revenue responsiveness to changes in income as well as the impact over the period of the discretionary changes in tax policies. If the estimated buoyancy is a value that is greater than 1.0 then this is an indication that revenues from this source have been growing at a faster rate than the growth rate of GDP. Conversely, if the estimated buoyancy is less than one this indicates that either because of the structural design of the tax, or because of discretionary tax policies, the revenues from this source have grown more slowly than the growth of GDP. Hence, the estimated buoyancy of a tax is a descriptive statistic of historical experience rather than a parameter that should be used to make forecasts.

Table 3 contains estimates of the buoyancy of total direct and total indirect taxes as well as the component taxes within each of these broad categories.

⁵ Ahmed, Shakeel, *Calculating the Revenue Effectiveness of the Value Added Tax and Finding its Determinants*, MSc Thesis in Economics, Eastern Mediterranean University, July 2002. Effectiveness is measured here as the ratio of actual VAT collections /total consumption divided by the statutory rate of VAT.

Table 3: Revenue Buoyancies of Cyprus Taxes, 1990-2002.

Type of Tax	Estimated Buoyancy
Total Taxes	1.32
Total Direct Taxes	1.41
Individual Income Tax	1.03
Corporation Income Tax	2.33
Other Direct Taxes	1.17
Total Indirect Taxes	1.25
Import Duties	-0.40
Selective Excises	1.13
Value Added Tax	2.53
Other Indirect Taxes	-0.60

From table 3 we find that the buoyancy of the overall tax system was 1.32 indicating that tax revenues were growing at about 32 percent faster than income. Hence, with a modest amount of expenditure control, we can clearly see how the size of the public sector budget deficit could be reduced over time. The buoyancy of all direct taxes was estimated to be 1.41. Almost all of the estimated buoyancy that is greater than one for the aggregate of all direct taxes came about because of the buoyancy of the corporation income tax system which was estimated to be 2.33 over this period. With an estimated buoyancy of 1.03 for the individual income tax, it would appear that the direct tax policy measures taken during this period were focused on reducing the rates of individual income tax while at the same time reducing the incentives given to the corporate sector without a corresponding reduction in tax rates.

The estimates of buoyancy for the indirect tax system indicate that it is here where the tax mix was greatly altered. For the indirect tax system the estimate of this parameter is 1.25 for the period indicating that the indirect tax system as a whole remained quite buoyant. However, when considering individual taxes the buoyancy estimates range all the way from -0.40 for import duties and -0.06 for other indirect taxes to 2.53 for import duties. Obviously, the value added tax represented a major substitution for the import duties and other indirect taxes that were being greatly reduced during this period.

The Challenge Facing Belize

Belize like most of the countries of Central America and the Caribbean regions will have to make major adjustments to the structure of its tax system before it will be able to enter

into a multilateral or bilateral agreement leading to economic integration. In Table 4 the revenues by type of tax are presented as percentages of GDP for the period from 1997 to 2001. The obstacle to economic integration is clearly shown by the fact that while total tax revenues in 2001 were equivalent in size to 19.8 percent of GDP the taxes on international trade transactions were equal to about 8 percentage points of GDP. At the same time excise taxes amounted in size to less than one percentage point of GDP. Belize is also faced with a very serious public sector budgetary deficit caused by an ambitious public sector investment program.

Table 4: Taxation in Belize by Tax, 1997 - 2001.
Expressed as percent of GDP.

