The Revenue Effects of Uganda's Tax Reforms, 1989-2008

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Foreword

This report presents the major areas of research and key findings of the international research project on 'Macroeconomic Policy Challenges of Low Income Countries'. The project aims to contribute to a better understanding of the macroeconomic problems of low income countries, and facilitate an exchange of views with academics and researchers based in developed economies, including those in the international financial community.

In this report, the authors explore the options available for policy makers on revenue mobilization in Uganda. They tackle fundamental policy questions about what measures could result into fast revenue growth for Uganda focusing on the tax reforms and macroeconomic issues. The elasticity and buoyancy indexes computed for the pre and post-reform periods as well as for the combined period provide a framework through which the impact of the reforms on each index between the two periods can be discerned. The approach provides the basis for identifying the sources of fast revenue growth and/or lagging revenue growth in the tax system, and the components of revenue growth which are within or outside the control of authorities.

This study offers practical lessons for Uganda and other African countries attempting to achieve their revenue targets.

We thank the Uganda team for their recommendable work and the external reviewer, Professor Peter Warr of the Australian National University for his technical support. The project could not have been undertaken without the generous financial support of the Governments of United Kingdom and the Netherlands, the International Monetary Fund, and the World Bank. Gary McMahon and Robert Dodd at the GDN Secretariat in Washington, D.C. provided excellent administrative and professional back-up. However, the views expressed in this report are entirely those of the authors and do not necessary represent GDN's own policies or views or of its funding partners.

Global Development Network

Table of Contents

List of Tables and Figures

Table:

Figure:

Executive Summary

This paper focuses on the requirement to increase government revenue in Uganda and the ways various taxes have responded to changing economic environment. Specifically, the paper looks at the tax reforms implemented by the government and how revenue yields of individual taxes and the overall tax system have responded to changes in GDP (or proxy bases). We computed elasticity and buoyancy indexes for the pre - and post-reform periods as well as the combined period based on primary data from four main sources: the Uganda Revenue Authority (URA); Uganda Bureau of Statistics (UBOS); Ministry of Finance, Planning and Economic Development; and Bank of Uganda.

Fiscal operations and tax reforms

Analysis shows that the growth in domestic revenue in Uganda has hardly kept pace with the growth of the economy especially the growing expenditure demands. In 2003/04, while the share of revenue to GDP was 12.6 percent, the share of total government expenditure to GDP was 24.1 percent. The fiscal deficit nearly doubled to 11.5 percent in 2003/04 from 6.5 percent in 1997/98. The absolute expansion in the size of government budget explains the increase in the budget deficit, which is partly financed by external borrowing.

Major tax reforms implemented since 1990s aimed at addressing these fiscal challenges facing the country. Reforms were directed at improving administrative efficiency and to ensure better taxpayer compliance. It aimed at rationalizing the tax structure and rates, widening the tax base, reducing exemptions and simplifying tax procedures. High and differentiated taxes and tariff rates, burdensome bureaucratic requirements, discretionary exemptions and tax incentives were considered to be a source of inefficiency in the tax system.

In order to improve revenue administration, the Uganda Revenue Authority (URA) was set up in 1991 as a semi-autonomous agency to collect taxes. The value-added-tax (VAT) was introduced in 1996 to replace Sales Tax and Commercial Transaction Levy (CTL). A new Income Tax Act was enacted in 1997. The Act broadened the definition of taxable

income; and eliminated (most) discretionary tax exemptions and tax incentives. Substantial attempts were also made to modernize and automate customs and VAT administration. In addition, Tax Identification Number (TIN), the Large Tax Payer Department (LTD), pre-shipment inspection and GATT valuation system and the Tax Appeal Tribunal, as well as a system of paying taxes through commercial banks were introduced.

As a result, revenue increased from 7.82 percent of GDP in 1990/91 to 12.6 percent in 2003/04. Notwithstanding these improvements, revenue/GDP is still below the 1970/71 level of over 13 percent, and remains low by the standards of many countries in Sub-Saharan Africa that on average collect about 23% of GDP in revenues. However, since the 1990s Uganda's tax structure has been greatly improved and it appears to mirror the tax system in other SSA countries, in terms of the types of taxes and rates. There is not much that remains to be done, except to administer it equitably and efficiently.

While the differences in excise rates and bases and exemptions under VAT, import duty and income tax (coupled with high income tax threshold) seemingly explain, in part, the low tax/GDP in Uganda, relative to other countries, greater explanations are likely to lie with differences in the levels of development, the structure of the economies, degree of commercialization and urbanization, size of the peasant population, poverty, tax administration capability and level of corruption, among other factors.

There are indications that widespread corruption (bribery, smuggling, falsification/ forging of documents, under-declaring of goods and income, tax fraud, etc.) in the tax system has undermined growth in revenue. Corruption has persisted despite several anti-corruption measures undertaken by government, including privatization of some of the customs operation, and use of automated system (in customs and the VAT operations) and special services of revenue protection/anti-smuggling (para-military) unit.

Corruption could be reduced by building tax compliance and winning public confidence through improved service delivery and government payment and procurement system (prompt payment to government suppliers/service providers, transparent and equitable awarding of contracts). Making the tax procedures simple and transparent, and educating

taxpayers on tax laws and collection systems will enable taxpayers to know what their obligations are towards revenue collection. Effective use of automated systems especially in the clearing system and monitoring refund claims will reduce on frauds associated with VAT refunds and customs operations. These should be reinforced by strengthening tax administration including staff investigative machinery and human resource management capability.

Reforms and responses of the tax revenues to changes in income

Table 1 summarizes the income elasticity of the direct and indirect taxes and the overall tax system in Uganda; in the pre - and post-reform periods.

Table 1. Summary of elasticity: direct and indirect taxes, and overall tax system

	Elasticity indexes	
Direct taxes	*Pre-reform*	*Post-reform*
tax-to-income	0.706	2.082
base-to-income	1.479	2.021
tax-to-base	0.479	1.031
Indirect taxes		
tax-to-income	0.999	0.664
base-to-income	1.032	0.784
tax-to-base	0.989	0.674
Overall tax system – tax-to-income	0.645	0.545

Notes: Pre-reform refers to the period between 1988/89-1995/96. During this period, no major reforms of the tax system had taken place apart from the establishment of the Uganda Revenue Authority. Post-reform period refers to the period between 1996/97-2003/04, when major tax reforms were implemented. Indirect taxes include Import duties, excise duties and VAT/sales tax.

- *Elasticity estimates for pre-reform period*

Table 1 reveals an inelastic response of the overall tax revenue to changes in income, prior to, and after the major reforms. It is reflected in tax-to-income elasticity coefficients of 0.645 and 0.545 for the pre – and post-reform period, respectively. The low tax-to-income elasticity of the overall tax revenue in the pre-reform period is explained by the low tax-to-base elasticity of direct and indirect taxes, which signifies a big proportion of untaxed or uncollected revenues in the early 1990s (especially considering the wide gap between the base-to-income and tax-to-base elasticity of direct taxes).

Prior to the major reforms, revenue yields attributed to import duties and sales tax (Table 2) were elastic, while the yield of direct taxes and excise duties were inelastic. Import duties had the highest tax-to-income elasticity coefficient (1.256) while excise duties and

direct taxes had the lowest coefficients (0.705 and 0.706, respectively). The low tax-to-income elasticity of direct taxes was due to the low tax-to-base elasticity of direct taxes, during the pre-reform period. This was caused by informal sector activities that were not captured by the tax system, exemptions, and illegal business operations that by-passed the tax-net. The low tax-to-income elasticity of excise duties was the product of low tax-to-base and base to income elasticity coefficients. However, revenue from import duties and sales tax responded favorably to changes in GDP partly because of the introduction of 10% import duty on agricultural inputs (except fertilizers, pesticides and seed) and all raw materials (in 1993/94); raising all zero-rated import duties to 10% (in 1988/89) and abolishing duty free imports; and introduction of sales tax on all zero-rated and exempt products (in 1989/90).

Table 2. Summary of elasticity: import and excise duties, and VAT/sales tax

	Elasticity indexes	
Import duties	*Pre-reform*	*Post-reform*
tax-to-income	1.256	0.382
base-to-income	1.166	0.638
tax-to-base	1.066	0.244
Excise duties		
tax-to-income	0.705	0.304
base-to-income	0.965	0.857
tax-to-base	0.830	0.325
VAT/sales tax		
tax-to-income	1.037	1.306
base-to-income	0.965	0.857
tax-to-base	1.073	1.452

- *Elasticity estimates for post-reform period*

Elasticity of the overall tax system deteriorated slightly after the reform (Table 1). Results also show that, only direct taxes and VAT have elasticity of more than one (2.082 and 1.306, respectively) after the major reforms. The inelastic response of the overall tax revenue is explained by poor performance of indirect taxes (the decline in the tax-to-income elasticity, particularly of import duties). Direct taxes performed well because of the favorable response of the tax base to changes in income and the significant increase in the tax-to-base elasticity due to improvement in revenue administration and reduction in discretionary tax exemptions. VAT also performed well mainly because of the responsiveness of VAT revenue to changes in the tax base (private consumption).

However, the low base-to-income elasticity of VAT (0.857) reflects low responsiveness of private final consumption to growth in national income (GDP).

The elastic revenue yield for direct taxes and VAT means that the tax policies that Uganda Government implemented between 1996/97 and 2003/04 were effective, especially in increasing the responsiveness of these taxes to changes in national income. However, the huge gap between tax-to-base and base-to-income elasticity indexes of direct taxes portrays potential revenues in the public hands not being taxed. This could mean that there is substantial portion of wages/salaries and incomes in the private sector that is still not captured by the tax system or simply uncollected, including informal sector activity, illegal business operations, and exemptions. The low response of excise revenue to changes in private final consumption and import duties to changes in imports (c.i.f value) portrays loss of revenue from these sources. However, the demand for alcoholic beverages and cigarettes frequently rises less quickly than income (GDP), and so excise revenue is likely to be less elastic.

The low response of the imports revenue to changes in the tax base suggests an increase in tax evasion; the growth in value/proportion of imports that are exempted from import duties; decline in growth of the real value of imports especially fuel imports (tax rate on fuel remained specific, constant, and unadjusted for inflation for over four years – after 1996/97) and decline in duty revenue from raw materials imports (10% import duty on selected raw materials were waived off in 2001/02).

- *Comparison between pre and post-reform period*

The major reforms implemented after June 1996 brought a positive change in revenue yield of direct taxes and VAT. Reforms improved revenue yield of direct taxes from an index of 0.706 (pre-reform) to and index of 2.082 (post-reform). This growth is explained by increased response of the tax base to changes in GDP (from an index of 1.479 to 2.021) brought about by increase in wage rates particularly in the civil service following the recent pay-reform in civil service, and reduction in tax exemptions after the enactment of the new Income Tax Act in 1997. The abolition of tax holidays as well as

clarification of taxation of benefits in kind as part of the income tax (law) reforms helped improve the tax base and increase revenues from corporate and personal income taxes.

Tax reforms also improved the tax-to-income elasticity of VAT/sales tax from 1.037 to 1.306 (Table 2). The improvement was small because of the number of VAT exemptions, including exemption of VAT on hotel accommodation in 2001/02. Though VAT revenue rose more quickly to changes in the tax base, only a small change occurred after the reform because of the same problem. The capacity of the VAT to raise more revenue is further constrained by the sluggish growth of the tax base in relation to GDP (this deteriorated slightly after the reform), a situation which the authority may not have direct influence.

Revenue yields (tax-to-income elasticity) of import duties declined during the reforms period - from elasticity index of 1.256 to 0.382 (Table 2). This is explained by the drastic decline in response of the tax revenue to changes in the tax base (from 1.066 to 0.244) – attributed to the factors discussed in earlier paragraphs. It generally undermined the response of overall tax system and impact of the reforms implemented by government.

Revenue response to changing economic trends

Analysis of the effect of key macroeconomic variables on revenue suggests that high level of development aid can be a source of disincentive to making full use of domestic resources for revenue generation. This is reflected in an inverse relationship between income tax/overall tax revenue and external grant (the coefficients on external grant are negative and significant for income tax and the overall tax equation i.e. estimated at 0.0041 and 0.057, respectively).

Results also reveal that lower budget deficit reduces effort to collect revenue, particularly income tax. However with inverse relationship between import revenue and budget deficit (negative coefficient of 0.272), the assumption that increasing fiscal deficit would increase effort to collect more revenue through increased import duties may not hold in certain circumstances. Increase in import revenue is found to be associated with increase in the shillings/US$ ratio i.e. depreciation of Uganda shilling.

The OLS results (with import volume as dependent variable) reveal a positive link between exchange rate depreciation and volumes of import (coefficient is 3.393) – contrary to the assumption that depreciation discourages imports. Depreciation also appears to be positively related to import prices (shown by the coefficient of 0.209). The regression coefficient suggests a weak link between income tax revenue and changes in inflation, but there appears to be a relatively strong relationship between income tax revenue and literacy rate.

Conclusions

Empirical results suggest that tax reforms had a positive impact on direct taxes and VAT/sales tax as evidence by increase in tax-to-income elasticity from 0.706 to 2.082 and 1.037 to 1.306 respectively. The yield of import duties deteriorated after the reform as shown by a decline in tax-to-income elasticity index: from 1.256 (pre-reform) to 0.382 (post-reform). The major reason for this is the increase in tax evasion; and decline in real value of imports especially fuel imports due to non adjustment of tax rate for inflation for over four years (petroleum products contribute 2% revenue/GDP and over 65% of import duty revenue); growth in value of imports exempted from import duty; and the waiving of 10% import duty on selected raw materials in 2001/02 - affected the tax base.

Reforms had a bigger impact on direct taxes than on indirect taxes, suggesting that tax evasion is still a major problem for indirect taxes especially import duties. The sluggish response of the imports revenue to changes in the tax base (i.e. the low tax-to-base elasticity coefficient of 0.244) suggests serious problem of tax evasion, and other factors mentioned above. The improved performance of direct taxes can be explained by the introduction of the Income Act 1997 and subsequent measures which reduced loopholes in the tax system and avenues for corruption, reduction in discretionary exemptions, and simplification of tax procedures and payments of taxes through commercial banks.

Direct taxes and the VAT are key potential growth areas for revenue mobilization, and therefore, key areas to rely on for raising future revenues. The huge gap between tax-to-base and base-to-income elasticity indexes is a sign of potential revenues, which are currently untaxed. It shows that room for further improvement in revenue for direct taxes

exists. This can be achieved by abolishing some of the exemptions (e.g. on Treasury Bills and Bank of Uganda Bills, and salaries of employees of police and prison service – met by raising their salaries); improving administrative efficiency of URA and strengthening its capacity to register more eligible taxpayers into the tax net.

Reforms had nearly neutral impact on excise duties. This is not surprising because the demand for alcoholic beverages and cigarettes frequently rises less quickly than income (GDP). So, excise revenue is likely to be less elastic even after reforms. Nevertheless, excise duty can be a potential source of future revenue growth by improving compliance (the high base-to-income elasticity compared with the tax-to-base elasticity index is an indication that some taxes are not being collected), and widening the base by including more items into the tax net e.g. imposing high excise duty on plastic shoes.

Finally, the results for the regression analysis on the response of tax revenue (with reference to income tax and import duty) to changing economic trend imply that external aid, fiscal deficit and changes in exchange rate have significant influence on tax revenue. Clearly, Uganda needs to significantly improve its revenue performance and reduce its relative reliance on foreign aid. This will require a major improvement in tax administration, including tackling the problem of unemployment, and corruption in the tax system and the economy as a whole.

1. Introduction

In Sub-Saharan Africa, the nexus of population pressure, growing fiscal deficit, and unsustainable debt management coupled with the challenges of globalization and HIV/AIDS, threatens a downward spiral of increasing poverty unless effective strategies to reverse the spiral are identified and implemented. In Uganda, government has (since 1987) initiated a sequence of tax reforms to address the fiscal challenges facing the country. This study provides empirical insights into the performance of these reforms in terms of raising the revenue mobilization capacity of the tax system. This kind of information is crucial for formulating policy to improve the tax revenue effort by providing evidence about what measures are most or least effective in raising revenue.

This country case study is part of an international research project on macroeconomic policy challenges of low income countries organized by the Global Development Network (GDN). Specifically, the study aims to document challenges of domestic revenue mobilization in Uganda that can offer policy lessons for low income economies.

The challenge of domestic revenue mobilization carries important policy implications for Uganda because the growth in domestic revenue after the various tax reforms (initiated since 1987) has scarcely kept pace with the growth of the economy especially the growing expenditure demands. It is not clear why revenue has not improved significantly despite the wide reaching tax reforms implemented. While effort to increase revenue is recognized (Mahler *et al* 2000; Zaake, 2000), concrete ideas on what measures are most effective remain scarce. Available studies in Sub-Saharan Africa have focused on countries like Kenya, Ghana, Malawi, and Tanzania. Past studies in Uganda (e.g. Mutambi 2004; World Bank, 2003; Mahler *et al* 2000) were more concerned with discretionary tax measures, macroeconomic policies, tax administration and the Customs Union. There are many policy questions that are not tackled by these studies.

This study seeks to address some of these questions. For instance, has Uganda's tax reform effort enhanced revenue mobilization capacity of the tax system? If so, which

components of the tax structure or categories of taxes have been most responsive? If not, which categories of taxes have been the least responsive, and why? Other countries in Sub-Saharan Africa have much larger ratios of tax revenue to GDP than Uganda. What differences in the structure of the tax system seemingly account for this difference?

What is the optimal mix of direct versus indirect taxes?[1] The World Bank (1997, page53) noted that 'poor countries, weak in tax administration, are better able to apply indirect rather than direct taxes …' It is also argued that when there is a rapid and significant change in macroeconomic policies, it is much more difficult for tax reforms to have important and identifiable revenue effects (Tanzi,1988). If this is true, how is revenue effort affected by macroeconomic (policy) environment? What lessons do the outcomes have for policy makers in Uganda and elsewhere?

