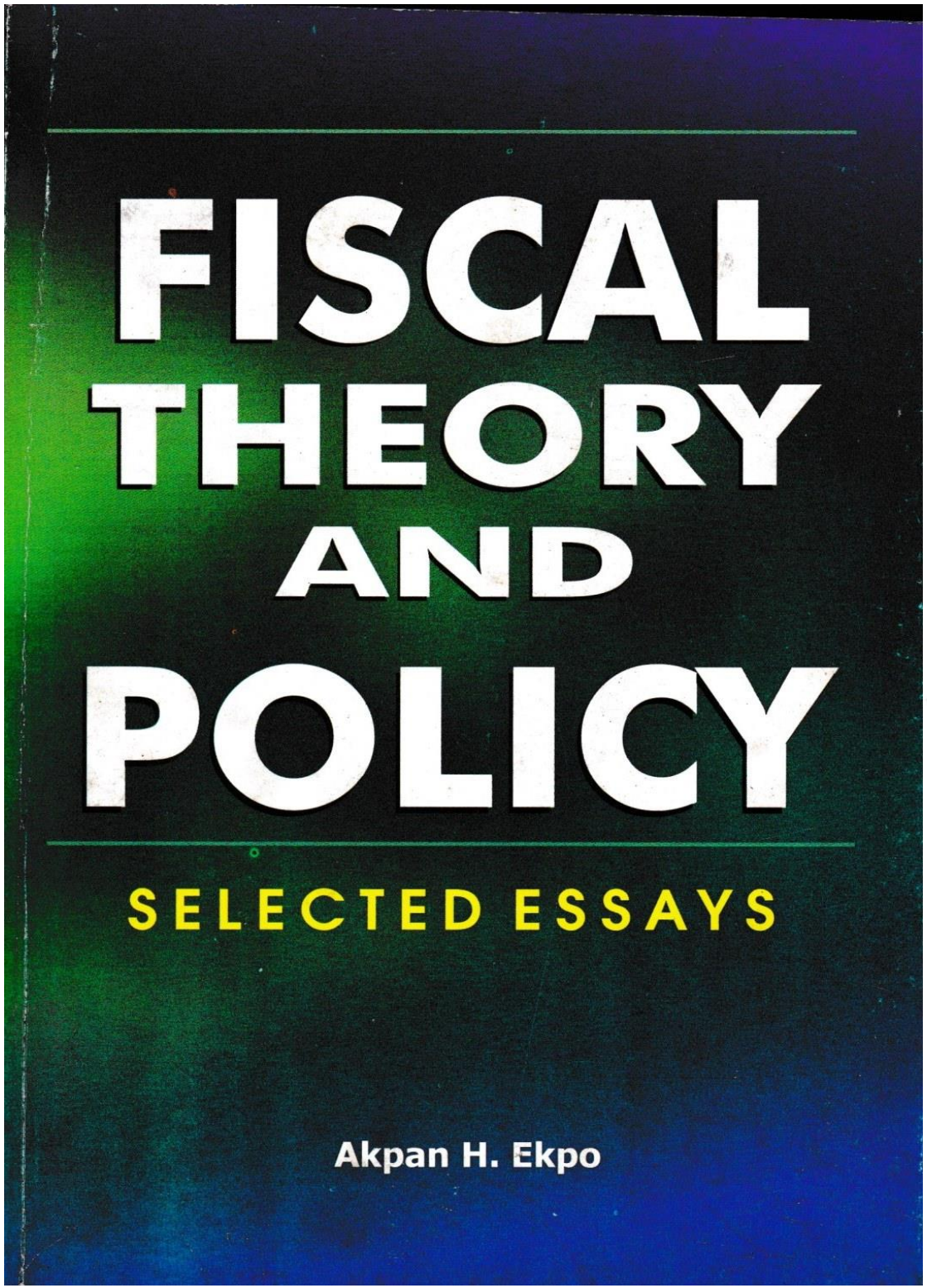

CHAPTER FIVE

DESIGN AND IMPLEMENTATION OF THE TAX SYSTEM FOR GROWTH AND POVERTY REDUCTION IN AFRICA

1. INTRODUCTION

Economic growth and development in Africa particularly in sub-Saharan African (SSA) countries have been hampered by socio-economic and political factors. The lack of sufficient tax revenues to finance development has affected the pace of growth and development. Most African countries tend to rely on external donor support to fund various development projects and programmes as well as routine government expenditures. There are African countries that plan their annual budgets on the basis of expected donor support. It is even more challenging when poverty reduction becomes an argument in the development equation.