YEAR	1997	1998	1999	2000	2001	Average 1997-2001
Total Revenues	23.2	22.2	21.6	20.9	22.3	22.0
Tax Revenues	20.3	19.3	16.5	18.4	19.8	18.9
Income Tax	4.5	4.8	4.2	4.7	4.6	4.6
Personal Tax	2.2	1.6	0.9	1.1	1.3	1.4
Business Income/Business Tax	1.9	2.9	3.1	3.4	3.3	2.9
Arrears	0.4	0.4	0.2	0.2	0.1	0.3
Taxes on Property	0.1	0.1	0.1	0.1	0.2	0.1
Taxes on Goods and services	8.5	7.8	5.8	6.8	7.0	7.2
Value Added Tax	6.1	5.4	-0.3	0.0	0.0	2.3
Sales Tax	-	-	4.4	5.1	5.2	4.9
Excise Duty	1.4	1.4	0.4	0.5	0.5	0.8
Other	1.0	1.1	1.1	1.2	1.3	1.2
Taxes on International Transactions	7.2	6.6	6.4	6.7	8.0	7.0
Import Duty	4.2	3.7	3.8	3.9	3.7	3.9
Revenue Replacement Duty	2.9	2.9	2.6	2.4	3.7	2.9
Environment Tax	-	-	-	-	0.3	0.3
Other	0.0	0.0	0.1	0.4	0.4	0.2
Non-Tax revenues	3.0	2.8	5.1	2.5	2.6	3.2
Licenses	0.4	0.4	0.6	0.4	0.4	0.5
Rent and Royalties	0.3	0.3	0.4	0.3	0.3	0.3
Ministries	0.9	0.8	1.2	1.1	1.1	1.0
Transfers	0.4	0.5	1.1	0.2	0.3	0.5
Other	0.9	0.8	1.9	0.4	0.4	0.9

Source: Ministry of Finance, Belize, 2002.

At the present time in Belize excise duties are levied only on the domestic production of goods and services that are also subject to import duty and revenue replacement duty. Hence, the import duties and the revenue replacement duties are designed to function

both as revenue agents as well as instruments for providing domestic protection for industries. This structure of trade taxation is not consistent with either future bilateral trading arrangements or multinational trade negotiations under the auspices of the WTO. In these circumstances it will be expected that Belize should reduce its level of tariffs dramatically. Under the present circumstances this would have very serious fiscal repercussions.

In order to prepare for such trade negotiations, Belize needs to develop a modern excise tax system whose primary objective is to generate revenue. By reforming the excise tax much of the tax revenues that would have been lost by import tariff reductions can be retained. By excisable goods we refer to alcoholic beverages, cigarettes and tobacco products, motor fuels and kerosene, cosmetics, and motor vehicles. We find that the combined amounts of tariff revenue and revenue replacement duties levied on these goods amount to about 62 percent of the total revenues, even though they account for only 16 percent of total imports from Non-Caricom countries.

A modern excise tax system would levy either per unit or ad valorem rates of tax on the duty inclusive price of imports. These taxes would be imposed at the same rate on both imported or domestic produced goods and services of the same type. Imposing such excise taxes would be perfectly consistent with the rules of the WTO or any other likely bilateral trade agreement.

A possible strategy for Belize would be leave the arrangement with CARICOM as it now is but to lower all the tariffs on excisable goods imported from elsewhere to 10 percent. This would be combined with an excise tax on each of the goods at a rate that would bring the total tax burden up to the current level that is now imposed by the import duties and revenue replacement duties. This reform would allow the import duties to be significantly rationalized without an undue loss of revenue. For the non-excisable goods the import duties and revenue replacement duty should be combined and levied as a single import duty.

If this were done, then the excise tax rates on the excisable commodities that would leave the system revenue neutral are shown in Table 5.

This leaves us with the problem of reforming the tariffs and revenue replacement duties on those items that are not normally part of the excise tax system. At the present time the rates of tariff range from 0 to over 70 percent on these items. The total revenues collected from non-excise commodities in fiscal year 2001 are shown in the third column of Table 6, based on combined import and revenue replacement duty rates on c.i.f. value. The total amount was BZ\$39,578 thousand.

Table 5: Excise Tax Rates on Imported Excise Commodities.

Categories	Goods	Excise Rates (percent)
Alcoholic Beverages	Beer and Stout	175
	Wine	80
	Sprits	80
	Ethyl Alcohol	15
Cigarettes and other Tobacco Products	All	285
Fuels	Gasoline	110
	Diesel Fuel	70
	Aviation Fuel	5
	Kerosene	25
Cosmetics	All	35
Motor Vehicles	Cars, Trucks	40
	Dumpers Designed for Off-highway Use	5
	4 Cylinder with Less than 3 liters G.V.W.	0
		10

Suppose there is a structural reform of the rates of tariff so that there in the future there are only four rates of tariff, 5, 10, 15 and 20 percent. That is, raising the bottom rate from 0 to 5 percent to 5 percent; consolidating the rate from more than 5 to 15 percent to 10 percent; consolidating the rate from more than 15 percent to 20 percent at 15 percent; and consolidating the rate from more than 20 percent to 20 percent.