The insights gained from this research can enrich the existing knowledge and understanding of the challenges of domestic revenue mobilization in low income countries. It is hypothesized that: (i) the tax reforms have increased the revenue mobilization capacity of the tax system but the administrative structure is not strong enough to deliver effective outcomes; (ii) during the pre-reform period, the overall tax system was inelastic with respect to GDP and the most contributor to the overall elasticity was sales tax; (iii) the reforms had different impacts on different taxes. The most elastic taxes after reforms are the direct taxes (attributed to relative effectiveness of the reforms in direct taxes) and the lowest are indirect taxes; (iv) VAT has the lowest tax-to-base elasticity in individual tax handles; and (v) changes in macroeconomic variables had a negative net effect on tax revenue.

Finally, it is hoped that this research can offer an opportunity to discuss theoretical and empirical insights, to identify vital areas for new inquiry and to establish contacts with those having similar interests. The rest of the paper is organized as follows: section 2 focuses on the fiscal operations and the tax reforms. Methodological issues are outlined in section three. Section four looks at the way tax revenue has responded to changes in income in the pre – and post-reform periods. Section five focuses on the tax responses to changing economic trends, and the paper ends with conclusions in section six.

2. Fiscal Operations and Tax Reforms

The fiscal policy of Uganda Government focuses on stimulating economic growth, strengthening tax administration and raising tax revenue. Ultimately, government aims at reducing fiscal deficit in relation to GDP, which is often financed by foreign inflows in terms of budget support. This section demonstrates that wide deficits persist because the growth in domestic revenue has constantly lagged behind government expenditures.

2.1 Aggregate level of government spending and the budget deficit

One of the greatest difficulties facing the Government is that, the revenue outturn has hardly kept pace with the growth of the economy especially the growing expenditure demands (Table 3). For instance, between 1997/98 and 2003/04 government expenditure rose by about 7 percent point of GDP while total revenue (including grants) rose by 1.9 percent point of GDP during the same period. This is reflected in increased budget deficit (as a ratio of GDP) from 6.5 percent 1997/98 to 11.5 percent in 2003/2004 (i.e. an increase of 5 percentage point of GDP in the last six years).

Table 3. Uganda: Government revenues and expenditures, 1997/98-2003/04

	1997/98	1998/99	1999/2000	2000/01	2001/02	2002/03	2003/04
	Expenditures in billions Uganda shillings						
Total revenue & grants	1198.6	1357.7	1576.9	1867.9	1968.1	2251.2	2935.2
Recurrent revenue	800.9	950.7	1010.3	1083.5	1253.6	1433.6	1659.0
Grants	397.7	407.0	566.6	784.5	714.6	817.6	1276.2
Total expenditure	1292.2	1589.9	1989.9	2098.4	2514.9	2721.0	3166.8
Deficit (incl. grants)	-93.6	-232.2	-413.0	-230.5	-546.8	-469.8	-231.5
Deficit (excl. grants)	-491.3	-639.2	-979.6	-1015.0	-1261.4	-1287.3	-1507.8
	Memo items as % of GDP						
Domestic revenue	10.6	11.6	11.2	10.8	12.2	12.1	12.6
Gov expenditure	17.0	19.4	22.2	21.2	24.4	23.0	24.1
Deficit (incl. grants)	-1.2	-2.8	-4.6	-2.3	-5.3	-4.0	-1.7
Deficit (excl. grants)	-6.5	-7.8	-10.9	-10.1	-12.2	-10.8	-11.5

Source: Ministry of Finance, Planning and Economic Development

Based on the current approved budget for 2004/05, a budget deficit of Ushs 1,499.2 billion is predicted. This deficit may be even larger if additional expenditure in poverty reduction programs becomes necessary. The projected deficit taken into conjunction with other financing transactions will decrease government cash balance by approximately Ushs 437.7 billion. It means future deficits remain substantially large in relation to GDP.

The increases in government spending to poverty reduction programs, and the increased operational costs of districts, together with domestic development expenditures explain the increase in the budget deficit, which is partly financed by external borrowing.

Uganda's NPV-of-debt to GDP remains historically high at about 31 percent, and the NPV of debt in relation to exports (estimated at 269% at end of June 2003) is above the threshold of 150 percent under the enhanced HIPC Initiative. Further, increase in the sale of treasury bills to mop up excess liquidity arising from increased aid-financed public spending has led to a substantial rise in the stock of domestic debt to 10 percent of GDP in 2003/04, from 1% of GDP in the late 1990s. Grant financing of the government budget also rose from 5.3% of GDP in 1997/98 to about 9.5% in 2003/04. Despite these external inflows, substantial proportion of the budget still remains uncovered.

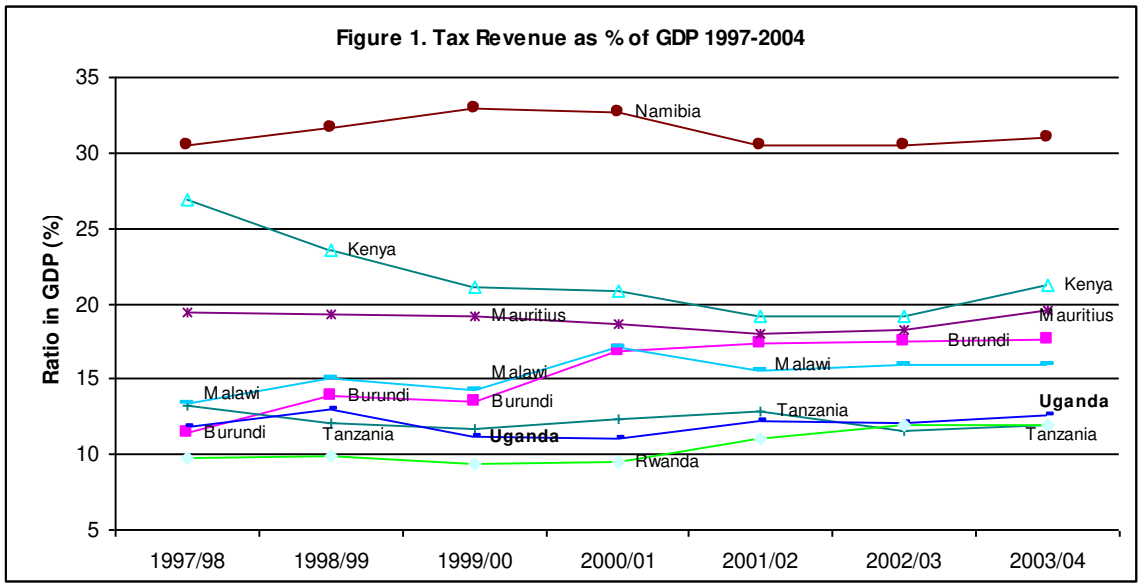
These high levels of fiscal deficits have the potential to stifle economic growth and impinge on other macroeconomic aggregates (Broadway et al., 1994). They also tend to subject the government's budget to foreign policies and political pressures. Government is aware that such kind of vulnerability does not reflect well on the prudence of the fiscal policy but it indicates that the situation may prevail for some time. This makes the case for increasing domestic revenue more compelling. Fortunately, this has been one of the major objectives of the Ministry of Finance since the 1990s. In 2000, the ministry revised the target to increase tax revenue to GDP ratio by half a percentage point annually, after failing to achieve the earlier target of one percentage point.

2.2 Uganda's tax effort

The amount of revenue collected from different types of taxes and the relative importance of the various taxes are presented in Table A2.1. From a historical performance of 12.6 percent of GDP in 1970-71, revenue from tax declined to a dismal 6.5 percent in 1989/90. However, revenue performance improved between 1991/92 and 1996/97, to a tax/GDP ratio of 12.2 percent in 1996/97. This remarkable growth in tax revenue was a result of policy measures that included restructuring the tax system/administration, particularly the establishment of the Uganda Revenue Authority (URA) in 1991, the introduction of the

value-added tax (VAT) in 1996 and the introduction of the new Income Act in 1997. Other factors that contributed to this growth include restructuring of the tariff regime, increase in the rates of excise duty on the traditional excisable products (beer, sodas, cigarettes, and spirits) and reductions in discretionary tax exemptions and incentives as well as growth of the economy especially the more easily taxable urban and commercial sectors.

However, this improvement was short lived as revenue performance began to stagnate in 1997/98 (Figure 1). At the current ratio of 12.6 percent of GDP (FY2003/04), Uganda's tax effort remains low by the standards of many countries in Sub-Saharan Africa that on average collect about 23 percent of GDP in revenues (not in the figure).



Sources: Ministry of Finance (Uganda), Ministry of Finance (Kenya), Ministry of Finance (Tanzania), Reserve Bank of Malawi, Bank of Mauritius, Bank of Namibia, Bank of Rwanda, and B.R.B et Ministère des Finances (Burundi).

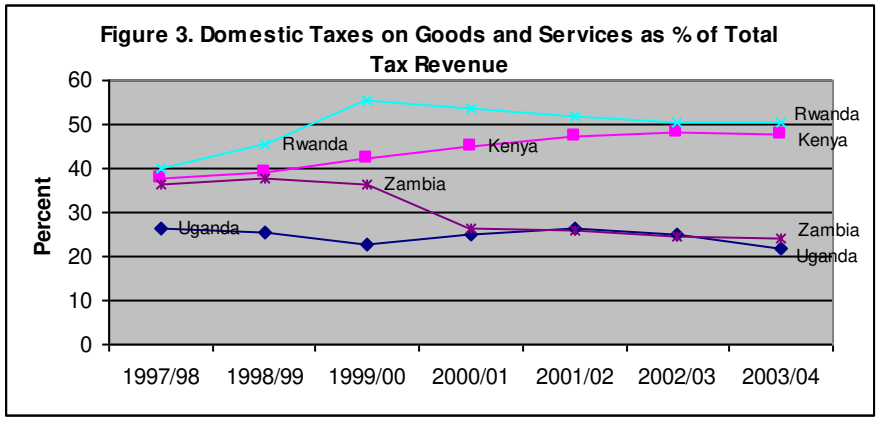
Uganda's tax effort (as measured by the ratio of tax revenue to GDP) is about the same level as Rwanda's and Tanzania's, but much lower than that of Malawi (15.9%), Burundi Ghana (17.2), (17.4%), Zambia (19.4%), Mauritius (19.6%), Kenya (21.2%), and Namibia (31%), among other countries in Sub-Saharan Africa with similar tax structure.

Apart from having low ratio of tax revenue to GDP, Uganda's reliance on international trade taxes remains much higher, relative to other countries in the region (Figure 2).

Among the trends revealed by Figure 2 is the gradual decline in reliance on international trade taxes in all the countries.

Source: Ministry of Finance (Uganda), Ministry of Finance (Kenya), Ministry of Finance (Tanzania), Bank of Namibia, Bank of Rwanda.
Note: International trade taxes include petroleum duty, and other import duty, excise on imports, VAT on imports, withholding taxes on imports, temporary road licenses, commission on imports, re-export levy and hides and skins levy – for the case of Uganda. Similar definition is used for other countries where data is available for comparative purpose.

While international trade taxes presently account for less than 30 percent of government revenues in most countries, they remain above 50 percent in Uganda. Other countries have substantially increased indirect taxes on goods and services to compensate for the decline in international trade taxes. Uganda instead shows high reliance on international trade and relatively low reliance on indirect taxes on goods and services (Figure 3).[2]



Source: Ministry of Finance (Uganda), Ministry of Finance (Kenya), Bank of Rwanda.
Note: Domestic/indirect taxes include VAT and excise duty (on domestic goods and services).

When administrative capabilities are lacking, trade taxes become an attractive alternative (Linn, 1990). Although Uganda has increased its reliance on direct taxes on income and profits (from 13.2% of total revenue in 1997/98 to about 24% in 2003/04) it is still below those found in most low-income countries in Sub-Saharan Africa and the upper middle income countries (e.g. Kenya 32.7%, Namibia 34.9%, Rwanda 31%, Zambia 33% and Singapore 53.7%).

We now turn to the question – why other countries in Sub-Saharan Africa have much larger ratios of tax revenue to GDP than Uganda. What differences in the structure of the tax system seemingly account for this difference?

The structure of the tax system in Uganda is similar to other countries in terms of the types of taxes and rates. Areas of potential differences seem to be the differences in the rates and base of excise tax, and level of exemptions. Excise taxes in Uganda are levied at high rates (higher than many countries) on a narrow base (over 80% of the excise revenue is collected from domestic production of three items: beer, cigarettes, and soft drinks). Uganda has a wide range of zero-rated and exempt goods (under VAT and Customs). Threshold income for being registered for VAT in Uganda (i.e. annual turnover of about US$ 27,000) is much lower than Kenya ($47,000), Botswana ($50,000), Lesotho ($39,000), Ghana ($75,000), Mauritius ($71,400), and South Africa ($40,000). Low threshold can present compliance problem. Ministerial discretion in customs and excise taxes is still prevalent, though far less than in previous years.

Current exemption for salaries of members of the armed forces, the police and prison service and income earned by expatriate staff, interest on treasury bills and central bank bills, and other related exemptions have the potential to narrow the tax base, and reduce its productivity. Uganda relies on PAYE for direct taxation; most of the taxes are less developed. Property tax, taxes on land and real estate, and financial transactions which are important revenue base for Mauritius (i.e. contributing 6%, 1.5% and 4.5% of total tax revenue in Mauritius, respectively) are not yet developed in Uganda.

The other reasons for the low tax share in GDP (perhaps more important than the ones mentioned above) are that Uganda has a substantial part of the value added in national income accounted for by the agricultural sector. In Table 4, the value-added from agriculture accounts for nearly 40 percent of GDP in Uganda compared to less than 20 percent in Kenya, 6 percent in Mauritius, 11 percent in Namibia, 2 percent in Botswana, and 16 percent average for Sub-Saharan Africa. Uganda agriculture comprises small landholdings that usually serve only subsistence objectives.

Table 4. Economic Indicators for selected countries in Sub-Saharan Africa

Country	Population 2001	Per Capita GDP 2002	GDP Growth (2000-01)	Structure of Output (2001)			Illiteracy rate (2001)	Poverty 1984-2000*
				Agric.	Indust.	Service		
	Million	(US$)	Percent	% GDP	% GDP	% GDP	%of pop	% pop
Uganda	23	236	4.6	36	21	43	32	*55
Kenya	31	393	1.1	19	18	63	17	42
Tanzania	34	267	5.7	45	16	39	24	42
Rwanda	9	212	6.7	40	22	38	32	51
Namibia	2	1,463	2.7	11	33	56	17	..
Mauritius	1	3,740	7.2	6	31	62	15	11
Botswana	2	3,080	6.3	2	47	51	22	..
Zambia	10	361	4.9	22	26	52	21	73
Memo items								
Sub-S Africa	674	469	2.9	16	28	56	37	..
Low Income Countries	2,506	451	4.7	24	32	45	..	..
World	6,130	5,174	1.1	4	30	66	..	..

Source: The World Bank (2003): *World Development Indicators*; and *African Development Indicators;* UNDP (2004) *Human Development Report* 2004. **Notes:** Value added is the value of the gross output of producers less the value of intermediate goods and services consumed in production, before taking account of the consumption of fixed capital in the production process (World Bank, 2003). Industry comprises mining, manufacturing, construction, electricity, water, and gas (International Standard Industrial Classification - ISIC div10-45)
* National poverty head count = percentage of population 15 years of age and above that is illiterate. According to 2003 household survey, poverty level in Uganda is estimated at 38%.

Agriculture sector dominance is reflected in the degree of monetization; Uganda's monetized economy is estimated at 70% (Kenya's is 82%) of total GDP (not included in the table). This portrays large informal activities that are not captured by the tax system, and is aggravated by high incidence of poverty (the 2003 survey indicates that 38% of the population live below the poverty line).

Potential revenue sources such as industries, services and mining constitute a small proportion of Uganda's GDP compared to other countries (Table 4). The value-added from industries accounts for 47% of GDP in Botswana (with mining alone accounting for about 35% of GDP according to Bank of Botswana 2004 report); over 30% in Mauritius

and Namibia, and 26% in Zambia. Uganda's service sector (comprising 43% of GDP) is also among the smallest in Sub-Saharan Africa, and is below the SSA average.

Uganda's per capita income/GDP is also one of the lowest in SSA. Tanzi (1987) findings (on review of tax systems in developing countries) reveal a positive relationship between per capita income and total tax revenue, and income taxes. It is argued that as countries develop, tax bases tend to develop more than proportionately to the growth in income. It is also generally argued that as income grows, countries become more urbanized. Urbanization is assumed to bring about a greater demand for public services while at the same time facilitating tax collection (Tanzi, 1987).

While these economic factors are recognized, it should be noted that corruption and tax evasion is a serious problem in Uganda. Tax administration is weak. Occasional political influence is a problem too. These, combined with inadequate facilitation and low staff morale, weaken tax collection efficiency. Of course, it should not be forgotten that Uganda has experienced political instability involving civil wars in the past decades, which has negative impact on revenue collection.[3]

The persistent low tax to GDP prompted Uganda Government to reform the tax system. The tax reforms mirror the general characteristics of the reforms implemented in Sub-Saharan Africa in the past decade. They were part of a wider macroeconomic reform program of the 1980s-1990s that were implemented with a view to setting these countries on a path of economic growth through increased productivity and efficiency.

2.3 Major tax reforms in Uganda

The major reform measures included: reforming tax administration, introduction of VAT to broaden the tax base; simplifying the tax structure and broadening the bases for personal and corporate income taxes set at lower rates; reduction of import duties and simplification of the rate structure; and abolition of export-related taxes. The tax laws were therefore, amended and some repealed with the view to aligning them with the best practice.[4]

Administrative Reforms

The Uganda Revenue Authority (URA) was set up in September 1991 as an autonomous agency to collect taxes. Prior to this, three separate departments in the Ministry of Finance: Customs and Excise Department, Inland Revenue and the Income Tax Departments, collected taxes for government.

URA was expected to improve revenue collection through enhanced autonomy, acquisition of skilled staff, increased integrity and effective use of automated system. The authority was expected to adopt private sector-style management practices in its administration, with competitive staff remuneration, high caliber staff and adopt a code of conduct to guard against corruption. All these measures were expected to result in sustainable increase in revenue collection, and to achieve a tax to GDP ratio comparable to countries such as Kenya, Mauritius, Zambia and Singapore.

