

Review of Value Added Taxation in TRNC

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Abstract

The value added tax system in North Cyprus is somewhat unique. It has a very high degree of legal coverage of goods and services in the economy and instead of exempting certain sectors from taxation; they are taxed at lower rates. At the same time the administration of the tax relies heavily on the characteristics of North Cyprus that arise because it is a small island economy. Overall the tax design of the VAT in the TRNC is one of the most comprehensive in the world, and its evolution to date has been to strengthen rather than weaken the value added tax system. In many ways it is a legal model that could be followed by many developing countries facing similar economic circumstances. However, the resolve of the government to administer the system according to the design has certain deficiencies. In this paper we discuss the strength and weaknesses of taxing system in TRNC and offer some recommendations.

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REVIEW OF THE VALUE ADDED TAX
IN THE TURKISH REPUBLIC OF NORTHERN CYPRUS

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Review of Value Added Taxation in TRNC

Overview

The value added tax system in North Cyprus is somewhat unique. It has a very high degree of legal coverage of goods and services in the economy and instead of exempting certain sectors from taxation, they are taxed at lower rates. At the same time the administration of the tax relies heavily on the characteristics of North Cyprus that arise because it is a small island economy.

In total there are 5 rates of tax. Until present they have been 0 percent on bread and milk, exported goods, and property rentals; two low rates of 3 percent; and 9 percent on selected goods and services; a standard rate of 13 percent; and higher rate of 20 percent rate on tobacco, alcohol and mobile telephone services. The complete taxation of electricity, telephone and petroleum at either the standard, or higher rate of 20 percent, is a very positive feature of the VAT system in the TRNC. A recent decision has been made to raise the 9 percent rate to 10 percent, the 13 percent rate to 15 percent and the 20 percent rate to 30 percent in the near future. It is also proposed to raise the VAT rate on automobiles that is now 13 percent to 30 percent. The rise in the VAT rate on automobiles will be effective January 1, 2002, some three months after the date of announcement.

Prior to these changes there has been a gradual but consistent movement over time to bring the rates together into a uniform rate, while maintaining a higher rate on such things as tobacco, cigarettes, alcoholic beverages, and cell phone calls. This is to be encouraged, with a note of caution with respect to sectors such as agriculture, construction and

educational services. It is likely to be impossible to achieve a uniform taxation of all the goods and services from these sectors. Hence, it would likely be better to impose a lower rate of tax on them rather than to induce serious evasion at a higher rate. After a detailed review of the administration and compliance problems involved, selected items that are taxed at either the 3% rate or the 10% rate could be raised to the standard 15 percent rate, especially if the current rate differential is now creating compliance problems.

Overall the tax design of the VAT in the TRNC is one of the most comprehensive in the world, and its evolution to date has been to strengthen rather than weaken the value added tax system. In many ways it is a legal model that could be followed by many developing countries facing similar economic circumstances. However, the resolve of the government to administer the system according to the design has certain deficiencies.

Revenue Collection Effectiveness

The value added taxes collected in the year 2000 amounted to approximately 43.034 trillion Turkish Lira or 6.9 percent of GNP. To make a comparison of how the VAT system in the TRNC is performing relative to VAT systems in other countries we calculated a revenue effectiveness ratio.

This effectiveness ratio (E) is designed to have a value of 1 if the tax is of a consumption types, there are only two rates of VAT (a zero rate on exports and rate of T on everything else) with a full credit for all intermediate inputs including investment goods. It is calculated as the ratio of actual tax revenues (expressed as a fraction of GDP), to the

standard rate of tax (T) times $\left(\frac{C_t}{GDP_t}\right)$, or $E = \frac{\text{Actual Taxes Collected} / GDP_t}{T \left(\frac{C_t}{GDP_t}\right)}$. The reason

why we divide by (C_t/GDP_t) is because the value added tax is a tax on consumption not

GDP, and the ratio of consumption to GDP across countries varies greatly. For most countries this ratio is often much less than one. The case of Singapore, which we will discuss below, is an interesting exception as the value of E that is greater than one.