Taxation is the main mechanism for transferring resources from the private to the public sector. An examination of taxation brings into focus issues of equity, efficiency and the necessary trade-offs in the context of optimal tax theory.

While it is necessary for government to obtain private sector resources through taxation in order to be able to provide public goods and services, the trade-off between equity and efficiency is a crucial element of an economy's revenue policy. Therefore, policy makers desire to enhance economic growth in order to reduce poverty should result in an increased taxable capacity of a country.

African countries are faced with the challenge of designing and implementing tax systems that will enhance their revenue profile. There are several disturbing issues. Apart from the trade-off between efficiency and equity, there is also the problem of reducing dependence on indirect taxes (for example, trade taxes). Based on the advice of the International Monetary Fund, other issues include taxation of income and vulnerable groups (for example women) if poverty reduction is the focus. An analysis of these issues is the objective of this paper. The paper is organized as follows: Section 2 discusses stylized facts while conceptual issues are presented in section 3. Section 4 examines tax structure and reforms in the context of design issues, while Section 5 examines tax administration and Section 6 concludes. It is expected that our discussion will shed more light on the subject matter as well as open up new areas of research.

2. *STYLIZED FACTS: POVERTY AND REVENUE PATTERNS*

Appendix Table A1 presents the gross domestic product (GDP) growth rates for selected African countries. During the period 1960-70, most of the countries had impressive growth rates except for Congo Republic, Cameron, Ghana and Rwanda. For the period 1970–1979, the GDP growth rates for Ghana, Uganda, Ethiopia and Zimbabwe stood at -0.1%, -0.4%, 1.9% and 1.6%, respectively. Uganda and Botswana had impressive GDP growth rates during the period 1999–2001. The data presented show clearly that African countries need to enhance growth if poverty reduction is to take place. Most of the countries are far behind the millennium growth rate of 7% if poverty is to be drastically reduced by the year 2015. The New Partnership for Africa's Development (NEPAD) stresses

the need to stimulate growth if underdevelopment and poverty are to be reversed.

A poverty line set at $1 a day ($1.08 in 1993 purchasing power parity terms) has been accepted as the working definition of extreme poverty in low-income countries. In SSA, 241 million people (47.4%) live on less than $1 a day. This will increase to 404 million people by 2015, representing 46% of the population. In SSA those living on less than $2 a day jumped from 386 million people in 1990 to 618 million people in 2015 (see Tables A2 and A3).

> "In SSA, where GDP per capita fell by 5 percent, the poverty rate rose from 47 per cent in 1990 to 49 per cent in 1999 and the number of people living in extreme poverty increased by 74 million (World Bank, 2003, p.4).

It is, therefore a major challenge to design and implement a tax system that will not increase poverty but rather raise revenue for development. More revenue is needed to provide and maintain basic public services. The reality, however, is that those with political power and economic ability are few and do not want to pay tax; those without political power are many and resist paying taxes (Fjeldstad and Rakner, 2003).

The few are those with higher incomes while many are those with lower incomes. On equity terms, those with higher incomes should pay higher taxes. It follows, therefore, that poverty reduction strategy papers should involve much greater participation of the poor in tax policy formulation. This is partly another mechanism for empowering those who were previously excluded from benefiting from the economy. This way the tax system will become much more progressive.

Table A4 provides the revenue position and tax mix for selected African countries. The share of revenue in GDP

shows a very wide variation from 5.3% in the Democratic Republic of Congo (DRC – Congo Kinshasa) to 44.7% in Lesotho. "It is only in Lesotho that the share of revenue in GDP exceeds that for the OECD, and most low-income countries have a revenue share that is less than half that in the industrialized world (Heady, 2001: 2). The budget deficits also indicate a wide range, from 0.9% in Kenya to about 9% in the Republic of the Congo (Congo Brazzaville). The evidence confirms the need for African countries to raise more revenue to reduce budget deficits and mobilize resources to fight poverty. Tax policy is thus crucial and must be designed and implemented in a manner that does not worsen poverty or slow economic growth.