URA introduced measures aimed at increasing taxpayer compliance. These included taxpayer education and tax advice facilities, and the Tax Identification Number (TIN) to reduce the time taxpayers spent fulfilling their tax obligations. The Large Tax Payers Department (LTD) was set up in 1998 to offer corporate service on all domestic taxes to the top 100 tax payers and their subsidiaries. The Tax Appeals Tribunal (TAT) was also introduced in August 1998 to provide an independent mechanism to which taxpayers who are aggrieved by URA actions can go for redress.[5]

Other measures included computerization of the Income Tax Department in 1994; automation of URA operation using ASYCUDA system in Customs and the VENUS system in the VAT department (1996) – for recording revenues and tracking receipts; merging the department of VAT and Internal Revenue in April 2000 to create a one-stop centre of internal revenue for the medium and small taxpayers. In addition, URA instituted tax investigation mechanisms to ensure greater accountability on the part of revenue collectors and to strengthen the procedures for investigating allegations of corruption. A special para-military unit (the Anti-smuggling Protection Unit) was established to augment the efforts of the URA to crack down smuggling and tax evasion.

The Special Revenue Protection Service is deployed in all the revenue collection departments of the URA to curb tax malpractices.

Value Added Tax (VAT)

Another major reform was the introduction of VAT in 1996 (at 17% for most goods) to replace sales tax (which was charged at 12% - 30%) and taxes on services called commercial transaction levy (CTL). VAT was introduced on the ground that it had a higher revenue potential compared to the sales tax. It was also considered to be a fairer tax than sales tax because it can reduce or eliminate the cascading effect (paying tax upon tax) of sales tax. The other strength of VAT over sales tax is the existence of an audit trail that could be used to verify VAT amounts declared under the VAT system.[6]

Prior to introduction of the VAT, most of the changes to the tax system in the 1990s seem to have been concerned more with raising revenue than equity, and relied greatly on ministerial discretion. Examples of these are the introduction of sales tax on all zero rated and exempt products in 1989/90 and the removal in 1993/94 of all exemptions from tax except those under bilateral agreements with foreign countries and accredited international institutions (those granted to investors under the Investment Code except for construction materials were retained). Over the years, Uganda has witnessed a distinct move away from ministerial discretion in tax policy (exemptions). The VAT law of 1996 prohibited the granting of exemptions (discretionary exemptions have reduced).

Under the present VAT, supply of most basic goods and services, which accounts for disproportionately high percentage of low-income household spending are exempted or zero-rated e.g. basic foodstuffs. In addition to equity concerns, certain sales are exempt or zero-rated for general development reasons e.g. educational and health services and passenger transport services. Generally, a number of VAT exemptions appear pro-poor.

Exemption of public passenger transport is progressive because public transport is usually the mode of transport for the poor. The same with food, as it has been known since the time Engel coined his famous law (Engel's Law), the poor tend to spend more

of their budget on food than do the rich. It can also be argued that the exemption gives a greater tax relief to the better off than the poor because the actual amount spent by the rich on food is more than the amount spent by the poor. Rich people tend to buy more expensive varieties of food and may throw food away more easily.

Preferential treatment to educational services on ground of equity needs careful justification. In 2001, the ratio of pupils enrolled in private primary schools as a percentage total primary enrolment in Uganda was only 13% compared to 87% in government-aided schools (Bategeka, Ayoki and Mukungu, 2004). Private education is expensive, and has wide usage in urban areas and is usually bought by the better off. Public education under the Universal Primary Education (UPE) is basically free.

Preferential treatment to drugs and medicines and medical services is likely to increase the regressivity of the VAT, and can easily be abused. The same applies to dental, nursing and social welfare. Much of the justifications for the consumption of such goods and services relating to infant mortality, the control of communicable diseases, and disease-prevention are appropriate. However, there is no convincing evidence that the private sector is important in these functions (like in education) or the poor are using the service provided by the private sector. Instead, the main beneficiaries of the tax relief are the better off who spends more on medicines and medical services and who can afford to pay for services at private health facilities.

Drugs and medicines, and medical services are provided free or at nominal cost under the public health services, but are charged high price at private facilities. Equity may not be severely affected by abolishing tax-relief to sales of drugs and medicines, and medical services and achieve the redistribution objective through the expenditure side of the budget, albeit with its own challenges.

VAT relief for agricultural outputs and inputs cannot be fully justified by reference to equity. For instance, domestically produced cereals especially wheat and rice are not part of the basic diet of the poor. And since the small producers and traders who are effectively exempt from the VAT by the threshold generate a high proportion of the

value-added in the production and distribution of domestically consumed food, extending VAT to agricultural output would not hurt the poor.

The list of VAT exemptions needs to be reassessed and kept to a minimum to broaden the tax base and to facilitate compliance by taxpayers and control by tax administration. The zero rates should be applied exclusively to exports (and items required by international convention). Extending zero rates to many sectors result in more difficult control systems and an increased number of refund claims, which sometimes cannot be managed by the tax administration.

Income Tax

With respect to direct taxes, reforms aimed at reducing overall complexity of the tax structure by ensuring that each of the sources of personal incomes are similarly taxed and that those in the less formal sector are brought into the tax net by use of a presumptive tax to ensure equity payment between all sources of income.

The Income Tax Decree of 1974 allowed considerable discretion to the minister to declare any class of income to be exempt from tax. This loophole was eliminated by the new Income Tax Act of 1997. The new Income Tax Act aimed at broadening the definition of taxable income (among other things).[7] It abolished discretionary exemptions and tax holidays, and reduced the personal income tax rates to four main bands (0%, 10%, 20% and 30%).

Setting an annual threshold income subject to income tax at Ush 1,560,000 (approx. US$ 900 or over 3 times per capita income), the poor are, by definition, 'exempted' from personal income tax. Otherwise the main exemptions include pensions; salaries (official employment income) of employee of the Armed Forces (of Uganda), the Police Force, and the Prison Service; interest payable on Treasury Bills or Bank of Uganda Bills; bequests and gifts not arising from a business relationship; charitable donations; non-business capital gains; and income exempt under normal international convention.

Exemptions of pensions, charitable donations, bequests and gifts, and items required under international convention are normal and support equity. However, the reason for exempting Treasury Bills and Bank of Uganda Bills; and salaries of employees of the armed forces, police and prison service is difficult to discern. Removal of exemption on Treasury Bills and Bank of Uganda Bills would reduce possible distortion in the capital market likely to hinder financing of private capital formation. Raising salaries of employees of the armed forces, police and prison service to enable them pay taxes (i.e. to retain the same after-tax-income) is preferred to outright exemption. It improves transparency of the tax system and fairness in relation to other PAYE taxpayers.

Import Duty

The current tariffs in Uganda are based on the Harmonized Code (HS) - having changed it from the SITC system in 1995/96. Customs tariff reform have involved (among others) reduction in tariff rates, simplification of the structure, reduction of exemptions and phasing out import bans, import license requirements and pre-shipment inspection (Table A4.4). The myriad tax rates charged on international trade (imports) have been reduced to three standard rates: 0%, 7% and 15%.

Plant and machinery is zero-rated, while raw materials and final goods from non-COMESA countries are subject to a 7 percent and a 15 percent duty, respectively. Rates for similar goods originating from COMESA countries are 0%, 4% and 6%. To compensate for the reduction in tariff, government introduced excises of 10% on the imports (applied on an ad valorem basis across about 400 tariff lines). The excise was meant to protect domestic producers against imports from COMESA countries. Meanwhile, import bans on cigarettes, beer, sodas, and car batteries were removed in 1998/99, and replaced by temporary import surcharge.

In 1995/96, Government amended Section 22 of the 1991 Investment Code to abolish the granting of discretionary exemptions on import duties (and all other taxes) payable on imported plant and machinery for investors licensed by Uganda Investment Authority. Consequently, the tax system became more transparent, easier to administer and has

contributed to an increase in the revenue yield. However, Section 4 of the Customs Tariff Act of 1970 allows for the minister to remit duty, in whole or in part. Frequently, these statutory instruments are used to benefit specific industries in response to lobbying.

Most of these statutory instruments have the flexibility to allow raw materials for specific industries to be imported at preferential rates, for instance, remitting the customs duty payable from 15 percent to 7 percent (and/or remitting any excise on imports). The preferential treatment tends to target goods with high degrees of protection such as textile and sugar. In the case of sugar, the industry benefits simultaneously from high duties on sugar imports (15%), and preferential access to imported sugar as a raw material for other production (beer and soft drinks). The textile industry benefits from the high duties on textile imports (15 percent ad valorem tariff, plus a 10 percent excise or a specific duty of US$0.19 per meter, whichever provides greater protection). Presently, the domestic market price of sugar in Uganda exceeds US$600 per ton (much higher than the cost of sugar on world markets) – thus imposing a burden on the consumers, including the poor.

The preferential treatment accorded to domestic textile industry, in away, also denies consumers, including the poor access to better and cheaper imported clothing. An important case is the taxing of used clothing. The importation of used clothing is subject to a 15% import duty and a 10% excise. Yet, many Ugandans especially the poor cannot afford new clothes, whether domestically produced or imported. Extensive tax evasion (smuggling) occurs, not only because of weak customs administration and lack of effective surveillance and deterrence mechanisms, but also because of such protection. Revenue implications of the removal of this protection are likely to be positive.

2.4 Structure of domestic taxes

Domestic Indirect Taxes in Uganda comprise the Custom/Import Duty, Excise Duty, and the Value Added Tax. The Direct Taxes consists of the Income Tax. Other revenue items include Fees and Licenses, and Non-tax Revenue (Appropriation in Aid). The four major taxes: Income Tax, Import Duty, VAT, and Excise Duty are described in reference to

their coverage, base characteristics, rate structure, and contribution to revenue, relative to other countries in Sub-Saharan Africa.

Income tax

Income tax accounted for 23.7 percent of Uganda's total tax revenue in 2003/04 compared with Malawi (21.6%), Tanzania (29%), Rwanda (28%), Kenya (35%), Zambia (33%), and Namibia (34.7%), with similar income tax structure (Table A2.3). Income tax comprises Pay-As-You-Earn (PAYE), corporate tax, withholding tax, presumptive tax, rental income tax, and tax on interest in banks. Of these, PAYE (on formal sector employees) is the most important in Uganda, accounting for 11.8 percent of total tax revenue, followed by corporate income taxes (7.7%), and withholding taxes (Table A2.1). Rental income and tax on interest in banks have nearly the same contribution to total tax revenue. Other domestic direct taxes in this category include taxes on casinos and lotteries, which account for less than 1percent of total direct taxes.

Uganda, Malawi, Tanzania, Zambia and Namibia collect more revenue from personal income tax than from corporate taxes. However, the ratio of personal income tax to total tax revenue is much lower in Uganda (11.8%) compared with ratios in Tanzania (13%), Malawi (16%), Namibia (23%) and Zambia (26%) – Table A2.3. The Ugandan case is an indication of potential revenue loss due to a large number of individuals exempted from personal income tax including incomes earned by expatriates. In Namibia, income earned from work performed in Namibia is taxable in Namibia, regardless of where or by whom payment is made. And interest income received by ordinary residents of Namibia, regardless of where that interest is earned is taxable in Namibia.

At the moment, the threshold for personal income subject to income tax in Uganda is about US$ 900 per year (equivalent to 3.3 times per capita GDP). With this target, over 70% of employees included in the pay as you earn (PAYE) returns fall below the threshold. Tanzania applies income tax threshold of about US$ 570 (approx. 2 times per capita GDP) per annum, Malawi about US$ 370 (about 2 times per capita GDP), Rwanda US$ 330 (about 1.5 times per capita GDP), and Ethiopia US$ 209 (about 2 times per

capita GDP). In Uganda, where PAYE has recorded high revenue yield; it has mainly been as a result of increase in wage rates and the elastic nature of the tax rather than the expansion of the tax base. Yet, without taxes on property, personal and corporate incomes remain the only base of direct taxation in Uganda.

Value Added Tax

The largest share of tax revenue in Uganda originates from Value Added Tax (VAT), followed by import duty. The share of VAT in total tax revenue in 2003/04 was 33.8 percent in Uganda (equivalent to 4.3% of GDP) and 24.4 percent in Mozambique (2.7% of GDP), with the same 17% standard rate. On the other hand, Kenya, Lesotho, Mauritius, Namibia and South Africa levy rates lower than Uganda. Yet they have much larger ratios of tax revenues to GDP than Uganda (Table 5).

Table 5. Value- Added-Tax in selected SSA countries, 2003/04

Country	*Scope*		*Rates (percent) and Exemptions*			*Threshold* USD '000	*Rev as % of*		*Efficiency Ratio(%)*[1]
	Stage(s)	Tax Base	Standard	Exemptions[8]	Other rates		Total Tax	GDP	
Botswana	R	G+S	10	Standard	None	50.0	13.2	4.2	42.0
Ethiopia	R	G+S	15	Standard	0	58.1	37.7	4.5	30.0
Kenya	R	G+S	16	Standard	0,14	47.4	28.3	6.0	37.5
Lesotho	R	G+S	14	Standard	0	39.6	15.7	6.4	45.7
Malawi	R	G+ST	20	Standard	0		26.4	4.2	21.0
Mauritius	R	G+S	15	Standard, other	10	71.4	36.9	5.6	20.0
Mozambique	R	G+S	17	Standard, other	None		24.4	2.7	15.9
Namibia	R	G+S	15	Standard	30	26.4	23.5	7.2	48.0
Rwanda	R	G+S	15	Standard	0	27.7	31.6	3.8	25.3
South Africa	R	G+S	14	Standard	0	40.0	24.0	5.9	42.1
Tanzania	R	G+S	20	Standard, other	None	19.2	35.0	4.7	23.5
Uganda	R	G+S	17	Standard	0	27.0	33.8	4.3	25.3
Zambia	R	G+S	17.5	Standard	0	20.8	30.2	5.8	33.1

Source: Ministry of Finance (Kenya), Ministry of Finance (Uganda), Bank of Namibia, Reserve Bank of Malawi.
Notes: R = VAT extending through the retail stage, G = Goods, S = Services, ST = Service taxed selectively
1 The efficiency ratio is defined as the ratio of the share of VAT revenues in GDP to the standard rate (Grandcolas 2004). A 25% ratio implies that a 1% point increase in the standard rate is associated with an increase in the share of VAT revenues in GDP of about 0.25 percentage point.

Countries with similar VATs (as measured by the standard rate) can have a significantly different revenue performance (VAT revenue/GDP). In Mauritius the VAT collects about 6% of GDP and in Ethiopia and Rwanda less than 4%, all with standard rate of 15%.

Uganda's VAT (same as other countries' in Table 5), extends through the retail stage and includes goods and services in the tax base. The inclusion of the retail stage (with exception of small businesses) means that all trading margins are included in taxable value. [9]

Uganda imposes three VAT rates: a zero rate, exempt and standard rate of 17%. The zero rate applies to exports; international transport services; drugs and medicines; educational materials; seeds, fertilizers, pesticides and hoes; cereals grown, milled or produced in Uganda; and machinery and tools suitable for use only in agriculture. Apparently, Kenya, Mauritius, Mozambique, Rwanda, South Africa, Tanzania, and Zambia do the same with similar range of foodstuffs. Outside Africa, nine other VAT countries in the world, zero rate (basic) foodstuffs.[10]

The standard exemption (in Uganda) applies to unprocessed food and other agricultural products, and livestock; milk and most milk products; excisable petroleum products; feed for livestock and poultry; equipment for processing agricultural and dairy products; and medical, dental, nursing, social welfare, educational and funeral services. Others include passenger transport services (except those provided by tours operators); unimproved land; building leases (except for commercial buildings, hotel/holiday accommodation, car-parking facilities, service apartments and any lease of less than 3 months). Also exempted are banking and insurance services; assets sold as part of a going concern; betting; postage stamps, and precious metals purchased by the Bank of Uganda; and computers, printers, parts and accessories.

VAT (17%) is levied on domestic goods and services, excise duty-inclusive ex-factory value of domestically manufactured goods and on the custom duty-inclusive c.i.f value of imports. Tanzania imposes VAT on relatively wider range of goods and services, including petroleum products; Uganda and Kenya do not levy VAT on petroleum products. Botswana levies VAT at a single rate; no relief for the VAT on essential products is provided (although the country may use other elements of the tax-and-expenditure system to help the poor).[11]

The threshold for being registered for VAT in Uganda is an annual turnover of UShs 50 million (approx. US$ 27,000). The threshold in Kenya is Ksh 3.6 million (approx. US$ 47,000), in Rwanda RwF 15 million (about US$ 27,700) and in Tanzania Tshs 20 million (approx. US$ 19,260). However, Uganda and Rwanda have nearly the same threshold yet they differ in their VAT revenue; while Kenya and Mauritius with a wide difference in tax thresholds have almost the same tax to GDP ratio (Table 5).

The VAT base in Uganda is generally broader compared to the base of the previous sales tax and CTL. However, over 90 percent of VAT revenue in Uganda is still collected from a few domestic excisable products (cigarettes, beer and spirits, soft drinks and cellular phone services) and less than ten prominent companies. Further, there has been so much pressure for special relief in Uganda targeted at the 0% rate. Such relieves narrow the VAT base, reduce its revenue productivity, and introduce distortions and inequalities in the tax system.

Excise duties

Excise duty contributed 10.5 percent of Uganda's total tax revenue (1.4% of GDP) in 2003/2004. This proportion is similar to those found in low-income countries in Sub-Saharan Africa such as Malawi, Ethiopia, Rwanda, Tanzania (Table A2.A) and Zambia but is substantially lower than those found in Kenya, Mauritius, Namibia and Lesotho and in the OECD countries, where excise revenue is over 3 percent of GDP.

Excise duty is applied ex-factory on domestically produced goods, that is, beer, spirit, and soft drinks, petroleum products, and cellular phone air time. The same tax equally applies on similar imports, except for cellular phone air time. Uganda also charges a 10 percent excise duty/surcharge on a range of products e.g. motor vehicles and other high value imports – for the purpose of raising revenue. Kenya, Tanzania, Rwanda and Ethiopia have basically a similar base for excise revenue as Uganda's. However, the excise tax rates differ significantly across these countries on the main excisable goods (Table A2.4). For instance, the specific excise duty rate for gasoline in Uganda is twice as

high as that in Tanzania. Retail gasoline prices are higher in Uganda because of the relatively high excise duty and the pre-tax price – which reflects higher transportation costs to deliver gasoline to Uganda. The high excise duty is an incentive for smuggling.