The actual rates of taxes collected will be lower than $T\left(\frac{C_t}{GDP_t}\right)$ if there are legal exemptions, or if there are low tax rates on selected goods and services (other than exports). Finally, to the degree that the level of tax administration and compliance is less than perfect, the effectiveness ratio will be less than one. When there are multiple VAT rates we select the standard rate T^* rate as the relevant tax rate in the construction of the effectiveness ratio.

Taking this approach and using the standard rate of VAT for year 2000 in North Cyprus of 13 percent, the VAT effectiveness index for North Cyprus is 0.55 for year 2000. In Table 1 we have constructed this same index for all the EU countries plus South Cyprus, Taiwan, Turkey, Singapore, Chile, New Zealand. We find that with respect to this index of effectiveness, the TRNC ranks tenth highest in this sample of 22 countries.* It is interesting to note that the first five countries in this ranking Singapore (First with $E = 1.05$), Taiwan (Second with $E = 0.79$), S. Cyprus (Third with $E = 0.74$), Chile (Fourth with $E = 0.68$) and New Zealand (Fifth with $E = 0.64$) are all countries that have a one single positive rate of VAT, a zero rate on exports, and have very broad tax bases.

In TRNC the strategy of revenue mobilization through the VAT was to make the legal coverage of the tax as broad as possible and to concentrate the effort for the collection of

*There is an issue whether GNP is understated in the TRNC. In 2000 the reported GNP was 651,380,055 billion TL. The average exchange rate between TL and US \$ was approximately 640,000 per dollar. Therefore, the GNP of North Cyprus was approximately US \$ 1.018 billion. In calculating per capita income the population figure corresponding to this GNP figure should exclude all foreign students, tourists and soldiers from Turkey. If the residual population amounts to approximately 164,000 people, then per capita GNP is estimated to be approximately US \$ 6,200 in 2000. This might be somewhat of an underestimate, given the level of consumption that one observes.

the tax on imports, utilities (electricity, telephone, water), and petroleum which are relatively easy to tax. No refunds are given for excess tax credits except for exports of goods, and for receipts submitted by individuals who are able to claim a partial credit for VAT receipts they collect. The tax department at the moment is not able to effectively enforce the collection of the VAT amongst a significant proportion of the traders of goods and services in the domestic economy, primarily due the faulty design of the system for income taxation and social security contributions. TRNC is an exporter of educational and tourism services, hence, its imports of goods are much larger than its exports of goods. The ratio of imports to GNP is large at 0.43.

In contrast, Taiwan and Singapore have a large volume of goods exports and goods imports. To avoid having to process a large volume of tax refunds to exporters it was decided not to tax imported intermediate goods when they first entered the country if the importer was a registered VAT taxpayer. They have, however, implemented a comprehensive administrative system for controlling the VAT payments of domestic taxpayers. Taiwan has a computer system that has been successful at matching the majority of the invoices of buyers and sellers, as a way of auditing the VAT returns. Likewise, Singapore uses advanced information technology very effectively. Both countries levy only one positive low rate of tax, plus zero rate exports. It is 3 percent in Singapore and 5 percent in Taiwan. In the case of Singapore, a large volume of retail sales is made to foreign tourists and shoppers who came to Singapore. Because Singapore does not refund very much of the VAT to tourists and foreign shoppers, the total tax collections are larger than 3 percent of the consumption of Singapore residents. Hence, we have the only observation that I have ever seen where E is greater than one.

