Determinants of Tax Effort in Developing Countries: Empirical Evidence from Uganda

Agaba Samuel Bakehena 1 and William Kaberuka 2
1 Electoral Commission, Kampala, Uganda
2 Makerere Business School

Abstract

Tax effort is the exertion that a country puts into collecting revenue that is necessary to meets its expenditure demands for sustainable development. One of the reforms that the World Bank recommends to DCs aimed at augmenting their revenue is a tax reform. Towards this endeavour, Uganda has carried out a number of tax reforms; but its tax share to GDP has not only remained low and stagnant at about 12 per cent but has also not matched her expenditure demands. This has led to high fiscal deficits which have persisted over the years. This study was carried out using time series data obtained from the World Bank's Development Indicators 2010 CD-RM. A multivariate regression model was used in the analysis to identify the determinants of tax effort in Uganda. The findings of the study revealed that lagged tax effort measured by tax-GDP ratio, share of agriculture to GDP, GDP per capita, openness to trade and external debt stock significantly affect tax effort. Increase in the other mentioned variables augurs well with tax effort in Uganda. However, services and manufacturing sectors' share to GDP were found not to significantly affect tax effort. The study recommends that if Uganda is to improve her tax effort to the levels of other Sub-Saharan African countries, she needs to invest in areas that would significantly increase GDP per capita. Investment incentives should be provided to the agricultural sector with the view to commoditizing the sector and hence bringing it under the tax net. Uganda should also review the policies regarding the currently offered tax breaks and exemptions with a view to retaining only those that have a productive effect on the development of manufacturing and service sectors.

Key words: **Tax Effort, Sustainable Development, Fiscal Deficit, Tax Reform, Commoditization, Investment Incentives and Productive Effect**

Introduction

Uganda, like many other developing countries (DCs) continues to face difficulties in generating sufficient revenue for public expenditure. Government spending has persistently continued to be higher than revenue receipts, which has led to budget deficits year after year. For instance, during the FYs 2004/05-2009/10 period, while government expenditure averaged 20 per cent of GDP, tax revenue averaged 12.6 per cent, resulting in average budget deficit of 7.4 per cent of GDP (MoFEP, 2009). The problem of high fiscal deficits poses important challenges to policy makers. To reduce the budget deficits while avoiding inflationary financing, the policy makers have to either reduce expenditure on strategic investments, in areas such as public infrastructure and human capital which alternative may negatively impact on economic growth, or to raise domestic revenue of which tax is most suitable.

Prior to 1987, Uganda suffered prolonged periods of political turmoil and civil strife that led to the collapse of the economy. By the mid-1980s, tax revenues had deteriorated to a

paltry 6 per cent down from 15 per cent of GDP in 1970. Since 1987, Uganda has undertaken major economic reforms such as the devaluation of the shilling, privatization of government enterprises and service industries and liberalization of the exchange rate, among others, that were aimed at achieving key economic objectives of promoting sustainable economic growth, achieving macroeconomic stability, reducing fiscal vulnerability and alleviating poverty (Tumusiime-Mutebile, 2010). In particular, the country's tax system has undergone a series of reforms aimed at attracting and promoting investment, increasing the revenue yield and simplifying tax administration. Some of the tax policy reforms included the partial removal of tax exemptions from the Minister of Finance, reduction of rates on personal income and on business and the introduction of Value Added Tax (VAT) at 17 per cent in 1996 as a replacement of Sales Tax and Commercial Transaction Levy (CTL). VAT was considered superior to other forms of indirect taxation in terms of both economic and administrative efficiency. The tax administration reforms included the formation in 1991 of the Uganda Revenue Authority (URA), a government body charged with the task of administering and collecting tax revenue for the central government. Other reforms in tax administration were improved transparency and tax education, automation of tax administration and fighting smuggling where the Anti-Smuggling Unit (ASU) was set up in 1992 to assist URA in fighting the threat (Kawesa, 2004).

Consequent to these reforms, Tax-GDP ratio increased from 5 per cent (FY1988/89) to 12 per cent (MFPED, 2005). However, this improvement was short-lived as revenue performance has stagnated at about of 12 per cent of GDP since 1995. Uganda's tax effort remains low by the standards of many countries in Sub-Saharan Africa whose average is about 23 per cent.