The share of income tax in total revenue varies among countries – from 43% in Zimbabwe to 9% in Congo Brazzaville. The low share is attributable to the fact that income taxes are collected more from companies than individuals. It is necessary to note that non-tax revenues constitute a substantial share in total revenue. This is due to mineral deposits such as in the Congo Brazzaville and Nigeria.

3. CONCEPTUAL ISSUES

There are two main criteria for judging taxes: the efficiency criterion and the equity criterion. The efficiency criterion may be explained thus: "In divesting resources to the public sector, taxes of different sorts impose varying degrees of distortions on the working of the market economy" (Boadway and Waldersin, 1984 . Distortions impose welfare losses on the economy by causing a departure from pareto optimality. These welfare losses are often known as excess burden or the welfare cost of taxation. One objective of the tax system is to minimize the welfare loss imposed on society from divesting a certain amount of resources to the public sector.[1]

The equity criterion is concerned with how the burden of output reduction in the private sector is distributed among the various agents of an economy under various taxing schemes. Generally, two concepts of equity are found in the literature. They include horizontal equity and vertical equity. A tax is horizontally equitable if it treats equals equally. The vertical equity criterion is concerned with how the tax system treats people of differing welfare levels. In order to judge the degree to which the tax system is vertically equitable we must be prepared to make a judgement about the correct way of treating people at different utility levels. Hence, there is the need for an interpersonal utility comparison that depends partly on value judgement.

In many African countries, it is the poorest who receive the least benefit from public services, thus taxation becomes more progressive in that situation, whereas in Organization of Economic Cooperation Development (OECD) countries this is usually used as an argument for making taxes less progressive. Policy makers have, in addition, to efficiency and equity, been concerned with other properties of taxes such as the administrative cost and the ease of implementation as well as enforcement of various taxes. Another generally accepted criterion is the flexibility of the tax revenue with the level of economic activity. If the revenue of a tax rises and falls with economic activity, it will function as an automatic destabilizer for fiscal policy objectives. Concepts of elasticity and buoyancy of the tax system involve the flexibility of the tax revenue with the level of economic activity. Empirical evidence, especially from the AERC network research, exists on some African countries.

Practically, governments depend upon a wide variety of tax

services in a bid to secure the right trade-off between equity and efficiency. Economists are still unable to tell policy makers the precise terms of this trade-off, however. "If unequal rewards are necessary for the maximal production of wealth, to what extent should the fiscal system intervene in determining distribution" (Lambert, 1990: 91).

Bovenberg and Ewijk (1997) examine the trade-off between efficiency and intra- and intergenerational equity with overlapping generations and human capital accumulation. The results reveal that regressive taxes help to internalize intergenerational externalities; even though regressive taxes widen income disparities within any generation, the associated boost to growth benefits the poorest households among generations that are born far into the future. "However, regressive taxes hurt the poorer households that are alive when the tax system is changed, whereas these households suffer less intergenerational redistribution, they fail to reap any welfare gains from the improved performance because higher growth does not affect the human capital they inherited in the past" (Bovenberg and Ewijk, 1997: 175).

There is a theoretical debate as to whether the tax system is the most efficient way of reducing irregularity leading to increased efficiency. Some economist argue that the marginal utility of income forgone by a rich person is less painful than that sacrificed by a poor person and that the poor tend to consume more and add more to aggregate domestic demand than the rich, so that beyond a certain point, making taxation less progressive tends to reduce economic activity. Others argue that taxing the rich, who are likely to invest, results in a decline in entrepreneurship and therefore progressive taxation reduces economic activity. It is for the policy maker to determine the tax rules that will ensure fairness.

Governments in Africa are concerned with the problem of raising revenue and improving the distribution of income, yet they do not possess sufficient information about the preferences and endowments of their citizens to enable them (policy makers) to utilize lump-sum taxes. Governments, therefore, allow redistributive taxes to depend only on information revealed by consumers in the course of choosing their hours of work, their occupation, and their income and consumption patterns (Kusi, 1998: 4).