Table 1: International Comparison of Revenue Effectiveness of VAT Systems

S. N.	Country	VAT Revenue as percentage of GDP	Standard Rate	Consumption/GDP ^f	Tax Effectiveness Ratio	Rank
1	Austria (1997) ^a	8.60	20.00	0.77	0.56	8
2	Belgium (1997) ^a	6.90	21.00	0.86	0.38	20
3	Chile (1998) ^b	8.50	16.00	0.78	0.68	4
4	Denmark (1997) ^a	10.50	25.00	0.76	0.55	12
5	Finland (1997) ^a	8.30	22.00	0.73	0.52	16
6	France (1997) ^a	7.90	20.60	0.79	0.49	17
7	Germany (1997) ^a	6.60	16.00	0.77	0.54	13
8	Greece (1997) ^a	8.40	18.00	0.87	0.53	14
9	Ireland (1997) ^a	7.40	21.00	0.67	0.53	15
10	Italy (1997) ^a	5.70	20.00	0.79	0.36	22
11	Luxemburg (1997) ^a	5.90	15.00	0.64	0.62	6
12	N. Cyprus (2000)^c	6.62	13.00	0.92	0.55	10
13	Netherlands (1997) ^a	7.10	17.50	0.73	0.55	11
14	New Zealand (1997) ^e	6.28	12.50	0.78	0.64	5
15	Portugal (1997) ^a	8.30	17.00	0.85	0.57	7
16	S. Cyprus (1997) ^b	4.80	8.00	0.81	0.74	3
17	Singapore (1997) ^b	1.58	3.00	0.50	1.05	1
18	Spain (1997) ^a	5.80	16.00	0.78	0.46	19
19	Sweden (1997) ^a	7.40	25.00	0.77	0.38	21
20	Taiwan (1999) ^d	2.90	5.00	0.74	0.79	2
21	Turkey (2000) ^e	6.70	15.00	0.80	0.56	9
22	United Kingdom (1998) ^b	6.80	17.50	0.83	0.47	18

Sources:

^a *Tax policy in the European* (2000), Director General for Taxation and Customs, European Commission, p. 11.

^b Taxes are taken from the *Government Finance Statistics Yearbook (1999)* and GDP are taken from the *International Financial Statistics (2000)*, International Monetary Fund, Washington D.C.

^c Office of the Director General, Department of Tax, TRNC.
Consumption/GDP is from the TRNC Prime Ministry, State Planning Organization, Economic and Social Indicator, 2000.

^d *Yearbook of Financial Statistics of the Republic of China, Department of Statistics*, Ministry of Finance. (Note: The VAT as percentage of GDP is the average of the ratios years 1991-1999.)

^e Ministry of Finance statistics from Internet.

^f *International Financial Statistics (2000)*, International Monetary Fund, Washington D.C.

The case of South Cyprus is also an interesting comparison. It levies a single rate of tax of 8 percent that is relatively low as compared to the VAT rates in Europe. As it has a high volume of imports and a single rate it can quite effectively tax all imports. It also does not provide any system for refunding the value added taxes paid, nor does it impose a reduced rate of tax for tourist services. As tourism is the major source of foreign exchange for South Cyprus this is equivalent to subjecting both imports and exports to the value added tax. This results in a high revenue effectiveness ratio for the VAT systems in South Cyprus.

For island economies such as Cyprus, Singapore and New Zealand where prime beachfront properties are limited, the full VAT taxation of the tourism will extract some of the economic rents that would otherwise accrue to the landowners of such properties via large increases in land prices.

It would seem preferable, from both an income distribution and a fairness perspective, to have additional tax revenue accruing over time to the public sector rather than have inflated land prices and large capital gains going to those individuals lucky enough to have been the owners such properties.

A single rate of VAT, in addition to a zero rate on exports, with very limited exemptions is the ideal type of VAT. However, in a situation such as North Cyprus where the ability of the domestic tax administration to control the local trading sector is limited, and the ability to monitor the use of tax credits also is limited, it will likely be better to levy a low rate on activities, eg. construction, that would otherwise be exempt. By levying a low rate of tax on these activities a large volume of excess input tax credits that would be unusable due to the exempt status of the sector are immediately absorbed. In this way it is easier to control the use of the input tax credits by firms that sell both taxable and tax

exempt goods. This policy seems to have been reasonably successful because as of the end of 2000 the accumulated excess tax credits held by firms only amounted to 1.8 percent of one year's total VAT collections.

Upon a detailed examination of a sample of the records of firms with excess tax credits, it is clear that the excess credits are concentrated in the construction, education, second-hand car sales, and food supply (milk and bread) areas. These items generally are taxed at one of the preferential rates. At the moment this does not seem to be a serious problem, but to avoid the temptation by taxpayers to reallocate these excess tax credits to other taxable areas, it would be advisable to disallow a VAT input credits that are more than 24 months old.