This article aims at investigating factors deemed to determine tax effort in Uganda. More specifically, the article examines the effects of the level of development, the size of international trade, the relative size of the country's debt stock and the structure of the economy on Uganda's tax effort. Tax effort has been defined by Leuthold (1991) as the exertion a country puts into collecting its revenue, given the tax handles available to the country, where a tax handle is an easily accessible tax base that yields productive revenue. The article is organized as follows: Section I is the introductory background, Section II discusses the Theoretical Issues, Section III discusses the Methodology and presentation of the results while Section IV concludes with the Conclusion and Recommendations.

Determinants of Tax Effort: Theoretical Issues

The theoretical basis of this study draws mainly from the theories advanced by Stotsky and Wolde-Mariam (1997) and Begum (2007).

Tax effort has been defined by Stotsky et al. (1997) as the ratio between actual revenues and the tax capacity where the tax capacity represents the maximum revenue that could be collected in a country given its economic, social, institutional, and demographic characteristics. Leuthold (1991) defines tax effort as the exertion a country puts into collecting its revenues, given the tax handles available to the country, where the tax handle is an easily accessible tax base that yields an easily accessible revenue.

The generic models most studies concerning tax effort have used have been based on the stochastic tax frontier representation originally developed by Ainer, Lovell and Schmidt

(1977) a model that is analogous to the production frontier except in two cases. In the first case: while in the production frontier output (production) depends on the known factors of production (that is capital, labour and land) as inputs, in the tax frontier, tax effort depends on un known inputs which must be assumed such as the literacy rate, the prevailing policy etc. In the second case: for the production frontier, the difference between the actual production and the production frontier, given the level and combination of inputs of production, represents the level of inefficiency; but in the tax frontier, the difference between the actual tax revenue and the tax capacity includes technological inefficiencies, policy and political issues that determine the country's tax effort.

The stochastic tax frontier which serves as the basis for the variations in the models used in the study of tax effort is modelled as:

$$Y = \alpha_1 + \beta^{/}X + v - u : |U|$$

Where Y is the observed outcome (goal attainment) $B^{/}X + v$ is the optimal frontier goal (e.g., maximal tax revenue) pursued by the country, $B^{/}X$ is the deterministic part of the frontier and $v \sim N(0, \delta^2)$ is the stochastic part. The two parts together constitute the production frontier, the amount by which the country fails to realize the optimum is $u = |U|$ and X_i represents the variables taken to affect tax revenue. This model is an extension of the regression model, based on the theoretical premise that a production function represents the maximum output (level of tax revenue) that a country can achieve considering a set of inputs (GDP per capita, the structure of the economy, the political will and so on).

An examination of the literature on tax effort shows that two main methods based on the tax frontier model have been used (see, for example, Tanzi, 1981, 1987; Eltony, 2002; Piancastelli, 2001; Gupta, 2007, 1998, 2002; Teera and Hudson, 2004). One of the methods is the tax revenue/GDP ratio which is determined by taking the ratio of taxes in a country to a measure of tax base, usually GDP. Here it is assumed that the tax base is a proper measure of taxable capacity. However, a simple tax base such as GDP is not sufficient as a measure of taxable capacity as not all taxes are linked to income, and the distribution of income and how income is earned from different sources such as agriculture and the informal sector which also affect the country's tax system (Stotsky and Wolde-Mariam, 1997).

The second method is the regression approach which is used to measure taxable capacity by regressing for a sample of countries the tax revenue/GDP ratio on explanatory variables that serve as proxies for possible tax bases and other factors that might affect a country's ability to raise tax revenues. The predicted tax/GDP ratio from such a regression is considered a measure of taxable capacity and the regression coefficients are interpreted as average effective rates on those bases. This approach is considered relatively superior to the simple tax ratio method in that it considers the differences among countries in their capacity to raise taxes (Stotsky and Wolde-Mariam, 1997; Begum, 2007).

However, both of the above methods have their limitations; the tax/GDP ratio does not provide insight into other factors such as the structure of the economy, the level of economic development and the administrative and political capability that affect a country's tax performance. For the regression approach, while using the predicted tax capacity that is based

on average values for the sample, it may have no relevance for a given country, making it a poor normative indicator of taxable capacity (Addison and Levin, 2006). Moreover, both methods are static in nature. They only describe tax revenue at a given point in time (Begum, 2007). They cannot explain plausible short-run and long-run dynamic changes in the tax system. This limitation could be important since economic reforms may take a long time to influence the potential impacts in the economic system (Mwakalobo, 2009).