Uganda and Kenya impose excise duty on petroleum products, while Tanzania charges VAT. Use of ad valorem or specific rate also differs. For example, Uganda levies ad valorem rates of 130 percent on cigarettes. Instead, Kenya imposes specific rates based on average retail price bands. Uganda imposes ad valorem rates on beer while Kenya and Tanzania levy specific rates. In addition, Uganda has low rate for local beer while Tanzania excise all beers at the same rate. Wine and spirits are charged ad valorem rates in Kenya and Uganda, but specific rate in Tanzania. Unlike Kenya and Tanzania, Uganda levies a special excise duty or surcharges on a number of imported goods.

Over 80 percent of the excise revenue in 2003/04 was collected from domestic production of only three items: beer, cigarettes, and soft drinks, which means, excise taxes in Uganda are levied at high rates on a narrow base. Actually, the overall effective rate of excise duties averaged 48 percent between 1987 and 1989. The heaviest burden fell on beer (214%), cigarettes (215%), and soft drink (70%).

Custom/Import duties

Import duty is levied on the c.i.f value of imports, and is the second largest source of government revenue in Uganda. In 2003/04 it contributed 3 percent of GDP representing 23.8 percent of total tax revenue (Table A2.1). Petroleum products and motor vehicles provide over 60 percent of the customs (duty) revenue. Petroleum products alone contributed 2 percent to GDP and 66.8 percent of import duty revenue in FY2003/04. The significance of petroleum products is mainly because of the high specific tax rates.

With import duty revenue of 23.8 percent of total tax in 2003/04, Uganda shows greater reliance on import duty compared to Kenya – with a ratio of 10%, Tanzania 9.5%, Botswana 16%, Malawi about 19%, Mauritius about 13%, and Rwanda 14%. As

expected, Uganda has higher ratio of import duty revenue to GDP than, for example, Kenya, Tanzania, Malawi, Mauritius, Rwanda and Ethiopia (Table A2.2).

Tariffs may bring in badly needed revenue but they can create imbalances and distortions in the economic choices of enterprises, and ultimately reduce welfare. However, Uganda is engaged in a process of trade liberalization through regional and bilateral free trade and customs union (EAC) agreements, which are likely to limit her ability to increase such taxes in future.

The tariff structure in Uganda (is basically ad valorem for most items) - comprises three tariff bands: 0%, 10%, and 15%. The zero rate applies to capital goods and some socially important imports such as medicines, fertilizers and pesticides. Tanzania applies five import duty rates (0%, 5%, 10%, 20% and 30%) while Kenya has nine - ranging from 0-40%, Rwanda five (0%, 5%, 10%, 15% and 25%) and Ethiopia seven, ranging from 0-35%. This shows that the import duty structure is much simpler in Uganda than in the neighboring countries.

2.5 Revenue corruption

There are many indications that an increase in revenue corruption has contributed to reducing the growth in reported revenues.[12]

Revenue loss through corruption occurs in many ways, including falsification/forging of documents by taxpayers or tax officer to reduce tax liabilities. The Special Revenue Protection Service (SRPS) provided us a few examples connected with false-declaration of goods or under-declaration of both value and quantities of goods, proceeds and income; and of declaring imported goods (finished products) as raw materials. One involved an agro company in Kampala that had imported 4,400 tons of Tiger Head Batteries worth US$87,296 (in February 2004). The goods were declared as hoes and pangas (agricultural implements are exempted). The goods were detected at the railways goods shade in Kampala and the tax revenue of USh 54,249,344 (about US$ 30,138) was recovered, plus a fine of USh 52,381,004.

Sometimes goods are declared as originating from within the COMESA region which has lower duty rates in the assessment and application of duties on products. Misclassification of products (imports) under tariff codes with lower tariff rates and changing of number-plates for vehicles transporting transit goods has also been reported. Smuggling goods into the country through *panya* (unofficial) route (even through the customs), sometimes with the knowledge and help of customs officials is also rampant. There seems to be high rate of smuggling of petroleum products, cigarettes, sugar, steel, leather, wood, textiles, bicycles, and chemicals. Much of the petroleum products and cigarettes are smuggled across Lake Victoria. Part of the smuggled cigarettes are offloaded in Kampala under the pretext that consignments are export goods and then transported to the Democratic Republic of Congo (DRC) or sold in Kihihi and Rukungiri, Ntungamo, Mbarara, Ishaka and Kasese. Textiles are smuggled across Malaba, while new bicycles are brought in as spare parts.

At times, goods are allowed to enter the country without any documentation or with documents which indicate an intension to cross the country in transit (or heading for Kigali in Rwanda or Kinshasa in the Democratic of Congo), although the goods end up being sold in Kampala or other major towns in Uganda. For example, in February 2004 a truck: Reg. No. UAD 962J (carrying Saf-Lever Baker's Yeast valued at US$29,190), supposed to travel DRC was found being loaded in Kampala. The concerned trader had to pay tax of USh 19,288,362 to URA and additional Ushs 17,060,037 in fine, plus Ush 5,000,000 extra charge on the truck. Similarly, two trucks: reg. no. KAN 301V/ZB 6512 and KAN 987K/ZB 5109 that were carrying 2,220 tons of Tiger Head Batteries (valued at USh 77,583,153) purportedly heading for the DRC was found offloading goods in Kampala. Tax revenue of Ush 33,011,631 was also recovered, on top of a fine of Ush 23,274,946 and another fine of Ush 10,000,000 on the trucks.

Payment of bribes to tax officials in exchange for a tax reduction for the taxpayer, concealment of fraud discovered during audit excises, allowing goods to be released from customs control before payment of taxes, etc., have also been cited. For example, in October 2004, imported polythene bags and petroleum worth US$42,248.5 was removed from customs control using documents of prior consignment. This seems to have been

facilitated by some customs official. Fortunately, this was discovered, and the importer made to pay a fine of Ush 21,181,668 in addition to the tax of Ush 36,251,857.

Corruption in the tax system is very complex, seemingly well organized, and difficult to detect. It is a challenge to authority because corrupt individuals operate in a network. When a member of staff of URA is dismissed and joins the private sector, the knowledge of the workings of the tax system and inside contacts in URA only strengthens the corruption networks. In fact, many clearing firms and tax audit firms in Kampala and Entebbe are owned by former URA employees. To defeat the corruption problem would require identifying and cracking down these corruption networks.

Corruption is worsened by the (method of past) recruitment in URA, which appeared to be influenced by having good connections and less by professional qualifications. Moreover, the tax laws are unclear and administrative procedures, including the procedures for reporting tax revenues lack transparency and are poorly monitored within the tax administration itself and by the office of the Auditor General. Revenue officers are considered to have wide discretionary powers to interpret tax laws.[13]

Government has tried several measures to end corruption. These included privatisation of some of the customs operations e.g. verification of imports through pre-shipment inspection companies (was tried between 1996 and 1999, only to be abandoned in June 2000); and automation of customs and VAT operations by introducing ASYCUDA and the VENUS system in the customs and the VAT department, respectively (i.e. introduced in 1996 though use of forged receipts to release goods in customs has not stopped, even with ASYCUDA in place).

Others included enforcement of tax compliance using a special military unit, the Anti-smuggling Protection Unit, and the Special Revenue Protection Service; recruiting 'born again' Christians into URA because they were perceived to be more trustworthy; and introducing a system of reward (in 1998) i.e. a cash prize of 10% of the face value of tax revenue recovered, to any person who volunteers information leading to recovery of tax revenue; as well as dedicating a telephone-hotline and email address for the public to report any tax-related malpractices. In addition, taxpayers' education program and anti-

corruption efforts through the office of the Inspectorate of Government (IGG) have been used to reinforce other measures. Instead, corruption seems to be increasing. In 2002, because of public concern, the President appointed a commission of inquiry to investigate the alleged corruption in the URA. What happens next, in terms of implementing the recommendations of the commission is yet to be seen. [14]

Dealing with corruption in the tax system requires a number of measures – including building tax compliance and winning public confidence so that people voluntarily comply in paying taxes rather than the tax collectors having to demand for taxes. Taxpayers' willingness to pay or not depends on what they perceive they will get in return from government in terms of service provision.[15] Government budget and action should therefore, reflect this. In addition, Government needs to ensure that payments to its service providers and suppliers are not over delayed. Discontent with government payments seems to increase tax resistance, and may be contributing to the tax evasion by some businesses.

Other measures include making the tax procedures very simple and transparent so that the taxpayers know what their obligations are towards revenue collection, as well as educating them (taxpayers) on tax laws and collection systems. These ought to be presented in the simplest possible way for an average taxpayer to understand (interpretation in major local languages could also help). Possibly, ignorance of the tax laws and procedures is partly responsible for generating the environment for corruption in the tax system.

In addition, effective use of automated systems (e.g. computerization of the clearing system), and improving information flow within and across departments and strengthening tax audit are needed to improve tax collection and monitoring system. It would also help in evaluating refund claims and in preventing possible frauds associated with these claims. Developing an effective mechanism that guarantee the tracking of documentation of goods from Mombasa to the final delivery point is also needed in order to cut down on falsification of documents by officials at various checkpoints, and to ensure continuous monitoring of the tax body.

Consideration should also be given to strengthening tax administration including staff investigative machinery and human resource management system, particularly system of rewarding staff in order to attract skilled and high calibre employees. Employee must feel that they actually represent the most valuable asset of the organisation and that top management is prepared to invest in their future. So, the issue of retirement benefits (lack of which has been cited as one of the causes of stealing) and career development need urgent attention. A well designed training program is necessary if capacity of staff is to improve.

The point here is that the URA administration must rely on a number of human resource management instruments, not only remuneration to be effective and efficient. While salary rise may help, it won't stop revenue officials from taking bribes. Pay level is only one of several factors affecting the behaviour of tax officers. In a situation in which the demand for corrupt services is extensive and monitoring ineffective, wage increases may end up serving as an extra bonus on top of the bribes taken by corrupt officers (Fjeldstad and Rakner 2003). Similarly, it is not enough to 'fire' corrupt officials without reforming aspects of the system that provide opportunities for stealing and ensuring that honest officials are being appointed in position of trust. Where personal contact is a problem, the introduction of elements of unpredictability as to which particular official may handle a matter or certain category of clients, and routine transfers may also help.

Finally, anti-corruption effort in the tax system needs to be extended to embrace other efforts towards achieving good governance, rather than being handled in isolation. For instance, how transparent is the government procurement system, the awarding of government tender, ministerial discretion of providing preferential treatment to some industries and companies, and so on? How is the policy environment, for instance, what has been done to correct the misalignment in policies which generates an environment for corruption such as cross-border differences in the tariffs regime? Some of the smuggling activities are reactions to misalignment in the policies of Uganda and her neighbors, and the policy that provides over protection to some industries.

3. Analytical Framework

The primary goal of Uganda's tax reforms was to increase the level of government revenue (tax/GDP). Empirical evidence shows that tax policies that make the yield of individual taxes responsive to changes in national income (GDP), and ensure that the predominant taxes in the revenue are those with a highly elastic yield with respect to national income (or proxy bases) are revenue enhancing. We applied the concept of *elasticity* and *tax buoyancy* to measure the responsiveness of tax revenue to changes in income (excluding the effects of discretionary changes)[16] and the total response of tax revenue to changes in income.

3.1 Elasticity index and tax buoyancy

We computed elasticities and buoyancies for the pre-reform period as well as the post-reform period. Elasticities (tax-to-base and base-to-income) were estimated for each tax and for the overall tax system. We applied the approach, similar to that in Mansfield (1972) - that is:

Elasticity of total tax revenue to income: $$ET_t Y = \frac{\Delta T_t}{\Delta Y} \times \frac{Y}{T_t} \quad (1)$$

Elasticity of *k*th individual tax to income: $$ET_k Y = \frac{\Delta T_k}{\Delta Y} \times \frac{Y}{T_k} \quad (2)$$

where

T_t = Total tax revenue

T_k = Revenue from the *k*th tax

Y = Income (GDP)

Δ = Change operator

In turn, the income elasticity of each individual tax can be decomposed into two components: elasticity of tax to base and the elasticity of the base to income. Thus:

Elasticity of *k*th individual tax to base: $$ET_k B_k = \frac{\Delta T_k}{\Delta B_k} \times \frac{B_k}{T_k} \quad (3)$$

Elasticity of *k*th individual base to income: $$EB_t Y = \frac{\Delta B_k}{\Delta Y} \times \frac{Y}{B_k} \quad (4)$$

where

B_k = Base of the *k*th tax

Therefore, in a system of *n* taxes:

$$ET_t Y = \frac{T_1}{T_t}\left(\frac{\Delta T_1}{\Delta Y} \times \frac{Y}{T_1}\right) + \cdots + \frac{T_k}{T_t}\left(\frac{\Delta T_k}{\Delta Y} \times \frac{Y}{T_k}\right) + \cdots + \frac{T_n}{T_t}\left(\frac{\Delta T_n}{\Delta Y} \times \frac{Y}{T_n}\right) \quad (5)$$

Equation (5) states that the elasticity of total tax revenue to income is equal to the weighted sum of individual tax elasticities - as provided in Mansfield (1972). As shown above, the elasticity of *k*th tax may be *decomposed* into the product of the elasticity relative to the base and the elasticity of the base to income:

$$ET_k Y = \left(\frac{\Delta T_k}{\Delta B_k} \times \frac{B_k}{T_k}\right)\left(\frac{\Delta B_k}{\Delta Y} \times \frac{Y}{B_k}\right) \quad (6)$$

It therefore, follows that the elasticity of total revenue to income in a system of *n* taxes is the product of the elasticity of tax to base and base to income for each individual tax weighted by the significance of that tax in the total tax system:

$$ET_t Y = \frac{T_1}{T_t}\left[\left(\frac{\Delta T_1}{\Delta B_1} \times \frac{B_1}{T_1}\right)\left(\frac{\Delta B_1}{\Delta Y} \times \frac{Y}{B_1}\right)\right] + \cdots + \frac{T_k}{T_t}\left[\left(\frac{\Delta T_k}{\Delta B_k} \times \frac{B_k}{T_k}\right)\left(\frac{\Delta B_k}{\Delta Y} \times \frac{Y}{B_k}\right)\right] + \cdots$$

$$+ \frac{T_n}{T_t}\left[\left(\frac{\Delta T_n}{\Delta B_n} \times \frac{B_n}{T_n}\right)\left(\frac{\Delta B_n}{\Delta Y} \times \frac{Y}{B_n}\right)\right] \quad (7)$$

This analysis helps us to identify the source of fast revenue growth or lagging revenue growth in the tax system (Mansfield 1972: 427). It also permits identification of the component of revenue growth, which is within or outside the control of authorities. For instance, the tax-to-base constituent of elasticity is partly within the control of the authorities, but the base-to-income elasticity is determined, largely by changes in structure of the economy and economic growth – therefore not within the control of authorities.

3.2 Estimation procedure

a) Elasticity

The relationship between tax revenue and income is approximated by the function:

$T^* = \alpha Y^{\beta} \varepsilon$

Rewritten as:

$$LogT_t^* = Log\alpha + \beta LogY + \mu_t \qquad (8)$$

where $\mu_t = \log \varepsilon_t$

T = tax revenue, β = tax elasticity (measure of the percentage change in tax revenue arising from 1% change in income Y (GDP).

To obtain T_t^*, this study adopted the Proportional Adjustment (PA) technique developed by Prest (1962) – to eliminate the discretionary effects from the revenue series. The PRA method was chosen because of its superiority to other techniques e.g. the Constant Rate Structure (CRS). The PRA method has been used in a number of studies, including Mansfield (1972) in Paraguay, Osoro (1993) in Tanzania, Chipeta (1998) in Malawi, and Muriithi and Moyi (2003) in Kenya.

A preliminary series of adjusted tax yields was prepared by subtracting from the actual yield for each year the estimated amount attributed to the discretionary change in that year. That is,

If $T_1, T_2, \cdots, T_t$, are actual tax yields for a series of years, and

$D_1, D_2, \cdots, D_t$ are estimates of the discretionary changes for various years, then $T_1 - D_1 = T_{11}, T_2 - D_2 = T_{12}, \cdots, T_t - D_t = T_{1t}$ represent preliminary adjusted tax series i.e. the actual tax collected each year adjusted to the structure of that year (with t=1 as the base/reference year). T_{11}, T_{12},…, T_{1t} represents what the tax receipts would have been if the tax structure had remained as in year 1 with all discretionary changes removed from the years following year 1.

To adjust the revenue yield in the preliminary tax series so as to reflect revenue yields based on the structure of the reference year for each year (this study adopted 1988/89 as the reference/base year), the preliminary adjusted tax (e.g. $T_{1,t}$) is multiplied by the previous year's ratio of the adjusted tax with reference to the base year $(T^*)_{t-1}$ expressed as a ratio of the actual tax revenue (T_{t-1}). That is,

$$T_1^* = T_{11} = T_1 - D_1$$

$$T_2^* = \frac{T_1^*}{T_1} \text{ x } T_{12}$$

.
.
.

$$T_t^* = \frac{T_{t-1}^*}{T_{t-1}} x T_{1,t}^*$$

b) Buoyancy

Buoyancy of taxes with respect to income (GDP) is estimated using the following equation:

$$LogT_t = Log\mu + \phi LogY + \mu_t \qquad (9)$$

where

T = Tax revenue

Y = Income

μ = Stochastic disturbance term, and

ϕ = Tax buoyancy.

3.3 Impact of macroeconomic variables on tax revenue

The analysis of tax yield using the approach described above does not allow for the accurate formulation of the relationship between tax receipts and income by adding other independent variables to the estimating equation (Manisfield, 1972 p428). Variables such

as exchange rates, inflation, budget deficits, import volumes, and revenue administration can affect tax revenue.

In developing countries, where collection lags are experienced, inflation is likely to have a negative impact on real tax revenue. High levels of inflation may increase tax-payers propensity to delay tax payment. Existence of collection lags for tax payments implies a real revenue loss during inflation, which is a direct function of the ratio of inflation, the size of the collection lags, and the initial level of taxation (Tanzi, 1988). Moreover, high inflation rates can also reduce the tax base as economic agents try to make portfolio adjustments in favor of assets that typically escape the domestic tax net (Ghura, 1998).