Weaknesses

a. VAT Rebates to Individual

The most obvious defect in the design of the VAT and its administration system is the policy of issuing cash rebates to individuals upon the submission of retail VAT invoices. This is a policy that was tried in Turkey, Bolivia and North Cyprus to force retailers to issue VAT receipts. It did not work in Bolivia, and has been a catalyst for corruption and irregularities in the tax system. Instead in Bolivia it created a booming market in false or unused receipts. In North Cyprus some people collect the receipts issued by large supermarkets and other establishments who are forced to record their sales via cash registers or computers in order to prevent their employees from stealing from them. In small establishments the VAT receipts are rarely asked for and rarely given. In 2000 these rebates amounted to 8 percent of total tax collections. The rebate system in North Cyprus largely represents a pure loss in revenue plus a heavy administrative burden. In the recent package of changes the rate of rebate is kept at 2.5 percent of the value of the

tax receipts submitted. The combined administrative cost of the government and the compliance cost of the private sector to make the submissions for the rebates are likely to be a very large share of the value of the rebates, not to mention of the damage done to the reputation of the tax administration as a result of the processing of false claims.

It is recommended that as soon as the system has got used to the new rates of VAT, then the rebate system should be abolished. If a part of the revenue gained were spent on improving the information system and equipment of the tax administration, a much greater revenue impact would result.

If the rebates had been eliminated in year 2000, the effectiveness rates for North Cyprus would have been 0.59. This would have raised its ranking to seventh in this group of 22 countries.

b. Low Compliance of the Domestic Sector

The most serious weakness of the VAT system in the TRNC is the level of compliance by the domestic trading, service, and manufacturing sector in the economy. Table 2 shows the distribution of VAT collections for the year 2000. While it is reported that the customs office collects 55.1 percent of the VAT, it is clear that this is somewhat of an overstatement as a significant part of these revenues will appear again as input tax credits in the domestic trade, service and manufacturing sector. In any case, the tax collections as reported in Table 2 of 23.9 percent being collected by the “Tax Office”, basically represents the taxes that are being paid on the value added of the domestic parts of the economy (excluding the tax on the sales of petroleum, electricity, and telephones). This is compared with the distribution of value added in the economy for 1999 as reported by the State Planning Organization, in Economic and Social Indicators. After excluding all

of Agriculture, Financial Institutions, Electricity and Water, and half of Transportation and Communication, and Public services we find that the remainder of the domestic economy accounts for 49.1 percent of domestic value added. Hence, the share of value added tax collected from these sectors is about half of the size that these sectors contribute to the total value added for the country. Given that a number of the goods and services produced by these sectors, such as construction, are subject to lower rates of taxation, the revenue performance is expected to be somewhat lower than proportional for these sectors. It has also been suggested to us that the relative size of the “domestic” part of the economy may be somewhat underestimated due to the level of both income tax and VAT evasion that exists. This would reduce the level of the performance of VAT collections relative to the size of these domestic sectors.

Table 2: Value Added Tax Collected in 2000

S.N.	Sector	TL (000,000)	% of Total
1.	Customs Office	23,706,406	55.1
2.	Tax Office	10,324,448	23.9
3.	Petrol	6,109,531	14.2
4.	Electricity	1,739,485	04.1
5.	Telephone	1,154,373	02.7
	Total	43,034,243	100

A serious constraint on the expansion of the effective taxation of the “domestic sectors” is that there is a widespread underreporting of sales for purposes of income taxation. Because of the very high marginal rates of taxation arising from the combination of both personal income tax and social security payments, there is a strong incentive to pay employees in cash and to only report minimum salaries for the purposes of calculating income tax and social security obligations. If the employees are to be paid in cash, then

labour costs will be understated and the firms will have to make unreported cash sales to reduce their corporation income tax capabilities. Failure to reported cash sales will also reduce the amount of taxable transactions for value added tax purposes.

Before much further improvement can be made in the administration of the value added tax, steps will have to be taken to improve the tax policy design and legal structure of the personal income tax and the system of social security contributions.

c. **Computerization of the VAT Administration**

At the present time the quality of computerization of the information system in the tax administration of the TRNC is rather low. Countries such as Nepal, Malaysia, Peru and Kenya who all have a much lower per capita incomes, have much more effective computerized tax information systems than the present one in North Cyprus. No computer system exists in the Customs to control entries and accurately report revenues by type. This is usually the first place to introduce computerization in the tax administration, because of its vital role in revenue collection. Given the high level of computerization in the private sector and the abundance of computer personnel in the country, the situation in the tax and customs administration is puzzling.