This study makes a contribution to the existing scholarly literature by investigating the determinants of tax effort by employing a dynamic econometric analysis – error correction regression – for a single country, taking Uganda as a case study. Some of the factors that have been deemed to determine tax effort are the general level of economic development, the sectoral composition of the economy, administrative and political constraints on the fiscal system. The next sections discuss those factors that were considered for this study.

The level of Economic Development

Chelliah et al (1971), as cited by Bird, opines that a higher per capita income reflecting a higher level of development goes with a higher capacity to pay and collect taxes as well as a higher relative demand for income-elastic goods and services. There is also a consideration that, as income grows, countries generally become more urbanized. Tanzi (1987) says urbanization brings about a greater demand for public services increasing the need of a government to raise more taxes while at the same time facilitating tax collections.

Gupta (2007) examined the determinants of tax revenue effort in developing countries. He regressed Tax-GDP ratio on a number of predictors and his findings revealed that GDP per capita and the level of openness in a country significantly increase the tax-GDP ratio. On the other hand, Agriculture sector share to GDP significantly reduces a country's tax effort (tax-GDP ratio).

Sectoral Composition of GDP in Uganda

Uganda's economy is largely agrarian in terms of labour with employing 82 percent, manufacturing 5 per cent and services 13 percent. In terms contribution to GDP in 2010 the agricultural sector accounted for 44.4 per cent, the services sector 48.4 per cent with manufacturing contributing 7.2 per cent (BTVET, 2011).

Tanzi (1992) asserts that a country's economic structure is one of the factors that could be expected to influence the level of taxation. The sectoral composition of value added in the economy is considered likely to be an important influence on tax share because some sectors of the economy are more suitable to taxation and generate taxable revenues while others are not. An economy with a large GDP share of agriculture is expected to generate low tax revenues. For developing countries, the share of agriculture may be an important influence on the tax share, from both the demand and supply point of view. On the supply side, it is very difficult to tax the agricultural sector "explicitly", though it is often very heavily taxed in many implicit ways such as import quotas, tariffs, controlled prices for output, or overvalued exchange rates. On the other hand, small farmers are notoriously difficult to tax and a large share of agriculture is normally subsistence, which does not generate large taxable surpluses, as many countries are unwilling to tax the main foods that are used for subsistence.

Teera, (2002) says that since many public sector activities are city-oriented, it is assumed that the more agricultural a country is, the less it will have to spend on government services hence inferring that as the share of agriculture in GDP rises, the need for total public spending and so for tax revenue mobilization may fall. In the same study, it is postulated that the share of manufacturing could have a positive relationship with tax to GDP ratio, as manufacturing enterprises are easier to tax than agricultural enterprises owing to business owners being better book keepers. In a study by Eltony (2002) on the determinants of tax effort in Arab countries, the share of manufacturing was found to be insignificant in determining the tax revenue.

Openness to trade

The share of international trade in GDP is a measure of openness to trade that reflects the degree of exposure of an economy to external economic influences (Eltony, 2002). Openness to trade is usually taken as the sum of exports and imports as a percentage of GDP. Ghura (1998) suggests that in the presence of inward capital flows, the overall level of activity in the economy is artificially or temporarily increased through foreign borrowing and so is the aggregate tax base and, consequently, tax revenues tend to become artificially buoyant. Since the overseas sector is the most monetized sector of the economy, it makes international trade more available to taxation than domestic activities, and the tax collections are done at specific points. This is in agreement with Eltony (2002) who mentions that certain features of international trade make it more suitable to taxation than domestic activities. In developing countries, the overseas sector is the most monetized sector and has gained increasing importance in recent years. Thus import and export share are important in determining the tax share.

Outstanding debt

The growth of public spending has generated large fiscal deficits in many developing countries leading to increased share of public debt relative to GDP (Tanzi and Blejer, 1988). With a large debt, the government needs to raise the revenues necessary to service it. Therefore, public debt plays a role in determining the extent to which countries may take advantage of their taxable capacity. However, a high debt burden can also create macroeconomic imbalances that may tend to reduce the tax level (Tanzi, 1987). Teera (2002) asserts that the need to service a debt increases revenue collections since it is the only way through which this can be done. The debt in the previous period is more likely to affect the revenue in the current period.