The equity–efficiency nexus can be discussed within the concept of optimal tax theory. The theory differentiates between cases where it may be desirable to promote efficiency since equity may not be compromised and cases in which efficiency must be sacrificed if the goal is for a better redistribution (equity). Where equity and efficiency must be balanced, for example in the design of direct and indirect taxes on consumption, the tax rates will be influenced by the nature of the social welfare function.

> Equity issues in policy-making are difficult to resolve because they are linked not only to economic matters but also to social constraints and political conflicts. What is fair and what is not is more a matter for ideological or philosophical dispute, not mathematical models (Kolodko, 1998: 150).

The issue may also revolve around what degree of inequality is necessary and when it adversely affects growth and development. Studies have indicated that in the long run, using empirical analysis across a wide range of countries, higher output is related to lower levels of inequality and therefore it is not necessary to have a trade-off with efficiency.

Furthermore, existing literature using endogenous

growth models indicates that inequality, low levels of human capital formation and inadequate access to basic needs are detrimental to growth.

In the design and implementation of tax systems, there is growing concern of fiscal corruption. There exists in the literature the suggestion that corruption by tax officials will enhance tax revenue. The contention is that by strengthening the bargaining power of corrupt tax officials, tax evasion may be reduced and tax revenues enhanced. Fjeldstad et al. (2003) rejects fiscal corruption and provides three arguments: (a) in the short run, an increase in corruption may raise revenues but the opposite will occur in the long-run; (b) accepting corruption as a policy strategy to increase tax revenues may truncate democracy and good governance, and (c) eradicating corruption should be considered an end in itself. This suggests the need for incentive packages for tax collectors. Perhaps one method is to enable them to receive a percentage if targets are met or exceeded.

There is also the issue of whether the tax neutrality recommendations are appropriate to developing countries. In Africa, they are not appropriate. It is difficult to administer direct payments to households in Africa; many urban informal goods and services remain untaxed. It is therefore necessary to use a theory of restricted taxation in evaluating tax policy in Africa. (Heady, 2001: 8).

The prevalence of market failures, particularly in labour and capital markets, suggests that the pre-tax economy is not efficient and that resources need to be reallocated.

The labour market is often cited as a distorted market in developing countries as a result of market failures. Heady (2001) recognizes two types of distortions. The first concerns migrants from rural areas who are unable to sell land hitherto occupied by them, which restricts the movement of labour from agriculture to industry. The second

relates to the urban wage in modern manufacturing, which is set above market clearing levels and creates an incentive for people to leave agriculture to seek urban jobs despite the existence of urban unemployment and under-employment. The implications of these constraints are: (a) too few people are employed in the modern manufacturing sector, (b) modern sector employment needs to be subsidized, and (c) how then do we design taxes that will raise the money to finance the subsidies.

Heady (2001) argues that the people in the "informal" urban sector should be taxed in order to discourage further migration and subsidize formal employment. This calls into question the issue of equity and poverty reduction. Within the informal sector, incomes are not only different but cannot be taxed. Hence, reliance will be on the type of goods that are consumed by informal sector workers. It is not an easy matter identifying the goods to be taxed and enforcing the collection of the tax.

This confirms that tax neutrality is not necessarily a desirable aim. Also, government failures create administrative bottlenecks that further increase the cost of tax administration.

It is not an easy task to design an appropriate tax system given the multiplicity of taxes. Osoro (2000 LIST HAS 2001) argued that an optimal tax framework was irrelevant in analysing the best mix of taxes in Africa since it ignores country-specific fiscal and societal factors. He identified certain rules for designing tax systems:

a) Involve stakeholders
b) Ensure government support
c) Rationalize tax instruments
d) Build on existing institutions
e) Link trade and tax reform
f) Exempt the poor from the total
g) Choose taxes that raise the most revenue with the least risk

h) Be happy if the system is satisfactory

These rules need to be adhered to as much as possible when reforms are being conceptualized, formulated and implemented for specific taxes.

Generally, redesigning the tax system in favour of a broad tax base will stimulate economic activity and poverty reduction. A broad tax base may reduce capital flight and increase foreign investment (Pillarisett, J, 2002: 308). There is need for caution in designing for increased revenue.

There is widespread tax resistance in many local communities in Africa. "People may take to the extreme to evade taxes, for instance by literally hiding in the bush when tax collectors are approaching". It is not uncommon to find roadblocks manned by the local militia or police for tax enforcement. Taxes should be designed to be fair and persons must derive benefits for taxes paid.