Fiscal policy defines the agenda for revenue target. The level of budgeted government spending, inflows of foreign aid, debt financing and fiscal deficits determine the amount of taxes that the revenue collection agency is expected to collect. Meanwhile, increased level of foreign aid can have a significant impact on revenue by artificially (and temporarily) increasing the tax base as the level of economic activity tends to respond to the inflows (Seade, 1990). A substitution effect between domestic tax revenue mobilization and availability of external grants is also possible. In which case, increases in external financing will lead to a fall in domestic tax revenue (Ghura, 1998).

Countries that allow the exchange rate to appreciate are likely to experience a loss in their revenue (Tanzi, 1988; Seade, 1990). A depreciation of the real exchange rate raises import costs and reduces import volume (if import demand is price elastic) and thus imports tax receipts. Lastly, literacy improves tax compliance through better understanding of the tax laws/obligations and ability to file tax returns.

To capture the impact of some of the variables discussed above, particularly exchange rate, inflation rate, foreign inflow, and fiscal deficit on tax revenue the following equations were estimated.

$$ID = f(LRER, LFDEF, LFAID, LINR) \tag{10}$$

$$IT = f(LINR, LFAID, LIT, LRER, LFDEF) \tag{11}$$

$$TR = f(LRER, LFDEF, LFAID, LINR, LIT) \quad (12)$$

where

ID is the ratio of import duties to GDP; *IT* is the ratio of income tax to GDP; and TR is the ratio of total tax revenue to GDP. *LRER* is the real exchange rate; *LFDEF* is the ratio of budget deficit to GDP; *LFAID* is the ratio of external grant to GDP, *INR* is underlying inflation; *LIT* is a dummy for literacy; and *L* is the log operator.

3.4 Proxy tax bases and data sources

The major tax categories that are considered here are: direct taxes, import duties, excise duties and sales/VAT. For direct taxes, the factors that produce the incomes are assumed to pay the associated taxes. Thus, the proxy base for income taxes are domestic factor incomes derived from the data on the sources of income side of the national accounts compiled by Uganda Bureau of Statistics (UBOS). UBOS publishes annually the Statistical Abstract which contains, among others, time-series data on government revenues, consumer prices and national accounts.

We used import values (c.i.f) from the balance of payments as the proxy base for import duties; and private final consumption as the proxy base for excise duties, and sales tax/VAT – since sales tax/VAT has been levied at retail and wholesale levels. The proxy base for the overall tax system was GDP. The data on private consumption and GDP were obtained from the Statistical Abstract (for various years) published by the UBOS, and the data on imports (c.i.f), exchange rate, inflation rate and domestic factor incomes were obtained from Bank of Uganda Annual and Quarterly Reports.

Revenue data (for individual tax handles) were derived from the quarterly and annual statistical reports prepared by Uganda Revenue Authority. These are also available in Statistical Abstracts and Background to the Budget. Estimates of the discretionary tax changes were obtained from the *Budget Speeches* and from the Tax Policy Department of the Ministry of Finance. Information on tax reforms, fiscal operations, and foreign aid were obtained from the Ministry of Finance, the World Bank and the IMF publications.

4. Reforms and Responses of the Tax Revenues to Income

The results presented in this section reflect a decomposition of the income elasticity of main tax revenue in Uganda with respect to income into two components: elasticity of revenue to base and elasticity of base to income. For the Uganda tax system to continue to raise adequate revenue, it helps if individual taxes are income-elastic. This occurs when revenue rises in line with national income (GDP) even when no adjustments are made to the tax rates or bases i.e. revenue that would be generated automatically if the tax system were to remain unchanged over time.[17]

4.1 Elasticity estimates for the pre and post-reform period, combined

The elasticity for Uganda's overall tax system for the period 1988/89-2003/04 was 0.636 (Table 6). This means that the tax structure in Uganda is inelastic. This result is very similar to the elasticity reported by Muriithi and Moyi (2003) for the tax system in Kenya. For every 1% rise in GDP during 1988/89-2003/04, the Uganda tax system yielded only a 0.636% increase in tax revenue, resulting from economic activity alone. This yield is particularly affected by low tax-to-base elasticity of direct taxes and import duties and low base-to-income elasticity of excise duties and VAT/sales tax.

Table 6. Uganda: Elasticity of main taxes, 1988/89-2003/04

	Buoyancy coefficient	*Elasticity indexes*			Buoyancy less tax-to-income elast.
		Tax to income	Tax to base	Base to income	
Direct taxes	1.495	0.938	0.623	1.519	0.557
Import duties	1.321	1.048	0.896	1.157	0.273
Excise duties	1.429	0.919	1.006	0.940	0.510
VAT/sales tax	1.310	1.009	1.076	0.940	0.301
Overall tax system	1.311	0.636	--	--	0.675

Notes: Buoyancy/elasticity estimation allows for lags, and coefficients (elasticity and buoyancy) are calculated in real terms

The low tax-to-base elasticity of direct taxes (0.623) with high proxy base-to-income coefficient (1.519) signifies a big proportion of untaxed or uncollected revenue. This can be due to informal sector activities that are not captured by the tax system, exemptions (see discussion on tax reform, under income tax), and non-remittance of taxes by businesses, including illegal business operations and 'briefcase' activities that by-pass the tax net.

The low tax-to-base elasticity of import duties is attributed, in part, to effect of tax evasion and inefficiency in revenue administration, and growth in imports of goods and services that are exempt or zero-rated e.g. foodstuffs, drugs and medicines, etc. However, import duties still yielded the highest tax-to-income elasticity coefficient (1.048), while excise duties had the lowest. The base for import duties (same for direct taxes) has grown in line with growth in GDP although the growth in revenue lagged behind the growth in the tax base. This implies that the taxes responded poorly to changes in income between 1989 and 2004.

The poor response of excise revenue to changes in income is due to low base to income elasticity. The elastic response of the excise revenue to changes in the tax base means that potential for increasing excise revenue exists. This will be realized with future expansion of the tax base and ability of private final consumption to grow in line with the growth in GDP. The base-to-income elasticity of VAT/sales tax seems to be affected, largely by high poverty and rate of unemployment. Increasing revenue from VAT/sales in the short term could be achieved by improving efficiency within the tax administration as well as abolishing some of the exemptions and applying zero-rate to exclusively exports.

The relatively low tax-to-base elasticity of the individual tax categories (with an average coefficient of 0.9), compared with their base-to-income coefficients (of 1.139 on average) implies that the inelasticity of the overall tax system is caused mainly by problem of poor collection of taxes than by the effect of inelastic nature of the tax bases. More efforts should therefore be directed to increasing the responsiveness of the individual taxes to the base especially import duties and direct taxes.

However, the high buoyancy coefficients[18] (Table 6, last column: the difference between buoyancy and tax-to-income elasticity indexes) indicate significant revenue impact of discretionary measures that were introduced between 1988/89 and 2003/04. The largest impact of these measures is evident in direct taxes. The discretionary tax policy yielded a 0.6 percent rise in direct taxes and 0.3 percent rise in import duty revenue for every one percent growth in GDP.

4.2 Elasticity estimates for the pre-reform period

The coefficients presented in Table 7 reflect the income elasticity of the tax revenue during the period between 1988/89-1995/96. Prior to 1996/97, no major reforms of the tax system had taken place apart from establishment of the URA. The table shows an inelastic response of the overall tax revenue to changes in income as reflected in tax-to-income elasticity coefficient of 0.648. This was due to low tax-to-base elasticity of direct taxes and excise duty; and sluggish growth in proxy-base for VAT/sales tax and excise (private final consumption) in relation to income (GDP). The tax-to-income elasticity coefficients of import duties (1.256) and VAT/sales tax (1.037) signify elastic yields of these taxes prior to the major reforms.

Table 7. Uganda: Elasticity of main taxes, 1988/89-1995/96

	Buoyancy coefficient	*Elasticity indexes*			Buoyancy less tax- to-income elast.
		Tax to income	Tax to base	Base to income	
Direct taxes	1.337	0.706	0.479	1.479	0.631
Import duties	1.569	1.256	1.066	1.166	0.313
Excise duties	1.333	0.705	0.830	0.965	0.628
VAT/sales tax	1.192	1.037	1.073	0.965	0.155
Overall tax system	1.299	0.648	---	---	0.651

Notes: Buoyancy/elasticity estimation allows for lags, and coefficients (elasticity and buoyancy) are calculated in real terms

The low tax-to-income elasticity of direct taxes (0.706) is the outcome of low tax-to-base elasticity (0.479), which reflects poor revenue yield from direct taxes especially income tax before major reforms were implemented. This was mainly caused by the large informal sector activities that were not captured by the tax system, exemptions, and illegal business operations that by-passed the tax-net. The favorable response of import duties to changes in GDP was partly because of the introduction of 10% import duty on agricultural inputs (except fertilizers, pesticides and seed) and all raw materials in the early 1990s; and 10% import duty on all previously zero-rated items.

The relatively high revenue yield from sales tax was due to improvement in tax collection and introduction of sales tax on all zero-rated and exempt products (in 1989/90). The buoyancy index for the overall tax system during the pre-reform period (1988/89-

2003/04) was 1.299 compared to the post reform index of 1.202. This means that revenue increases during pre-reform period were driven by discretionary tax measures.

4.3 Elasticity estimates for post-reform period

The post reform period refers to the period between 1996/97-2003/04, when major tax reforms were implemented in Uganda. Table 8 shows elasticity of less than one (i.e. 0.545) for the overall tax system, and elasticity of more than one for direct taxes (i.e. 2.082) and VAT (1.306). Increase in yield of VAT/sales tax resulted from some improvement in revenue collection associated with the introduction of the VAT in 1996. However, responses of the overall tax revenues to changes in national income are affected by inefficiency in revenue administration, exemptions, tax evasion and sluggish response of the individual tax bases (except base for direct taxes) to changes in income.

Table 8. Uganda: Elasticity of main taxes, 1996/97-2003/04

	Buoyancy coefficient	*Elasticity indexes*			Buoyancy less tax- to-income elast.
		Tax to income	Tax to base	Base to income	
Direct taxes	2.145	2.082	1.031	2.021	0.063
Import duties	0.637	0.382	0.244	0.638	0.255
Excise duties	0.664	0.304	0.325	0.857	0.360
VAT/sales tax	1.386	1.306	1.452	0.857	0.080
Overall tax system	1.202	0.545	---	---	0.657

Notes: Buoyancy/elasticity estimation allows for lags, and coefficients (elasticity and buoyancy) are calculated in real terms

Direct taxes performed well because of the favorable response of the tax base to changes in income. This favorable response came about as a result of the new Income Act that was enacted in 1997 and subsequent reduction in discretionary tax exemptions, which helped to widen the tax base. Other contributory factors are increase in wage rates in the civil service following the recent pay-reform, and the abolition of tax holidays as well as clarification of taxation of benefits in kind as part of the income tax (law) reforms – which helped to improve the tax base and increase revenues from corporate and personal income taxes.

VAT also performed well mainly because of the responsiveness of VAT revenue to changes in the tax base (private consumption). However this improvement was small

because of the problem of tax evasion and growth in consumption of goods and services that are exempt or zero-rated e.g. foodstuffs, agricultural outputs and inputs, drugs and medicines and medical services, educational services, hotel accommodation, etc. So, whether VAT revenue rose more quickly to changes in the tax base, only a small change occurred after the reform because of the same problem. The low base-to-income elasticity of VAT (0.876) reflects low responsiveness of private final consumption to growth in national income (GDP).

The elastic revenue yield for direct taxes and VAT means that the tax policies that Uganda government implemented between 1996/97 and 2003/04 increased the responsiveness of these taxes to changes in national income. However, the VAT base has lagged behind growth in income as evident by low base-to-income elasticity of only 0.857 compared to tax-to-base elasticity of 1.452. This means that reform implemented by government could have led to higher revenue yield if the VAT base (private final consumption) grew in line with the income. Policy that would lead to increase in private consumption has great potential for increasing VAT revenue in Uganda. Similarly, for direct taxes, the growth in tax collection lags behind the growth of the base in relation to income – shown by the huge gap between tax-to-base and base-to-income elasticity indexes – suggesting that there are taxable revenues in the public lying untaxed. This shows that potential for increasing government revenue through direct taxation exists.

The low response of excise revenue to changes in private final consumption and import duties to changes in imports (c.i.f value) portrays loss of revenue from excise and import duties. The demand for alcoholic beverages and cigarettes frequently rises less quickly than income (GDP), and so excise revenue is likely to be less elastic. However, the low yield of imports revenue (which is directly related to the sluggish response of the imports revenue to changes in the tax base) is caused by an increase in the share of exempt and zero-rated imports (c.i.f value) to total imports (c.i.f value); remissions, and poor collection of imports revenue (duties) due to tax evasion; decline in growth of the real value of imports especially fuel imports (tax rate on fuel remained specific, constant, and unadjusted for inflation for over four years – after 1996/97) and decline in duty revenue

from raw materials imports (10% import duty on selected raw materials were waived off in 2001/02).

4.4 Comparison between pre and post-reform period

Table 7 and 8 indicate positive changes in the elasticity coefficients involving two main taxes: direct taxes and VAT/sales tax. Reforms brought a significant improvement in the yield of direct taxes, that is, from inelastic yield before major reforms to elastic yield after the reforms. This was achieved through improvement in the tax base, which grew in line with GDP. However, the capacity of the VAT to raise more revenue is constrained by the ability of the proxy-base for VAT (private final consumption) to expand in relation to changes in income (worsen after the reform). No marked difference is noted in the response of excise revenue to changes in income, prior to or after the major reforms of the tax system.

Import revenue had inelastic yields with respect to national income and proxy bases, during the post reform period. The yields were elastic during pre reform period. The unusual decline in yield of import duties is explained by the same reason mentioned in the previous section, including poor collection of imports revenue due to increase in tax evasion and share of exempt and zero-rated imports to total imports (c.i.f value), and remissions; and decline in growth of the real value of imports especially fuel imports (tax rate on fuel remained specific, constant, and unadjusted for inflation for over four years 1996/97) and the removal of 10% import duty on selected imported raw materials.

5. Tax Responses to Changing Economic Trends

The results for the regression analysis (with income tax/GDP, import duty/GDP and the overall tax/GDP as dependent variables and set of explanatory variables described in section 3) are presented in Tables 9. The reported R-squared suggests that estimated models provide reasonably good fits to the data. Further analyses were undertaken to understand the interdependency between income tax and import revenue and to establish how exchange rate depreciation has affected prices and volumes of import.

Table 9. Uganda: OLS results for income tax, import duty and overall tax revenues

	Income Tax/GDP Equation		*Import Duty/GDP Equation*		*Overall Tax/GDP Equation*	
	Coefficient	t-ratio	Coefficient	t-ratio	Coefficient	t-ratio
Literacy rate	4.029*** *0.691*	5.827			0.924** *0.467*	1.981
Inflation (Underlying)	-0.0067* *0.098*	-0.098	-0.076* *0.056*	-1.350	-0.113** *0.046*	-2.461
External grant to GDP (%)	-0.0041* *0.098*	0.217	0.0041* *0.335*	0.012	-0.057* *0.146*	-0.392
Real exchange rate (Ush to US$)	0.131* *0.625*	0.210	1.331* *0.898*	1.481	0.447* *0.422*	1.06
Budget deficit to GDP (%)	0.092* *0.69*	1.352	-0.272** *0.105*	-2.584	-0.092* *0.046*	-2.007
Constant	-16.716*** *2.986*	-5.598	-4.637* *3.600*	-1.288	-3.146* *2.014*	-1.562
R-Squared	0.960		0.899		0.942	
DW	2.261		1.353		2.141	
Std. deviation	0.503		0.342		0.277	
Number of observations	16		16		16	

Notes: Standard errors reported in italics. All continuous variables are logged
*** denotes statistical significance at the 1% level, ** at 5% level, and * at the 10% level using one-tailed test.

The effect of inflation and exchange rate on income tax becomes stronger with inclusion of import duty in the income tax/GDP equation. The coefficient depicts an inverse relation suggesting that increase in import revenue reduces effort to raise income tax. On the other hand, effect of inflation on the import tax revenue is strengthened when income tax is included in the import duty/GDP equation. Again, an inverse relation between the two types of revenue is obtained, which portrays a substitution effect. Effort to collect import revenue is reduced by the increasing level of income tax. This is particularly true where the resources for revenue generation available to the tax collection agency such as personnel and facilitation are inadequate.

5.1 Impact of external aid and fiscal deficit

The coefficient on external grant is negative and significant for income tax, and the overall tax equations (Table 9). This suggests that increase in external grants (development aid) reduces effort to collect revenue. However, the effect tends to be small. For example, a 1% rise in the ratio of external grant/GDP reduces income tax revenue by a 0.045% point of GDP and the overall tax by 0.05% point of GDP.

In recent years there has been a growing interest in the possible linkages between high levels of development aid and taxation in Africa (Therkildsen, 2001). It is assumed that, without aid, government would be forced to raise more taxes or cut its spending if it cannot raise more taxes, or borrow from other sources. According to the present findings, increase in development aid appears to be a source of disincentive to making full use of domestic resources for revenue generation. This could be the reason why revenue targets have become a major component of aid conditionality in Uganda.

Fortunately, there is an indication of increased effort to raise more revenue through increased import duties in response to increasing level of development aid. This is reflected in a positive coefficient of 0.004 (on external grant). Growth in import revenue lags behind increase in grant. Results in Table 9 also reveal that lower budget deficit reduces effort to collect revenue, particularly income tax. The result is consistent with the findings on effect of increased grant as lower budget deficit has often been a result of increased grant/aid.

With inverse relationship between import revenue and budget deficit (negative coefficient of 0.272), the result does not appear to support the assumption that increasing fiscal deficit encourages effort to collect more revenue through increased import duties. Farhadian and Katz (1989) included fiscal deficit as one of the explanatory variables in the import duty/GDP equation and found it insignificant. It is assumed that countries faced with an increased trade deficit may try to restrict imports as an alternative to exchange rate adjustment. This will reduce import duties. Some analysts have argued that countries faced with large/growing fiscal deficits and public debt, are likely to rely on inflationary finance rather than on non-inflationary revenue (Ortiz 1988; Tanzi, 1988).