Methodology

This study makes use of time series data on Uganda covering the period 1987 to 2009. The choice of this period was premised on the fact that prior to 1987 the economy was distorted due to instability in the country, and the recorded data then may not be reliable due to poor or non-recording. Data was obtained from the World Bank's World Development Indicators CD – ROM 2010.The original data obtained were available only with an annual frequency that provided a few data points. In order to increase the data frequency, and hence reduce errors associated with using a few data points such as non-normality, a quadratic match average process was applied to transform annual data into quarterly data. The data were then tested for stationarity using the augmented Dickey-Fuller (ADF) unit root test and the results indicated

the variables to be I(1). An ADF test was carried out on the residuals of the regression and they were found to be stationary, meaning that there exists a relationship between the variables. Then the Error Correction Model (ECM) was estimated to correct for the possible disequilibrium in the model.

Estimation Model

Tax effort was then modelled as a function of the level of economic development, the sectoral composition of the economy, the size of the international trade and the external debt stocks. The representation of the tax effort function that was formulated for this study is as follows:

TAX_GDP=f(T, CAPITA, AGRIC, MANUFACT, SERVICE, ODEBT, OTRADE)………………..…1

Where:-

TAX_GDP = tax revenue as per cent of GDP

CAPITA = GDP per capita in US dollars with 2000 as the base year

AGRIC = value added agriculture as per cent of GDP

MANUFACT= value added manufacturing as per cent of GDP

SERVIC= value added services as per cent of GDP

OTRADE = sum of imports and exports as per cent of GDP

ODEBT = external debt stocks (% of GNI)

T= time trend

θ_t is the error term with white noise properties.

Presentation and discussion of the results

Presentation of Econometric Results

Log-log model of the form shown below was estimated and the results are presented in Table 1. A log-log model was employed because of the need to eliminate the problem of heteroscedasticity.

$$LTAX\_GDP_t = \beta_0 + \beta_t T + \beta_2 LCAPITA_t + \beta_3 LAGRIC_t + \beta_4 MANUFACT_t + \beta_5 LSERVICE_t + \beta_6 LODEBT_t + \beta_7 LOTRADE_t + \theta_t$$

Table 1: Results of Ordinary Least Squares regression (log - log regression model)
Dependent Variable: LTAX_GDP

Dependent LTAX-GDP			
Variable	**Coefficient**	**Std. Error**	**t-Statistic**
C	32.17		
T	0.19		
LCAPITA	-15.85	11.5885	-1.36774
LAGRIC	6.46	3.18991	2.025136
LMANUFACT	-0.72	0.58299	-1.23501
LSEVICE	7.8	3.959	1.970194
LODEBT	-1.15	0.77318	-1.48736
LOTRADE	0.64	0.59405	1.07735

Source: primary data

Results in Table 1 reveal that in the long run, services and agricultural shares to GDP have positive and significant effect on tax effort. The other independent variables, i.e. Outstanding debt, Openness to trade, Manufacturing sector's contribution to GDP and GDP Per capita do not significantly affect the level of Uganda's tax in any given period. However, some variables such as outstanding debt, GDP per capita, the value added agriculture and value added manufacturing as per cent of GDP turned out with coefficient signs different from the anticipated ones.

Table 2: Short run relationship of the variables

Variable	Coefficient	Prob.
C	0.007689	0.3117
T	-0.000282	0.0367
D(TAX_GDP(-1))	0.063718	0.0000
D(LCAPITA)	2.804974	0.0000
D(LCAPITA(-1))	-1.425149	0.0222
D(LAGRIC)	0.313491	0.2261
D(LAGRIC(-1))	-0.297587	0.2693
D(LMANUFACT)	-0.292321	0.0823
D(LMANUFUCT(-1))	0.148717	0.3756
D(LSERVICE)	0.185792	0.7006
D(LSERVICE(-1))	-0.306942	0.5246
D(LODEBT)	0.060826	0.1681
D(LODEBT(-1))	-0.041424	0.4463
D(LOTRADE)	0.255747	0.0510
D(OTRADE(-1))	-0.007753	0.0679
ECT1(-1)	-0.197922	0.0003

Adjusted R-squared=0.555 Durbin-Watson stat=2.062

Dependent Variable: D(LTAX_GDP)

Source: primary data

The negative coefficient of the Error Correction Term (ECT) shows that the model converges quickly to equilibrium, suggesting that Uganda tends to compensate for low tax performance in the previous period. The results reveal that GDP per capita has a significant positive effect on tax effort in Uganda. Chelliah (1971) and Gupta (2007) while studying the determinants of tax effort in developing countries also found out that increased GDP per capita significantly increased tax effort.