For a very modest amount of expenditures, the tax administration of TRNC could have a world-class information system. A major improvement of the computerization of the information system for the VAT and its integration with the other revenue systems including Customs is essential for increasing the level of compliance and service associated with the operation of both the VAT and income tax in the TRNC.

d. Some comments on September 2001 measures

The new rate structure of 3, 10, 15 and 30 percent represents an overall weighted average increase in the tax structure of about 15 percent. These tax measures were taken to raise revenues during a time of fiscal crisis. In terms of macro-economic management it would appear that the government has done the right thing to turn to the VAT system at this time for additional revenues. Hence, my comments here, with once exception, are more looking at the implications and how they can be dealt with, rather than a disagreement over the tax policies.

The only serious defect in the design of the VAT proposals is the one to move the rate of VAT on automobiles from the current standard rate of 13 percent to the super rate of 30 percent. Taxing automobiles might be a very good source of revenue, but it would be far better to keep them at the standard rate of VAT and increase the excise tax on cars if there was a need to tax them more heavily. It is likely that this proposal will lead to abuse of the VAT system from the start. Given that the proposal is not to take effect until January, its immediate effect is to give a powerful incentive for people to go out and buy cars in next three months that they would have purchased next year. In this way the first impact of this policy is to temporarily increase sales and reduce the inventories of the car galleries between the time of the announcement and the time of implementation. This shifting of sales from next year to this year, will raise tax revenues this year and lower them next year. The net result is that this delay in imposing the rate will shift the cost of financing part of the car dealers' inventories this year to car buyers. It would be better to keep this kind of tax tinkering out of the VAT system. Overtime the proliferation of such tax measures will destroy the most effective component of the tax system in North Cyprus today, the VAT.

In terms of revenue from these VAT measures, there is likely to be a less than a 15 percent increase in the VAT revenues. The price elasticity of the highly taxes goods, such as telephone calls is less than zero, and the response in terms of evasion, smuggling of goods, and sales via the armed forces stores is significantly greater than zero with respect to the higher tax rates in the taxed establishments.

An examination of the experience of other countries reported in Table 1 who have imposed a high set of VAT rates is clearly instructive. It shows that there has generally has been a less than proportional response of tax revenues to higher tax rates. For example Belgium has a standard rate of 21 percent that is 61 percent higher than the 13 percent standard rate of North Cyprus. Yet this higher rate structure only collects four percent more revenues as measured by the proportion of GDP. France has a standard rate that is 50 percent higher than the TRNC, yet its rate of collections as a percentage of GDP is only 19 percent higher. Chile's standard rate is 38 percent higher than that of North Cyprus, yet its rate of collection as a percentage of GDP is only 19 percent bigger. The UK has a standard VAT tax rate that is 35 percent higher, but it collects only 3 percent more as measured as a fraction of GDP. Sweden has a standard rate that is 90 percent higher, but it collects only 12 percent more as a percentage of GDP than does North Cyprus. In all these cases the increase in tax revenue has been less than proportional to the increase in the statutory rates of tax. To conclude, the proposed new rate structure will almost certainly lead to an increase in revenues, but less than proportional to the increase in rates.

The higher VAT rate increases the urgency of lowering the current ineffective high statutory income tax and social security rates. Lowering of the personal income tax rates would enable the tax administration to increase its enforcement of business reporting of

all sales. In this way the tax administration might be able to maintain or increase the size of the VAT tax base, with the new higher rate structure.

Finally, this package of measures will increase the need to implement a major upgrading of the computer systems in the tax department and the training of the tax administration personnel in its use.

Summary of Recommendations

1. Abolish the VAT rebate to individual taxpayers.
2. Continue efforts to tax more goods and services at the standard tax rate.
3. Improve the quality of the information technology in the tax administration.
4. Reduce the combined marginal tax rates of the personal income tax and social security system in order to reduce the incentive for carrying out both wage and domestic sales transactions in cash.