5.2 Impact of foreign exchange rate

Coefficients on exchange rate are positive and significant for import (1.331) and overall tax/GDP (0.447) equation. Import revenue is therefore highly sensitive to changes in exchange rate. Depreciation of Uganda shilling by one percent against the US dollar can increase import revenue by a 1 percent point of GDP, income tax by 0.13% and overall tax revenue by 0.4% point of GDP. Exchange rate depreciation causes an upward shift in

the relative prices of goods and services leading to increased import receipt and revenue in local currency. In other words the real value of imports, measured in domestic prices increases as exchange rate depreciates. However, higher duty rates can lead to a lower import volume (hence offsetting the positive revenue impact of depreciation) if price elasticity of imports is greater than one. Our estimation of aggregate price elasticity of imports is 0.176.

The OLS results (using import volume as dependent variable – not in Table 9) reveal a positive relationship between exchange rate depreciation and volumes of imports. A coefficient of 3.393 (1% level of significance, $R^2 = 0.889$) was obtained. Importers seem, therefore, to respond to exchange rate depreciation by purchasing more foreign exchange (because of uncertainty about the stability of the shilling). Volume of imports goes up. Importers try to maximize the gain from the increased value of imports (measured in domestic prices) arising from exchange rate depreciation. Moreover, with many big businesses in Uganda run by foreign nationals, and Ugandans who hold foreign currency account, depreciation of the shilling may not necessarily be detrimental to imports.

Depreciation has a positive impact on import prices (shown by coefficient of 0.209). These findings suggest that the changes in exchange rate over the past years have not had negative impact on imports. With regards to income tax, depreciation is likely to depress real wages, including other non-tradable in the economy leading to decline in PAYE. On the other hand, international mobility of capital and improved business profitability can lead to a rise in corporate income tax. The net balance between these two opposing forces eventually determines the impact of exchange rate on income tax.

5.3 Impact of inflation

The coefficients on inflation are negative and significant at 10% level for income and import tax revenues, and 5% for overall tax revenue. Rising inflation seems to affect collection of import tax than income tax (Table 9) – reflected in coefficients of 0.076 and 0.0067, respectively. That is, a 1 percent rise in underlying inflation per annum reduced income tax revenue by a 0.006 percentage point of GDP compared with 0.076% for the case of import revenue. The weak relationship between income tax and changes in

inflation shows that inflation has not significantly affected collection of income tax in the recent past due to the prudent monetary policies, which kept inflation below 5% most of the time. This supports our earlier findings. Allowing for lags in the analysis of revenue elasticity based on real terms led to a significant fall in the yield of import revenue (from tax-to-income elasticity of 0.394 to 0.244) compared to the slight decrease in the yield direct taxes (from 2.106 to 2.082) in the same period. The greater influence on import tax may suggest some degree of reliance on inflationary tax.

5.4 Impact of literacy rate

There appear to be a strong relationship between income tax revenue and literacy rate as shown by an index of 4.16 (Table 9). This suggests that government can achieve a significant rise in income tax revenue by investing in mass education (as it is doing now with UPE, but tax education needs to be emphasized as well).

6. Conclusions

Uganda Government initiated sequence of tax reforms since the late 1980s to address the fiscal challenges facing the country. This study focused on the link between tax reforms and revenue mobilization. For the tax system to be revenue enhancing, the yield of individual taxes should be responsive to changes in national income (GDP), and the predominant taxes in the revenue should be those with a highly elastic yield with respect to national income (or proxy bases).

The empirical results and analysis presented in the previous sections suggest that the tax reforms had different impacts on different taxes, and that a half of the predominant taxes in the revenue had elastic yield with respect to national income (or proxy base). That is, reforms had a positive impact on direct taxes and VAT/sales tax as evidenced by increase in tax-to-income elasticity index of about 1.4 (i.e. from 0.706 to 2.082: the pre - and post-reform periods) for direct taxes, and 0.321 (i.e. from 1.037 to 1.306) for VAT/sales tax. Revenue yield of import duties deteriorated so much after the reforms as shown by a decline in tax-to-income elasticity index of about 0.9 i.e., from 1.256 to 0.382 (pre and post-reform period, respectively).

The reforms had a bigger impact on direct taxes than on indirect taxes, suggesting that tax evasion is still a major problem for indirect taxes especially import duties. Other factors that are responsible for decline in yield of import revenue is increase in the share of exempt and zero-rated imports to total imports (c.i.f value); remissions; and decline in growth of the real value of imports especially fuel imports as tax rate on fuel remained unadjusted for inflation for over four years; and the removal of 10% import duty on selected imported raw materials. Improved performance of direct taxes can be explained by the contribution of the new Income Tax Act 1997, which improved the administration of income taxes, reduced discretionary exemptions and made the tax procedure simpler for taxpayers and revenue administrators, and by increase in the wage rates in civil service, among other factors.

While yield has improved for two major taxes, the yield of the overall tax system is inelastic with respect to national income, and actually declined during the post-reform period. This scenario, coupled with inelastic responses of import and excise duties and the low base-to-income elasticity of VAT/sales tax suggests that the tax reforms hardly increased the revenue mobilisation capacity of the Uganda tax system. Nevertheless, direct taxes and VAT are key potential growth areas for revenue mobilization, and therefore key areas to rely on for raising future revenues.

As the findings show, there is room for further improvement in collection of direct taxes by strengthening the capacity of URA to register more eligible taxpayers into the tax net. The huge gap between tax-to-base and base-to-income elasticity indexes is a sign of potential revenues in the public lying untaxed. Increased investment growth in the country and deepened economic base that accompanies economic growth, will help future growth of direct taxes. Reforms had nearly neutral impact on excise duties. This is not surprising because the demand for alcoholic beverages and cigarettes frequently rises less quickly than income (GDP), and so excise revenue is likely to be less elastic even after reforms. Nevertheless, excise duties have much greater potential to contribute to revenue as evidence by the higher base-to-income elasticity compared with the tax-to-income elasticity index. Government needs to identify new items to bring into the tax net e.g.

plastic shoes or raise rates on items that carry low excise relative to the rates in the SSA region.

Among other trends revealed by this study is that during the course of the 1990s, up to present, Uganda's tax structure has been greatly improved and there is not much that remains to be done, except to administer it equitably and efficiently. The structure of the tax system broadly mirrors the tax system in other countries (SSA), in terms of the types of taxes and rates. While differences in excises rates and bases, and exemptions under VAT, import duty and income tax etc. seemingly explain, in part, the difference in tax/GDP relative to other countries, greater explanations are likely to lie with differences in the levels of development, the structure of the economies, degree of commercialization and urbanization, size of the peasant population, poverty, and level of corruption among other factors (as highlighted in the examples in Table 4).

Finally, the results of the regression analysis on the response of tax revenue (with reference to income tax and import duty) to changing economic trend imply that external aid, fiscal deficit and inflation, changes in exchange rate (depreciation) have significant influence on tax revenue. Clearly, improving the revenue performance will require a major improvement in tax administration, increase in the level of employment, and reduction in tax exemptions and corruption. Further adjustments in tax rates (except tax thresholds and some excisable goods) are not necessary at the moment (or in the medium term). Effort should be directed to improving tax collection and reducing corruption, improving welfare through employment generation and other poverty reduction strategies. Measures that could be undertaken to reduce corruption include winning public confidence through improved service delivery and government payment (for goods and services); making the tax procedures simple and transparent and improving on taxpayers' education; effective use of automated systems especially in the clearing system and monitoring refund claims; and strengthening tax administration including staff investigative machinery and human resource management capability.

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Appendixes

Table A2.1: Uganda: Domestic Revenue in Billions Uganda Shilling, 1988/89-2003/04

Sources of revenue	1988/89	1989/90	1990/91	1991/92	1992/93	1993/94	1994/95	1995/96	1996/97	1997/98	1998/99	1999/00	2000/01	2001/02	2002/03	2003/04
Total URA Revenue	**44.60**	**89.57**	**133.79**	**180.46**	**282.60**	**373.35**	**506.99**	**611.70**	**735.92**	**812.29**	**958.28**	**1008.00**	**1110.15**	**1251.25**	**1438.42**	**1,694.81**
Income Tax	**4.77**	**9.46**	**13.87**	**23.64**	**43.57**	**50.77**	**64.50**	**67.68**	**88.25**	**107.88**	**148.43**	**158.79**	**200.12**	**259.48**	**319.94**	**402.22**
-PAYE	0.50	0.71	1.01	3.21	11.19	14.61	20.33	25.04	38.33	48.41	67.65	83.47	103.55	137.31	168.27	200.27
-Corporate Tax	4.28	8.76	12.86	20.43	31.25	24.79	24.49	24.08	25.65	29.25	44.31	40.89	54.27	69.41	84.22	121.58
-Others	0.00	0.00	0.00	0.00	1.13	11.38	19.68	18.56	24.27	30.23	36.47	34.43	42.30	52.77	67.45	80.36
Excise duty (domestic)	**4.91**	**7.25**	**12.42**	**15.03**	**18.78**	**40.37**	**48.63**	**61.36**	**86.26**	**98.18**	**104.64**	**107.77**	**101.27**	**116.25**	**113.24**	**128.55**
International Trade	***19.29***	***49.55***	***80.58***	***100.58***	***165.98***	***211.22***	***297.59***	***356.69***	***453.44***	***466.18***	***543.55***	***555.45***	***611.07***	***633.26***	***721.75***	***861.31***
-Petroleum duty	3.11	15.90	36.14	54.50	82.52	92.83	119.66	150.76	197.46	188.27	193.21	197.20	199.30	222.17	240.68	269.81
-Import duty	4.68	9.18	13.44	21.54	38.68	52.56	65.14	75.86	72.27	78.05	96.48	105.09	141.01	117.22	133.07	133.95
-Excise duty	0.00	0.00	0.00	0.00	0.00	1.40	1.98	5.73	17.75	17.60	25.01	23.60	24.30	23.01	34.83	48.84
-VAT (Imports)	5.30	9.78	16.45	20.41	36.76	46.96	67.11	77.70	129.26	144.61	181.24	178.87	199.45	218.37	251.06	332.59
-Other duties	6.21	14.69	14.55	4.13	8.02	17.47	43.70	46.64	36.70	37.64	47.61	50.69	47.01	52.48	62.11	76.13
VAT (Domestic)	13.18	20.51	23.16	28.25	47.08	61.92	83.86	110.25	87.83	116.32	140.02	164.26	174.75	213.43	244.41	240.93
Total Import	**7.79**	**25.08**	**49.58**	**76.04**	**121.20**	**145.39**	**184.80**	**226.62**	**269.73**	**266.33**	**289.69**	**302.29**	**340.31**	**339.39**	**373.74**	**403.76**
Total VAT (Dom. + Imports)	**18.48**	**30.29**	**39.61**	**48.66**	**83.84**	**108.88**	**150.97**	**187.95**	**217.09**	**260.93**	**321.26**	**343.13**	**374.20**	**431.80**	**495.47**	**573.52**
Fees & Licenses	**1.41**	**2.80**	**3.76**	**3.65**	**6.45**	**8.70**	**12.41**	**15.73**	**20.14**	**23.73**	**21.65**	**21.73**	**22.94**	**28.84**	**39.08**	**61.80**
GDP at factor costs current prices	895	1,376	1,830	2,589	3,625.94	4,069	4,922	5,565	6,048	6,868	7,381	8,984	10,033	10,305	11,884	13,242

Source: Uganda Revenue Authority and Ministry of Finance, Planning and Economic Development

Table A2.1 cont...	Uganda: Tax Revenues as Percentage of GDP															
	1988/89	1989/90	1990/91	1991/92	1992/93	1993/94	1994/95	1995/96	1996/97	1997/98	1998/99	1999/00	2000/01	2001/02	2002/03	2003/04
Total tax revenue	**5.0**	**6.5**	**7.3**	**7.0**	**7.8**	**9.2**	**10.3**	**10.1**	**12.2**	**11.8**	**13.0**	**11.2**	**11.1**	**12.2**	**12.1**	**12.6**
Income Tax	***0.5***	***0.7***	***0.8***	***0.9***	***1.2***	***1.2***	***1.3***	***1.1***	***1.5***	***1.6***	***2.0***	***1.8***	***2.0***	***2.5***	***2.7***	***3.0***
-PAYE	0.1	0.1	0.1	0.1	0.3	0.4	0.4	0.4	0.6	0.7	0.9	0.9	1.0	1.3	1.4	1.5
-Corporate Tax	0.5	0.6	0.7	0.8	0.9	0.6	0.5	0.4	0.4	0.4	0.6	0.5	0.5	0.7	0.7	0.9
-Others	0.0	0.0	0.0	0.0	0.0	0.3	0.4	0.3	0.4	0.4	0.5	0.4	0.4	0.5	0.6	0.6
Excise duty (domestic)	*0.5*	*0.5*	*0.7*	*0.6*	*0.5*	*1.0*	*1.0*	*1.0*	*1.4*	*1.4*	*1.4*	*1.2*	*1.0*	*1.1*	*1.0*	*1.0*
International Trade	***2.2***	***3.6***	***4.4***	***3.9***	***4.6***	***5.2***	***6.0***	***5.9***	***7.5***	***6.8***	***7.4***	***6.2***	***6.1***	***6.1***	***6.1***	***6.5***
-Petroleum duty	0.3	1.2	2.0	2.1	2.3	2.3	2.4	2.5	3.3	2.7	2.6	2.2	2.0	2.2	2.0	2.0
-Import duty	0.5	0.7	0.7	0.8	1.1	1.3	1.3	1.2	1.2	1.1	1.3	1.2	1.4	1.1	1.1	1.0
-Excise duty	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.3	0.3	0.3	0.2	0.2	0.3	0.4
-VAT on Imports	0.6	0.7	0.9	0.8	1.0	1.2	1.4	1.3	2.1	2.1	2.5	2.0	2.0	2.1	2.1	2.5
-Other duties	0.7	1.1	0.8	0.2	0.2	0.4	0.9	0.8	0.6	0.5	0.6	0.6	0.5	0.5	0.5	0.6
VAT (domestic)	1.5	1.5	1.3	1.1	1.3	1.5	1.7	1.8	1.5	1.7	1.9	1.8	1.7	2.1	2.1	1.8
Fees and Licenses	*0.2*	*0.2*	*0.2*	*0.1*	*0.2*	*0.2*	*0.3*	*0.3*	*0.3*	*0.3*	*0.3*	*0.2*	*0.2*	*0.3*	*0.3*	*0.5*
Total VAT (dom. + imports)	***2.1***	***2.2***	***2.2***	***1.9***	***2.3***	***2.7***	***3.1***	***3.1***	***3.6***	***3.8***	***4.4***	***3.8***	***3.7***	***4.2***	***4.2***	***4.3***
Total Excise (dom. + imports)	***0.5***	***0.5***	***0.7***	***0.6***	***0.5***	***1.0***	***1.0***	***1.2***	***1.7***	***1.7***	***1.7***	***1.5***	***1.2***	***1.3***	***1.3***	***1.4***

Table A2.1 cont…	Uganda: Tax Revenues as Percentage of Total Tax Revenue															
Sources of revenue	1988/89	1989/90	1990/91	1991/92	1992/93	1993/94	1994/95	1995/96	1996/97	1997/98	1998/99	1999/00	2000/01	2001/02	2002/03	2003/04
Income Tax	10.70	10.56	10.37	13.10	15.42	13.60	12.72	11.06	11.99	13.28	15.49	15.75	18.03	20.74	22.24	23.73
-PAYE	1.11	0.79	0.75	1.78	3.96	3.91	4.01	4.09	5.21	5.96	7.06	8.28	9.33	10.97	11.70	11.82
-Corporate Tax	9.59	9.77	9.61	11.32	11.06	6.64	4.83	3.94	3.49	3.60	4.62	4.06	4.89	5.55	5.86	7.17
-Others	0.00	0.00	0.00	0.00	0.40	3.05	3.88	3.03	3.30	3.72	3.81	3.42	3.81	4.22	4.69	4.74
Excise duty (domestic)	11.01	8.09	9.28	8.33	6.65	10.81	9.59	10.03	11.72	12.09	10.92	10.69	9.12	9.29	7.87	7.58
International Trade	43.26	55.32	60.23	55.74	58.73	56.57	58.70	58.31	61.62	57.39	56.72	55.10	55.04	50.61	50.18	50.82
-Petroleum duty	6.97	17.75	27.01	30.20	29.20	24.86	23.60	24.65	26.83	23.18	20.16	19.56	17.95	17.76	16.73	15.92
-Import duty	10.48	10.25	10.05	11.94	13.69	14.08	12.85	12.40	9.82	9.61	10.07	10.43	12.70	9.37	9.25	7.90
-Excise duty	0.00	0.00	0.00	0.00	0.00	0.38	0.39	0.94	2.41	2.17	2.61	2.34	2.19	1.84	2.42	2.88
-VAT on Imports	11.88	10.92	12.30	11.31	13.01	12.58	13.24	12.70	17.56	17.80	18.91	17.74	17.97	17.45	17.45	19.62
-Other duties	13.91	16.40	10.88	2.29	2.84	4.68	8.62	7.62	4.99	4.63	4.97	5.03	4.23	4.19	4.32	4.49
VAT (domestic goods/services)	**29.54**	**22.90**	**17.31**	**15.65**	**16.66**	**16.58**	**16.54**	**18.02**	**11.93**	**14.32**	**14.61**	**16.30**	**15.74**	**17.06**	**16.99**	**14.22**
Total VAT (domestic & imports)	**41.43**	**33.82**	**29.60**	**26.96**	**29.67**	**29.16**	**29.78**	**30.73**	**29.50**	**32.12**	**33.52**	**34.04**	**33.71**	**34.51**	**34.45**	**33.84**

Source: Uganda Revenue Authority and Ministry of Finance, Planning and Economic Development.
Note: International trade taxes include petroleum duty, import duty, excise on imports, VAT on imports, withholding taxes, temporary road licenses, commission on imports, re-export levy and hides and skins levy. Excise tax includes excise on domestic products and excise on imports. It excludes petroleum duty which is treated here as part of the import duty (put separately because of its significance to revenue).