Increased contribution of agriculture to the economy decreases tax effort. A percentage increase in the agricultural share to GDP of any period, decreases that tax effort of the following period by 0.29 per cent points, other factors held constant. This finding is consistent with past findings like Tanzi (1992) and Teera (2002) who found out that increased size of the agriculture sector reduces the tax-GDP ratio owing to the difficulty in taxing the sector that is mainly subsistence, hence generating limited tax supplies.

The level of openness to trade also helps boost tax effort and the effect is significant at 10 per cent level of significance. A one per cent increase in openness to trade increases tax effort by 0.25 per cent points. The positive relationship between openness to trade and tax effort in Uganda is the same as in other developing countries. Eltony (2002) also found a similar and significant relationship between the two and attributed this to the convenience and ease of taxing international trade as tax collections are done at specific points.

Increased debt stock increases tax effort. A one per cent increase in the debt stock increases tax-GDP ratio by 0.06 per cent. However, the effect of outstanding debt on tax effort is not significant. The outstanding debt in a given period negatively affects the tax effort in the following period. This finding contradicts previous findings such as Tanzi (1987) and Teera (2002). Teera (2002), while studying determinants of tax share in Uganda, found out that lagged debt significantly increases tax-GDP ratio. According to Tanzi (1987), when debt interest outstrips borrowing, the level of taxation ought to go up unless the rate of growth of the economy is sufficient to sustain the increase.

The structure of the Ugandan economy reflected by sectors' contribution to GDP has no significant positive effect on tax effort. As noted earlier, increased agricultural contribution to the economy decreases tax-GDP ratio significantly. The other components of the economy, i.e. Services and Manufacturing do not significantly affect the tax effort in Uganda. Although their growth increases tax effort, the effect is not statistically significant. Results of the effect of the manufacturing sector on tax effort are similar to Eltony (2002) who, in study on the determinants of tax effort in Arab countries, also found out that though the manufacturing sector positively impacts on tax effort, the effect is not significant. The insignificant effect of the manufacturing and services sectors on tax effort in Uganda could be a result of the dominance of these sectors by foreign investors who receive numerous tax breaks and tax incentives such as VAT refund on building materials for industrial and commercial building, duty and tax-free import of plant and machinery, among others.

Conclusions

Empirical evidence from the estimation of the model suggests that tax effort (Tax-GDP ratio) of any given period have a bearing on the subsequent period's effort. If the tax-GDP ratio increases by one per cent in a given period, the ratio in next period increases by 0.53 per cent. GDP per capita has a significant positive effect on tax effort in Uganda. If other factors are held constant, a percentage increase in GDP per capita in a given period increases the tax effort (Tax-GDP) by 2.63 per cent. Previous studies by Chelliah (1971) and Gupta (2007) on the determinants of tax effort in developing countries also found out that increased GDP per capita significantly increases tax effort.

The level of openness to trade also boosts tax effort. A percentage increase in openness to trade increases tax effort by 0.21 per cent. The positive relationship between openness to trade and tax effort cuts across all developing countries. Eltony (2002) found a similar a relationship between the two and attributed this to the convenience of taxing international trade as compared to taxation of domestic activities.

The level of debt stock significantly affects tax effort. A percentage increase in the debt stock increases tax-GDP ratio by 0.07 per cent and this is corroborated by previous findings. Teera (2002) found out that lagged debt stock significantly increases tax-GDP ratio. According to Tanzi (1987), when debt interest outstrips borrowing, the level of taxation ought to go up unless the rate of growth of the economy is sufficient to sustain the increase. The structure of the economy reflected by the sectoral contributions of Agriculture, Services and Manufacturing to GDP has varying effects on tax effort.

Increased share of agriculture to the economy decreases tax effort. A percentage increase in the agricultural sector's contribution to GDP in a given period decreases that tax effort of the following period by 0.23 per cent. Tanzi (1992) and Teera (2002) also found out that increased size of the agriculture sector reduces the tax-GDP ratio owing the difficulty in taxing the sector that is mainly subsistence, hence generating limited tax supplies.

Services and manufacturing sectoral contributions to GDP do not significantly affect the tax effort in Uganda. Although the growth of the above sectors increases tax effort, the effect is not statistically significant. The insignificant effect of the manufacturing sector on tax effort was found to be a confirmation of past findings. Eltony (2002) investigated the determinants of tax effort in Arab countries and found out that though the manufacturing sector positively impacts on tax effort, the effect is not significant. The insignificant effect of manufacturing sector on tax effort is attributed to the dominance of the manufacturing sector by foreign investors who in the initial period of the establishment of their firms are entitled to claim VAT incurred in the procurement of inputs and offsets since production of final output does not commence immediately.