This option would only decrease the revenues from import and revenue replacement duties combined from non-excise commodities by BZ\$1.4 million. Persons importing goods of the first group would bear the most significant changes of import duty, especially those that are currently subject to zero rates. The second and third groups do not seem to be much affected, while those paying very high import duties would gain. The system, nevertheless, would be simpler and more transparent. If there were particular commodities, e.g., guns that the government wished to tax more heavily they should be brought under the excise tax system.

The proposed tariff rate changes above might be considered as the first phase of a tariff reduction program. This phase can be carried out without any loss in total revenues.

**Table 6: Tariff Restructure and Potential Government Revenues
For Non-Excisable Commodities in Fiscal Year 2001, Phase 1.**

Current Combined Rates (%)	Import Value (BZ\$000)	Import and Revenue Replacement Duties (BZ\$000)	Proposed Combined Rates (%)	Potential Duty Revenues (BZ\$000)
0	171,956	-	5%	14,427
0 to 5	116,580	5,447		
5 to 10	16,907	1,454	10%	5,368
10 to 15	36,777	5,367		
15 to 20	75,091	14,796	15%	11,264
20 to 25	6,731	1,516	20%	7,043
25 to 30	8,566	2,569		
30 to 35	8,171	2,770		
35 to 40	2,577	1,012		
40 to 45	3,910	1,753		
45 to 50	3,039	1,478		
50 to 55	28	14		
55 to 60	1,546	864		
60 to 65	-	-		
65 to 70	195	136		
70+	452	381		
Total	452,527	39,578		38,102
Total as Percentage of GDP	27.02	2.36		2.27

A realistic second phase might be to reduce the top tariff rate of 20 to a rate of 15 per cent. If this were done then total tariff revenues from non-excisable commodities would be BZ\$36.3 million, or a drop in revenue of BZ\$1.8 million. This amount can easily be made from a reduction in tariff exemptions.

The next important consideration is what revenue would be needed in to fill the shortfall if all import duties were reduced to zero? In the case of excisable commodities, the excise taxes can be adjusted for any reduction in import tariffs. However, another source of revenue would need to be found to replace the revenue lost from the reduction in tariffs on non-excisable commodities. From Table 6, column 3 we find that the loss in tariff revenue would be approximately BZ\$39.6 billion. In 2001 the revenue from the imposition of the sales tax is currently BZ\$86.2 million. This includes both the revenue from the basic rate of 8 percent as well as the 12 percent on alcoholic beverages, tobacco products and fuel. Considering only the tax base of the 8 percent commodities we estimate that the revenue from the elimination of tariffs on non-excisable commodities could be made up by increasing the basic sales tax rate from 8 percent to 12 or 13

percent. While such a high rate of domestic indirect tax is commonly imposed by countries levying a value added tax, it is getting to the upper end of the range of rates that can be administered under a single stage sales tax system. Hence, it is likely that a traditional invoice-credit system of administration would be needed to administer such a sales tax. This would place Belize in much the same position as Cyprus finds itself in 2002.

Conclusions:

It is clear from the above that Belize will need a major change of the weights it places on the various components of its tax system if it is to consider economic integration with a major trading bloc. In some ways this transformation is greater than the one required by Cyprus in 1991 when it started to make the changes needed to enter into the European Union. On the other hand, Cyprus had a greater part of its economy dependent on tariff protection than does Belize; hence, the political difficulties might have been greater. For the case of Belize we have outlined a strategy for making these changes in a series of steps that appear to be entirely reasonable and perhaps are viable. As we have seen in the case of Cyprus, this process will take time. However, the position that Cyprus now finds itself in appears to be a very sound one for the future economic development of the country.

References

Ahmed, Shakeel, *Calculating the Revenue Effectiveness of the Value Added Tax and Finding its Determinants*, MSc Thesis in Economics, Eastern Mediterranean University, July 2002.

Jenkins, Glenn P. and Kuo, Chun-Kuo, *Belize Fiscal Study*, (mimeo) Inter-American Development Bank, September 2002.

Poufos, George G, *The Cyprus Tax Reform 2002*, (mimeo) Inland Revenue Department, Republic of Cyprus, September 2002.

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