Table A2.2: Tax Revenues as Percentage of GDP in Selected Countries in Sub-Saharan Africa

Ethiopia							
	1997/98	*1998/99*	*1999/00*	*2000/2001*	*2001/2002*	*2002/03*	*2003/04*
Tax Revenue	9.5	9.7	10.1	11.5	12.5	11.8	na
Income tax	2.2	2.3	2.5	2.9	3.4	2.7	na
VAT/sales tax	3.0	2.9	3.0	3.5	4.3	4.5	na
Import duty	2.2	2.2	2.0	2.3	2.8	2.8	na
Excise duty	1.3	1.2	1.3	1.1	1.3	1.2	na
Kenya							
	1997/98	*1998/99*	*1999/00*	*2000/2001*	*2001/2002*	*2002/03*	*2003/04*
Tax Revenue	26.9	23.5	21.1	20.8	19.1	19.1	21.2
Income tax	8.9	7.5	7.0	6.3	6.1	6.8	6.9
VAT/sales tax	5.6	5.3	5.3	6.0	5.5	5.7	6.0
Import duty	4.0	3.8	3.7	3.4	2.3	1.9	2.1
Excise duty	4.6	3.9	3.7	3.4	3.5	3.6	4.1
Mauritius							
	1997/98	*1998/99*	*1999/00*	*2000/2001*	*2001/2002*	*2002/03*	*2003/04*
Tax Revenue	19.4	na	19.1	17.0	16.0	18.2	19.6
Income tax	na	na	2.7	2.6	2.6	2.7	na
VAT/sales tax	na	na	5.2	5.0	5.3	6.7	na
Import duty	na	na	3.9	2.9	2.5	2.3	na
Excise duty	na	na	4.6	4.2	3.5	4.1	na
Malawi							
	1996	*1997*	*1998*	*1999*	*2000*	*2001*	*2003*
Tax Revenue	15.6	13.4	15.0	14.3	17.1	na	15.9
Income tax	7.1	5.4	na	7.0	7.2	5.2	na
VAT/Surtax	4.2	4.5	na	5.7	6.0	4.2	na
Import duty	2.6	2.8	na	2.6	2.3	1.8	na
Excise duty	0.7	0.8	na	0.7	1.1	1.9	na
Namibia							
	1997/98	*1998/99*	*1999/00*	*2000/01*	*2001/02*	*2002/03*	*2003/04*
Tax Revenue	30.5	31.6	33.6	33.7	29.4	29.6	28.8
Income tax	9.8	11.0	10.8	12.3	11.8	14.1	11.0
VAT/sales tax	9.9	9.6	10.0	9.2	7.5	6.8	8.3
Import duty	10.2	10.3	11.5	13.6	9.5	8.2	8.9
Excise duty	na	na	na	na	na	na	na
Rwanda							
	1997	*1998*	*1999*	*2000*	*2001*	*2002*	*2004*
Tax Revenue	9.7	9.9	9.4	9.5	11.0	11.9	11.0
Income tax	2.6	2.9	2.5	2.7	3.3	3.7	3.1
VAT/sales tax	1.3	1.9	2	2	3.3	3.8	3.8
Import duty	2.4	1.9	1.3	1.4	1.5	1.7	1.3
Excise duty	1.9	2.2	2.8	2.8	1.9	1.8	1.8
Tanzania							
	1997/98	*1998/99*	*1999/00*	*2000/01*	*2001/02*	*2002/03*	*2003/04*
Tax Revenue	11.2	10.4	10.6	11.0	11.0	11.4	12.2
Income tax	3.1	2.8	3.3	2.7	2.9	3.1	3.5
VAT/sales tax	2.7	3.6	3.4	4.1	4.2	4.5	4.7
Import duty	1.6	1.5	1.3	1.2	1.0	1.1	1.1
Excise duty	1.9	1.3	1.3	1.9	2.0	1.9	1.8
Uganda							
	1997/98	*1998/99*	*1999/00*	*2000/01*	*2001/02*	*2002/03*	*2003/04*
Tax Revenue	11.8	13	11.2	11.1	12.2	12.1	12.6
Income tax	1.6	2.0	1.8	2.0	2.5	2.7	3.0
VAT	3.8	4.4	3.8	3.7	4.2	4.2	4.3
Import duty	3.8	3.9	3.4	3.4	3.3	3.1	3.0
Excise duty	1.7	1.7	1.5	1.2	1.3	1.3	1.4

Sources: Ministry of Revenue (Government of Ethiopia), Ministry of Finance (Republic of Kenya); Bank of Mauritius; Reserve Bank of Malawi; Bank of Namibia; Ministry of Finance and Economic Planning, Republic of Rwanda and National Bank of Rwanda; Ministry of Finance, United Republic of Tanzania; and Uganda Revenue Authority / Ministry of Finance (GOU).

Table A2.3. Income Tax Structure (in Selected Countries in Sub-Saharan Africa) in 2003/04

Kind of income tax and country	*Income tax bands in US$*		*Rate (%)*		*Revenue as % of*	
					Total Tax	GDP
Kenya						
Overall Income tax					35	6.9
Personal income tax						
	Over US$	To US$				
	0	1606	10			
	1606	3119	15			
	3119	4632	20			
	4632	6145	25			
	6145		30			
Corporate tax			30			
Withholding Taxes			Resident	Non-Resident		
i. Dividend			10	10		
ii. Interest			15	15		
iv. Management fees			20	20		
Malawi						
Overall income tax					21.6	
Personal income tax					16.0	
	Over US$	To US$				
	0	369	0			
	369	554	10			
	554	739	20			
	739	11577	30			
	11577		40			
Namibia						
Overall income tax					34.7	10.7
Personal Income Tax					23.0	7.1
Corporate tax			35		10.0	3.1
(Personal income tax band)	*Over US$*	*To US$*				
	0	2645	0			
	2645	5291	18			
	5291	10582	30			
	10582	26455	35			
	26455		36			
Rwanda						
Overall income tax					28	3.1
Personal Income Tax (Revenue)					12	1.3
Corporation Tax			40			
Personal income tax band	Over US$	To US$				
	0	334	0			
	334	558	15			
	558	1115	25			
	1115	1860	30			
	1860		40			
Withholding Taxes			Resident	Non-Resident		
i. Dividend			20%	20%		
ii. Interest			20%	20%		
iv. Management fees[2]			15%	15%		
Tanzania						
Overall income tax revenue					29	3.5
Person (individual) income tax		540			13	1.6
Corporation Tax			30		7.8	0.9
Withholding Taxes					3	0.4
			Resident	Non-Resident		
i. Dividend			10	10		
ii. Interest			10	10		
iii. Management fees			20	20		
iv. Commuted pension			10	15		
v. Rent			5	15		

Tanzania cont..						
Income band (individual)	Over US$	To US$				
	0	570	0			
	570	2080	18.5			
	2080	4160	20			
	4160	6240	25			
	6240		30			
Uganda /1						
Overall income tax revenue					23.7	3.0
Personal (individual) income tax					11.8	1.5
Corporation Tax			30		7.1	0.9
Personal Income bands	Over US$	To US$				
(Exchange rate: 1 US$ = 1735 UShs)	0	906	0			
	906	1625	10			
	1625	2835	20			
	2835		30			
Withholding Taxes			Resident	Non-Resident		
i. Dividend			15	15		
ii. Interest			15	15		
iv. Management fees			15	15		
Zambia						
Overall income tax					36	7.0
Personal income tax					26	5.0
Corporate tax				30	7	1.3

Sources: Ministry of Finance, Republic of Kenya; Malawi Revenue Authority; **the Namibian Tax Consortium,** Ministry of Finance and Economic Planning, Republic of Rwanda and Rwanda Revenue Authority; Ministry of Finance (United Republic of Tanzania) and Tanzania Revenue Authority (TRA); Uganda Revenue Authority and Ministry of Finance, Planning and Economic Development (Republic of Uganda); and Ministry of Finance and National Planning (Republic of Zambia)

Notes:

1/ *Uganda*: 15% branch profit tax on repatriated income
30% declining balance depreciation for machinery, 45% for computers, 20% for office furniture, 5% straight line depreciation for most building. No tax holiday.
Kenya: 12.5% declining balance depreciation for most machinery and equipment, 30% for computers, 25% for vehicles, 2.5% straight line depreciation for most buildings (4% for hotels)
Tanzania: 50% first year for machinery, 12.5% declining balance for second and subsequent years for most machinery and equipment (37.5% for heavy vehicles), 5% straight line depreciation for buildings, full expensing for mining industry with 15% uplift each year for uncovered costs.

2/ 15% temporary but adjustable to PAYE

Table A2.4 Excise Duty Structure and Rates in 2003/04

	Uganda		Kenya		Tanzania		Rwanda	Ethiopia
Revenue as % of GDP	1.4		4.1		1.8		1.8	1.2
Petroleum products (per 1000 liters)				*Excise Rate*				
Gasoline	USh	US$	KSh	US$	TSh	US$	Rate (%)	Rate (%)
Premium	660,000	365	19,445	253	146,000	140	37	30
Regular	660,000	365	19,055	247	135,000	129	37	30
Diesel	410,000	227	10,005	130	127,000	122	37	30
Kerosene	200,000	111	5,755	75	122,000	117	37	30
Tobacco products								
Cigarettes	Rate 130%						60	75
			Retail price per 1,000 in KSh	*Rate in KSh*	*Per 1000*	*Rate in TSh*		
			up to 1,500	450	> 70mm	8,495		
			1,501 - 2,500	650	< 70mm	3,781		
			2,501 - 3,500	900	*tobacco content*			
			Above 3,500	1,400	< 70%	16,206		
Safari		40%		30%				
Sportsman & sweet Menthol						21%		
Alcoholic beverages		*USh/liter*	Brand	KSh/liter		*TSh/liter*		
Beer		60	Stout/porter	49	All beer	232		50
		20 (local)	Malt	38			57	
			Non malt	24				
Wine 1/		70%		45%		*367=	70	50
Spirits		70%		65%		1,102=	70	100
Other beverages (soft drinks)								
Mineral water		10%		10%		37.5=	39	30
Sodas		13%		20%		.na.	39	40
Cider		70%		35%		.na.		
Mobile air time		10%		10%		10%		
Motor vehicles 2/								
Engine over 3000cc		10%		40%		10%		100
Engine 2000cc to 3000cc		10%		20%		10%		100
Engine less than 2000cc		10%		10%		0%		30,60

Source: Ministry of Finance, Planning and Economic Development (Uganda); Ministry of Finance and Kenya Revenue Authority; Tanzania Revenue Authority and Ministry of Finance (Kenya), Ministry of Finance and Economic Planning Republic of Rwanda; and Ministry of Revenue, Government of Ethiopia

Notes: 1/ TSh 743 if domestic grape content is less than 75 percent

2/ Ethiopia: Motor vehicles up to 1,300 cc 30%, 1301 to 1800cc 60% and over 1800 100%

Table A4.1: Actual and adjusted tax revenues in billion Uganda shillings, 1988/89-2003/2004

	Direct taxes		Import duties		Excise Duties		VAT/sales tax		Overall tax	
	Actual	*Adjusted*	*Actual*	*Adjusted*	*Actual*	*Adjusted*	*Actual*	Adjusted	*Actual*	*Adjusted*
1988/89	6.18	4.76	7.79	7.56	4.91	4.91	18.48	18.48	44.60	35.70
1989/90	12.26	5.74	25.08	19.96	7.25	6.58	30.29	28.16	89.57	50.25
1990/91	17.63	6.33	49.58	36.07	12.42	6.58	39.61	33.88	133.79	57.53
1991/92	27.29	7.09	76.04	49.43	15.03	6.58	48.66	38.23	180.46	62.26
1992/93	50.03	10.18	121.20	67.64	18.78	8.22	83.84	65.72	282.60	84.76
1993/94	59.47	13.04	145.39	79.11	41.78	16.43	108.88	82.51	373.35	104.56
1994/95	76.91	13.75	184.80	93.7	50.61	16.66	150.97	110.26	506.99	118.41
1995/96	83.41	14.91	226.62	109.47	67.09	20.84	187.95	129.53	611.70	126.11
1996/97	108.39	17.00	269.73	128.57	104.01	28.61	217.09	129.54	735.92	132.22
1997/98	131.62	20.65	266.32	131.32	115.78	31.85	260.93	155.70	812.29	140.82
1998/99	170.07	26.68	289.69	131.32	129.65	36.35	321.26	191.70	958.28	154.26
1999/00	180.52	28.32	302.29	138.11	131.37	36.23	343.13	204.75	1008.00	154.14
2000/01	223.06	35.8	340.31	144.61	125.57	33.81	374.2	213.84	1110.15	156.85
2001/02	288.32	44.93	339.39	144.22	139.26	33.67	431.8	246.75	1251.25	166.18
2002/03	359.02	55.01	373.75	155.84	148.07	35.08	495.47	283.14	1438.42	180.66
2003/04	464.02	69.52	403.76	168.36	177.39	38.57	573.52	329.67	1694.81	200.60

Source: Uganda Revenue Authority and Ministry of Finance, Planning and Economic Development
Note: Adjusted revenues are computed figures using the proportional adjustment technique described in the methodology section.

Table A4.2: Tax revenue obtained through discretionary measures as percentage of actual revenue from respective sources

Financial Year	*Direct taxes*	*Import duties*	*Excise Duties*	*VAT/sales tax*	*Overall tax*
1988/89	23.06	3.00	0.00	0.00	3.72
1989/90	39.15	17.94	9.24	7.03	13.51
1990/91	23.26	8.59	41.63	8.00	12.48
1991/92	27.74	10.65	17.37	8.14	12.32
1992/93	21.63	14.14	0.00	0.24	9.96
1993/94	-7.75	2.51	10.15	3.32	1.85
1994/95	18.46	6.81	16.32	3.62	7.99
1995/96	0.00	4.73	5.62	5.63	4.10
1996/97	12.26	1.33	11.46	13.42	7.87
1997/98	0.00	-3.45	0.00	0.00	-1.13
1998/99	0.00	8.07	-1.93	0.00	2.18
1999/00	0.00	-0.78	1.64	0.00	-0.02
2000/01	-2.32	6.99	2.35	4.23	3.37
2001/02	2.91	0.00	10.20	0.00	1.81
2002/03	1.67	1.87	2.03	0.00	1.11
2003/04	2.22	0.00	8.23	-0.59	1.25

Source: Tax Policy Department and Budget Speeches (various years), Ministry of Finance, Planning and Economic Development

UGANDA: REGRESSION RESULTS FOR INCOME ELASTICITIES AND BUOYANCIES

Table A4.3: Buoyancy and Elasticity Indexes of Main Taxes, 1988/89-2003/04

	Buoyancy	t-ratio	R-squared	DW	Elasticity	t-ratio	R-squared	DW
Direct taxes	1.495	33.295	0.988	0.403	0.938	12.874	0.922	0.307
Import duties	1.321	18.835	0.962	0.613	1.048	16.988	0.954	0.644
Excise duties	1.429	23.823	0.976	1.252	0.919	13.529	0.929	0.854
VAT/sales tax	1.310	39.030	0.991	0.610	1.009	32.790	0.987	0.931
Overall tax system	1.311	73.824	0.997	1.611	0.636	27.221	0.981	1.401

Table A4.4: Decomposition of the Tax-to-Income Elasticity of Main Taxes, 1988/89-2003/04

	Tax-to-base elasticity	t-ratio	R^2	DW	Base-to-income elasticity	t-ratio	R^2	DW
Direct taxes	0.623	16.039	0.948	0.399	1.519	38.471	0.991	1.518
Import duties	0.896	15.838	0.947	0.911	1.157	29.965	0.985	0.847
Excise duties	1.006	13.057	0.924	0.819	0.940	106.564	0.999	1.349
VAT/sales tax	1.076	28.692	0.983	0.745	0.940	106.564	0.999	1.

Table A4.5: Buoyancy and Elasticity Indexes of Main Taxes, 1988/89-1995/96

	Buoyancy	t-ratio	R-squared	DW	Elasticity	t-ratio	R-squared	DW
Direct taxes	1.337	48.688	0.997	2.226	0.706	9.363	0.936	1.230
Import duties	1.569	12.935	0.965	0.945	1.256	11.707	0.958	1.042
Excise duties	1.333	11.718	0.958	1.865	0.705	5.502	0.835	1.198
VAT/sales tax	1.192	18.609	0.983	0.906	1.037	13.592	0.969	1.061
Overall tax system	1.299	32.575	0.994	1.465	0.648	11.275	0.955	1.458

Table A4.6: Decomposition of the Tax-to-Income Elasticity of Main Taxes, 1988/89-1995/96

	Tax-to-base elasticity	t-ratio	R^2	DW	Base-to-income elasticity	t-ratio	R^2	DW
Direct taxes	0.479	11.859	0.959	1.590	1.479	19.634	0.985	2.516
Import duties	1.066	9.890	0.942	1.155	1.166	34.042	0.995	2.337
Excise duties	0.830	5.358	0.827	1.176	0.965	100.203	0.835	1.696
VAT/sales tax	1.073	13.037	0.966	0.956	0.965	100.203	0.835	1.696

Table A4.7: Buoyancy and Elasticity Indexes of Main Taxes, 1996/97-2003/04

	Buoyancy	t-ratio	R-squared	DW	Elasticity	t-ratio	R-squared	DW
Direct taxes	2.145	14.666	0.973	1.667	2.082	14.342	0.972	1.782
Import duties	0.637	10.515	0.949	1.703	0.382	7.767	0.910	0.854
Excise duties	0.664	6.850	0.887	1.834	0.304	2.827	0.571	1.213
VAT/sales tax	1.386	17.045	0.980	2.347	1.306	15.278	0.975	1,998
Overall tax system	1.202	15.113	0.974	1.632	0.545	8.293	0.920	2.315

Table A4.8: Decomposition of the Tax-to-Income Elasticity of Main Taxes, 1996/97-2003/04

	Tax-to-base elasticity	t-ratio	R^2	DW	Base-to-income elasticity	t-ratio	R^2	DW
Direct taxes	1.031	18.815	0.983	1.637	2.021	14.508	0.972	1.962
Import duties	0.244	1.597	0.298	0.441	0.638	2.476	0.505	1.252
Excise duties	0.325	2.407	0.491	1.160	0.857	16.049	0.977	1.725
VAT/sales tax	1.452	9.479	0.937	1.905	0.857	16.049	0.977	1.725