Recommendations

Uganda's tax effort can be propelled to the Sub-Saharan Africa average level of around 16 per cent by addressing certain concerns. There is need to emphasize taxation of domestic activities in addition to revenue from international trade.

Investment in areas that promote the manufacturing and services sectors should be undertaken since they are important in tax effort.

There is need for incentives and investments to commercialize the agricultural sector by enhancing agricultural production and productivity, agro processing and marketing so as to be able to bring agricultural activities under the tax net.

References

Ayoki, M., Obwona, M. and Ogwapus, M. (2005). Tax reforms and domestic revenue mobilization in Uganda. Washington, D.C, U.S.A: Global Development Network.

Bahl, R.W. (1971). A Regression Approach to Tax Effort and Tax Ratio Analysis. *International Monetary Fund Staff Paper*s. Vol. 18, pp.570 – 612.

Begum, L. (2007). A Panel Study on Tax Effort and Tax Buoyancy with Special Reference to Bangladesh. *Working Paper Series: WP 0715*, Policy Analysis Unit (PAU): Research Department, Bangladesh Bank, Dhaka, Bangladesh.

Cawley, G., Zake, J. (2010). Tax Reform. In Florence Kuteesa, Emmanuel Tumusiime-Mutebile, Alan Whitworth, Tim Williamson (eds). *Uganda's Economic Reforms: Insider Accounts.* Oxford University Press. New York.

Chelliah, R. J. (1971). Trends in Taxation in Developing countries. IMF Staff Papers, n. 18, p. 254 – 331

Eltony, Nangy, M. (2002). *Determinants of Tax Effort in Arab Countries*. API Publications, Kuwait.

Ghura, D. (1998). Tax Revenue in Sub-Saharan Africa: Effects of Economic Policies and Corruption. IMF Working Paper 98/135. Washington: International Monetary Fund.

Gupta, S, A. (2007). Determinants of Tax Revenue Effort in Developing countries. IMF Working Paper WP/07/184. Washington: International Monetary Fund.

Ministry of Finance, Planning and Economic Development. (2004). Background to the Budget, Financial Year 2005/2006. Kampala.

Ministry of Finance, Planning and Economic Development. (2008). Background to the Budget, Financial Year 2008/2009. Kampala.

Ministry of Finance, Planning and Economic Development. (2009). Background to the Budget, Financial Year 2009/2010. Kampala.

Mwakalobo, A.B.S. (2009). Economic Reforms in East African Countries: The Impact on Government Revenue and Public Investment. Open Access Dissertations. Paper 66.

Piancastelli, M. (1991). Measuring the Tax Effort of Developed and Developing Countries. Cross Country Panel Data Analysis /1985/95, Discussion Paper, IPEA. Rio de Janeiro.

Stotsky, Janet, G. and Wolde-Mariam. (1997). Tax Effort in Sub-Saharan Africa. IMF WP/97/107 73.

Tanzi, V. (1987). *Quantitative Characteristics of the Tax Systems of Developing Countries*. Oxford University Press.

Tanzi, V. (1992). Structural Factors and Tax Revenue in Developing Countries: A decade of Evidence, Cambridge University Press: 267 – 281.

Tanzi, V.,Blejer, M. (1988): Public Debt and Fiscal Policy in Developing Countries, in Kenneth J. Arrow and Michael J. Boskin (eds) *The economics of public debt: Proceedings of a conference held by the International Economic Association at Stanford, California*. New York: St. Martin's Press

Tanzi, V., Zee, H. H. (1997). Fiscal policy and long-run growth. IMF Staff Papers, n. 44, pp. 179 – 209.

Teera, M. J. (2002). Determinants of tax revenue share in Uganda. Department of Economics, University of Bath, UK, Unpublished.

Teera, J. M. and Hudson, J. (2004). Tax Performance: A Comparative Study. *Journal of International Development*, 16: 785-802.

The Republic of Uganda. (2011). (BTVET Strategic Plan, Ministry of Education and Sports. Kampala.

Tumusiime-Mutebile, E. (2010). Institutional and Political Dimensions of Economic Reform. In Florence Kuteesa, Emmanuel Tumusiime-Mutebile, Alan Whitworth, Tim Williamson (eds). *Uganda's Economic Reforms: Insider Accounts*. Oxford University Press, New York.