Table A4.4. Tax Reforms in Uganda 1989-2004

MAJOR REFORMS	Year
• Opening up of more offices of income tax department and intensifying staff training and enhance incentive to revenue collectors	1989/90
• Payment of taxes through commercial banks introduced, to minimize fraud and increase efficiency in revenue collection	1990/91
• URA set up with the view of improving tax administration	1991/92
• The National Customs Tariff System based on the Customs Cooperation Council Nomenclature was replaced with the Harmonized Commodity Description and Coding System.	
• Introduction of withholding tax	
• Introduction of Tax Identification Numbers (TIN) and computerization of income tax department	1994/95
• Introduction of VAT at a standard rate of 17% to replace CTL and Sales tax.	1996/97
• Introduction of a new Income Tax Act	1997/98
• Abolished discretionary powers under Section 4 of the Tariff Management Act 1970 for the Minister of Finance to remit import duty and excise duty under the Customs and Excise Law	2000/01
• Introduced GATT valuation method in place BDV and abolished pre-shipment inspection.	2000/01
• Export duty on coffee, abolished	1992/93
• Coffee stabilization tax, abolished	1996/97

OTHER REFORM MEASURES

Direct Taxes	
• Uganda Railways Corporation (URC), Uganda Airlines Corporation, Uganda Posts and Telecommunication exempted from corporation tax	1987/88
• Duty payable on all industrial raw materials suspended	•
• Waiving of stamp duty on mortgages through the Uganda and East African Development Banks	•
• Corporation tax reduced from 60% to 45% for all tax payers including industry and agriculture	1989/90
• The corporation tax reduced from 45% to 40% in a bid to promote investment through the retention of earnings, and to attract new foreign and local investment	1990/91
• The maximum individual income tax rate of 50% to apply on an annual income of more than Shs. 2.62 million, being revised from Shs1.2 million.	1991/92
• The corporate tax rate, reduced from 40% to 35% in order to encourage investment	1992/93
• Corporation tax rate reduced from 35% to 30%	1993/94
• Introduction of 16% rental tax of gross rental income (on rental income payable to individual landlords), but subject to the personal income tax threshold	•
• The rate of withholding taxes increased from 2% to 4% on supply of any goods, raw materials or services on the execution of any contract	1994/95
• Rental income payable by individual landlords was reduced from a withholding tax rate of 15% to 10%.	•
• Income tax threshold increased Ushs 840,000 to Ush 1,200,000 per annum. Abolished lunch and transport allowances, thus increasing the threshold for tax by 43 percent of previous beneficiaries	1995/96
• Abolished tax on interest income on fixed accounts and commercial banks deposits held for a period exceeding two years	•
• Abolition of income tax exemption on all locally recruited employees of NGO's and Diplomatic missions	1996/97
• Amended Section 31 of Income Tax Act to allow the expenses incurred by companies, in respect of initial public offerings on the stock exchange	2001/02
• Introduced 4% withholding tax on the income of resident professions	•
• Abolished exemption on interest earned on Treasury Bills	•
• Section 23 of the Income Tax Act will be amended to remove the double taxation of housing allowance paid to employees.	•
• Amending the Income Tax Act to allow lesser to claim capital depreciation benefits	2004/05
VAT/Sales Tax/CTL	
• Reduction of sales tax from 10% to 5% on buses and lorries, 110% to 90% on beer, 60 to 50% on Rex and Sportsman brand of cigarettes and from 45 to 35% on Kali cigarettes	1988/89
• Reduction of sales tax from 25% to 10% on locally manufactured textiles	•
• 30% sales tax imposed on imported soap and 10% on locally produced soap	•

• Sales tax on sugar, abolished	•
• 10% CTL extended to all restaurants and eating places in Kampala and major towns	•
• Sales tax introduced on all zero rated and exempt products	1989/90
• The sales tax rate bands reduced to a two rate structure: 30% and 60%	1990/91
• The CTL rates were harmonized from 10% and 20% to 10% for all tax pays	1991/92
• The CTL rate was raised from 10% to 15% with the catchments areas widened to include water utilities and civil aviation utilities	1992/93
• Road user collection points were abolished except for two only (Entebbe Airport)	•
• The CTL on drinks re-imposed in eating houses, bars and entertainment centers from ex-factory point	1993/94
• The sales tax rates structure was amended from a nine-rate structure to a four-rate structure ranging from 0% - 30% in preparation for VAT	•
• CTL on export services abolished	1994/95
• CTL levied on goods vehicles at the same time as the motor vehicle license is paid	•
• Removal of sales tax on important foodstuffs like milk, and maize flour. Reduced sales tax on construction wood and timber from 30% to 15%	1995/96
• Abolished VAT on computers and accessories	2002/03
• VAT exemption on hotel accommodation limited to hotels outside Kampala and Entebbe only.	2003/04
Import Taxes	
• Import duty of 255% imposed on imported sugar	1988/89
• Import duty of 60% imposed on imported soap	•
• Import commission raised from 0.5 to 1% and extended to petroleum products	•
• Introduction of customs duties on all imported raw materials at the rate of 10% in order to encourage the utilization of local raw materials	•
• All zero rated customs duties were raised to 10% for purposes of raising revenue	•
• The numerous customs duty rate bands - reduced to five ranging from 10% to 50% with rates above 50% abolished	1990/91
• Taxes on government imports - abolished	•
• Import duty on raw materials abolished (except for those locally available)	1992/93
• Import duty exemptions extended to educational materials, newspapers, journals and printed manuscripts	•
• The ban on importation of vehicles more than four years old was lifted	•
• Re-exports from bonded warehouses were authorized with a 2% re-export levy being charged	•
• Stamp duty - raised from 1% to 3%	•
• The bulk of the petroleum products to be taxed at ad varolem rather than specific rates	•
• Introduced 10% import duty on all raw material inputs	1993/94
• Introduced 10% import duty on imported agricultural inputs including agricultural machinery and tools (excluding fertilizers, pesticides and seed)	•
• The customs tariff structure reduced from six rates to four rates ranging from 0% - 30%	•
• A ban on the importation of tobacco products lifted	1994/95
• 60% import duty imposed on tobacco products	•
• Shifted from SITC to HS Code systems for customs classification	1995/96
• Harmonized raw material import duty rate to 5%	•
• Re-instated duty draw back scheme to allow refund for duty paid on all inputs into production of exports	•
• Reduced the duty rate and sales tax for special purpose commercial vehicles to 0%, 10% and 15% duty and sales tax respectively for passengers transport vehicles	•
• Abolished duty free imports for purposes of revenue accountability and control. With exception of Entebbe Airport, all other inland duty free shops were to wind up by September 30th, 1995	1995/96
• Valuation of goods by Pre-Inspection firms (for selected range of goods/imports)	•
• Implementation of 80% COMESA tariff reduction and introduction of a 10% surtax on all commodities coming from COMESA	1996/97
• Reversal of ad valorem rates of petroleum taxes	•
• Reduction of maximum import duty rates from 30% to 20%	1997/98
• Reduction of all excise surcharges down to 10%	•
• Reduction of fuel duty rates for petrol, diesel, and kerosene by 10% each to 215%, 160% and 105% respectively	•

• Reduction of the import duty bands from a four rate duty structure of 0,5,10,and 20% to a three tariff band structure of 0,7, and 15%	1998/99
• Movement from ad valorem to specific duty rates on fuel, reduction of fuel duty rates per liter by Shs 30/= for petrol, Shs 60/= for diesel and Shs.30/= for kerosene	•
• Reduction in import duty rates from 15% to 7% for specially adapted tourist vehicles	1999/00
• Reduction of import duty from 15% to 7% on specially designed tourism vehicles	•
• Reduced the freight cost in the tax base on freighted goods by 70%	•
• Jet kerosene reduced from 9.5 US cents per gallon to 5 cents per gallon	•
• The airport service charge of $20 to be included in the ticket cost	•
• Duty free allowance for miscellaneous goods increased from $100 to $300	•
• 100% exemption of the airfreight element in the tax base for freighted goods	2000/01
• Exemption of VAT and import duty on mosquito nets and materials for making such nets	•
• Remission of duty and zero VAT for inputs for the manufacture of agricultural inputs	•
• Rebate for inputs for producers of texts books on proof that the materials were used in the production of text books	•
• Waived the 4% withholding tax on imported raw materials	•
• Waived the 2% import commission on imported raw materials	•
• Remitted duty on life jackets and fishing gear	2001/02
• Introduced tax stamps on both domestic and imported cigarettes	•
• Specific duty on petrol adjusted from Shs 580 per liter to Shs 610 per litre	2002/03
• Abolished import commission on a number of goods, especially horticultural inputs	2003/04
• Abolished import duty and VAT on imported head gear and life jackets	•
• Remitted 7% import duty on safety belts	2004/05
• Increase import commission on imports to 6%	•
Excise Tax	•
• Excise tax reduced from 100% to 75% on beer, 75% to 55% on Rex and Sportsman cigarettes and 45% to 35% on Kali cigarettes, and 3% excise imposed on soap.	1988/98
• An excise duty of 5%, introduced on plastics, mattresses, paints and excise books	1989/90
• The excise duties were restricted to alcoholic beverages, soft drinks, cigarettes, and soap products except bar soap	1990/91
• The excise duty rate structure, adjusted from 30% and 60% to 30% and 50%	1991/92
• Excise increased from 30% to 100% for all imported luxury goods	1993/94
• The excise duty structure was altered to give a rate structure of 0, 10, 30 50, 70, and 100 percent rate chargeable on soft drinks, beer and cigarettes	•
• A reduction in excise duty rates from 80% to 70% on beer and from 50% to 40% on soft drinks in order to stimulate domestic manufacturing	1994/95
• Harmonized calculation of excise duty on all local goods by making the excise payable on the full ex-factory price for all excisable goods	1995/96
• Reduced excise duty for beer industry from 70% to 55%. Standardized excise duty rates for large cars and for TV sets from 30-50% to 20%	•
• Adjustments in excise duty rates as follows: beer from 55% to 70%, Sodas from 40% to 55%, Cigarettes from 100% to 122%, and Spirits form 30% to 45%	1996/97
• Reduction in excise duty rates for beer from 65% to 60% and 30% to 25% for soft drinks	1998/99
• A reduction from 25% to 20% in excise duty rate on soft drinks	1999/00
• All soft drinks made from concentrates to be subject to excise duty at 20%	•
• Soft drinks made from locally grown fruits exempted from excise duty	•
• All vehicles above 2250 cc to attract a harmonized excise duty at 10%	2000/01
• Removed excise duty on bicycles and spares and harmonized import duty at 15%	•
• Reduce excise duty on soft drinks from 20% to 15%	2000/01
• Increase excise duty on cigarettes from 122% to 130%	2001/02
• Increase excise duty on beers from 60% to 70%	•
• Introduced 10% excise duty on cellular airtime.	•
• Reduction of excise duty on beer from 70% to 60%	2002/03
• Raising the excise duty on motor vehicles by 5% from 10% to 15%, except on commercial vehicles	•

• Imposed excise duty of 20% on polyethylene bags for environmental reasons	•
• Increase excise duty on used articles from 10% to 15%	•
• Increase excise duty on sugar from 10% to 25%	•
• Reduced excise duty on carbonated waters (soft drinks) from 15% to 13%	2003/04
• Beer made from malt of locally produced raw materials to pay excise duty at 20%	•
• Cellular air time excise duty increase from 7% to 10%	•
• Increased excise duty on petrol by Shs 50 per litre and on diesel by Shs 30 per litre	•
• Increase excise duty on cigarettes from 130% to 150%	2004/05
• Increase excise duty on spirits from 45% to 60%	•
Others: Administrative related measures including fees, exports and special exemptions	•
• All exemptions from tax except those under bilateral agreements with foreign countries and accredited international institutions were abolished. Those granted to investors under the Investment Code except for construction materials were retained.	1993/94
• A coffee stabilization tax imposed at a rate of 20% for receipts exceeding shs 1,100/= per kg and a rate of 40% for receipts exceeding shs 2200/- per kg.	1994/95
• Threshold of the coffee stabilization tax set at Ush 1500 per Kg. Tax of 25% for earnings above it	1995/96
• Government to pay taxes for donor or NGO funded projects inputs	•
• Fees for a one year driving permit raised from Ush 5,500 to Sh 14,000 for a new driving permit and Ush 4,125 to Sh 8,000 for renewal; 2% charge for changing ownership of vehicles changed at a fixed rate of Ush 10,000 for motor cycles, Ush 30,000 for cars and Ush 50,000 for commercial vehicles	•
• Increase in the levy on lotteries and gambling from 10% to 15%	1996/97
• Reduction of stamp duty on mortgages from 1% to 0.5%	•
• Amnesty of arrears of license fees up to 31.12. 1997, for all heavy vehicles and trailers granted	1998/99
• An amnesty for all arrears of sales tax, CTL and the coffee stabilization tax given	1999/00
• Liberalized the manufacture and distribution of vehicle number plates	•
• Abolished the monopoly of UCB in handling URA revenues	•
• Provided 20% initial allowance for new industrial buildings	2000/01
• 5% annual write off allowed for industrial buildings extended for new commercial buildings. The definition of industrial buildings was extended to include hotels and lodges	•
• New PAYE regulations to establish a system of cumulative calculation of PAYE	•
• 4% withholding tax to apply only to non compliant taxpayers	•
• Concluded Double Taxation Agreements with South Africa, Norway and Denmark	2001/02
• All government contracts awarded only to VAT registered persons	2002/03
• Warehousing period extended to 24 months form the 12 months	•
• Bank of Uganda exempted from income tax under the Income Tax Act	•
• A 15% livestock development levy on all raw hides and skins of bovine animals leaving Uganda	•
• Abolished students visa fees for Kenyan and Tanzanian students in Uganda	•
• Increased automobile fees/licenses from Shs110 per cc to Shs 200 per cc except cars and passenger vehicles carrying more than 28 people	2003/04
• Revised traffic fees and charges upwards by 10%	2004/05

Notes

[1] Domestic direct taxes include pay as you earn (PAYE), corporate, withholding, and rental income tax, tax on bank interest, casino and lottery, among others. Indirect taxes comprise custom duty, excise duty; value added tax and various fees and licenses.

[2] Indirect domestic taxes, unlike import duties, do not necessarily reduce international trade flows by distorting domestic relative prices in favor of domestically produced goods over internationally produced goods.

[3] Uganda was found to be the country with the lowest tax effort for 1977 in a sample of 34 countries, while Rwanda was the lowest in 1994 (Tanzi, 1981; Stotsky and WoldeMariam, 1997). These were years of high political unrest in these countries.

[4] The distributional impact of the tax system, however, is not really complete without an analysis of the impact of the resultant expenditure. Whilst this has been beyond the scope of the current excise, it would be important to carry out such an analysis to ensure a full analysis of the impact of the reform program.

[5] The LTD was meant to be a 'one-stop' facility for large taxpayers, handling both VAT and Income tax assessment. The LTD provided for self-assessment and filing of tax returns directly to the bank with tax payments. This system was supposed to be extended to the medium and small taxpayers. However, in 2002 URA restructured some departments and abolished LTD. There was a section of the taxpayers who perceived that URA was using LTD to extort revenue from a few taxpayers. The TAT was particularly intended to speedily adjudicate tax disputes in an environment less intimidating than the courts of law. Although tax appeals mechanism has contributed to making the tax regime in Uganda a fair one since the taxpayers have a place independent of URA to appeal to, it is still characterized by bureaucratic delays in handling cases. Cases, on average, take between 7 and 10 months from the date of filing until the date of decision.

[6] The following types of audits are generally implemented in connection with VAT (and income tax) systems: desk verifications, registration checks, VAT refund audits, issue-oriented audits, comprehensive audits, and tax refund investigations.

[7] The definition of income includes all employee remuneration, in whatever form, including benefit-in-kind. Capital gains arising from the disposal of assets used in a business are included in taxable income.

[8] Standard exemptions include health, education and welfare services, immovable property, cultural and postal services, financial services, betting and gaming, non-profit organizations. Other exemptions include basic foodstuffs and other essential products. The products covered by 'other' exemptions can also be taxed at a reduced or zero rate

[9] Registered firms under VAT are entitled to claim the VAT money paid on goods/services, and permitted a full and immediate deduction (tax credit) for the VAT on inputs (including capital goods) from the VAT on outputs, including VAT on utilities (e.g. water, electricity, and telephones) from their output VAT.

[10] These countries are Ireland, the United Kingdom, Poland, Romania, Belize, Canada, Jamaica, Mexico, and Trinidad and Tobago.

[11] 18 countries out of 105 countries with VAT apply the same rate to all taxable goods and services. These countries are: Denmark, Albania, Croatia, Cyprus, Malta, Norway, Bolivia, Chile, Costa Rica, Guatemala, Japan, Singapore, Thailand, Western Samoa, Kazakhstan, Kyrgyzstan, Moldova, and Ukraine (Cnossen, 2003).

[12] A report by a commission of enquiry into the alleged corruption in the URA implicated several URA officers for corruption. In the Monitor (newspaper) of November 19,2004, Ms Allen Kagina, the New

Commissioner General of Uganda Revenue Authority admitted that corruption is a problem in the tax body: "corruption is going to be handled. It is not something that we are going to keep in the cupboard".

[13] They can allow or disallow expenses or charges, or exempt import duty on an imported item. While evaluating imports, corrupt officials take advantage of the ignorance of the taxpayer to have him/her to believe that his/her imports fall under the tariff codes for higher duty rates, when it is not the case. In the process the importer will be compelled to pay bribes for the 'tax adjustment'.

[14] Justice Julie Sebutinde led the commission that investigated into the alleged corruption in the URA. On Monday August 16, 2004 the High Court nullified the report of the commission. The ruling rendered it unusable as a public document. The government is appealing to restore the report so it can be implemented.

[15] The World Bank (1996), and Ablo and Reinikka (1998) provide qualitative and quantitative evidence on problems in service delivery in Uganda.

[16] Discretionary changes for the purpose of this study are defined as legal changes in tax rates or in the tax base, introduction of new taxes, and certain administrative efforts.

[17] The proxy base for direct taxes used in this study is domestic factor incomes, and for import duties we have used c.i.f value of imports, and private final consumption for excise duties and VAT/sales tax. See methodology section for details. The elasticity of a tax in this analysis refers to the responsiveness of the tax revenue to changes in GDP (or its proxy base), assuming that no changes are made in the tax legislation over time. It measures the revenue that would be generated automatically if the tax system were to remain unchanged over time.

[18] Tax buoyancy reflects both the built-in income elasticity of a tax and discretionary changes (changes to the tax rates and bases) that have been introduced.