4. TAX STRUCTURE AND REFORMS

The tax structure generally consists of direct and indirect taxes. Regarding direct taxes, the factors that produce the incomes are assumed to pay the taxes, while for the indirect taxes, households, families and firms that consume the taxed items pay the associated taxes. Direct taxes often include corporate tax, personal income tax, withholding tax, rental income tax, tax on interest in banks and presumptive income tax.

Indirect taxes include taxes on domestic goods and services such as value added tax (VAT) and excise duty on so-called demerit goods (beer, cigarettes etc.). It also includes international trade transactions such as import duty, VAT on imported goods and services, and excise duties on specific imported goods, for example beer and cigarettes.

Indirect taxes on goods and services are the major

revenue bases. Table A1 in the Appendix presents tax policies in selected African countries. Export and import duties constitute a large share of total tax revenue. For Cameroon, The share of import duties, which stood at 18.9% in 1990, increased to 31.6% in 2001. Direct taxes on income and wealth are important revenue bases in many African countries.

In Malawi and Tanzania, direct taxes generated about 40% of total tax revenues in 2001, out of these, corporate income taxes was the highest followed by the PAYE (Pay As You Earn) taxes on formal sector employees. Local government taxes contributed about 5% of total tax revenues (Fjeldstad and Rakner, 2003: 4).

Taxes on income, profits and capital gains, as shares in total taxes, remain high for most countries. In 1990, it was 71.7% for Botswana, 35.9% for Gabon, 55% for South Africa and 49.7% for Zimbabwe (see Table A6 in the Appendix).

It is not a secret that many African countries receive advice from the International Monetary Fund on tax issues. Most countries in Africa inherited tax structures from their colonial past and made only marginal changes.During the structural adjustment programmes in many countries tax reform became an integral part of the wider reform. Hence, the tax policies recommended for African countries are similar to those advocated for developed countries. This centres on the introduction of measures to broaden the tax base while simultaneously flattening the tax rates. The following trends in taxation in Africa can be highlighted:

* Introduction of the value-added tax (VAT)
* Lower personal and corporate income taxes
* Simplification of the tax bases as well as broadening the bases for personal and corporate income taxes
* Reduction of import duties and simplification of the

rate structure
* Simplification of the excise duty structure
* Abolition of export taxes
* Administrative reforms
* Establishment of semi-autonomous revenue authorities

The recent reforms notwithstanding, the tax systems in many African countries comprise excessive numbers of different taxes with different rate structures that are cumbersome for taxpayers to understand. More often, the tax law is very confusing and hence subject to the interpretation of tax officials. They thus have the monopoly of deciding on exemptions, tax liabilities, selection of audits and litigation. The procedures for reporting tax revenues lack transparency and are poorly monitored. It is extremely difficult to enforce punishments on those who fail to pay their taxes. Generally, the tax system is non-transparent and complicated. Under such a scenario tax design issues become problematic.
Let us identify some design issues on selected taxes in Africa.

4.1 VALUE-ADDED TAX (VAT)

VAT represents another option for raising additional revenue. When compared with other sources of revenue, VAT is a "money machine" (Gillis, 1990). VAT improves compliance; the non-distortionary (neutrality) features of VAT are attributable to the fact that sectional disparities are unavoidable but can be minimized through appropriate choice of exemptions and rate structure.

In sub-Saharan Africa, VAT has been introduced in Benin, Côte d'Ivoire, Guinea, Kenya, Ghana, Madagascar, Mauritius, Niger, Senegal, Togo and Nigeria, among others. VAT accounted for about 30% of total revenues in Côte

d'Ivoire, Kenya and Senegal in 1982. Between 1988 and 1994, VAT was the most important tax, constituting 37% of total tax revenue in Kenya. Evidence shows that VAT is a significant source of revenue in Nigeria. For example, actual VAT revenue for 1994 was N8.19 billion which was 36.5% higher than the projected N6 billion for that year. The contribution of VAT to government revenue in Nigeria has increased remarkably over the years.

The equity effect of VAT shows that it is a regressive tax because low income earners consume more of their earnings. This effect can be checked if measures are put in place to exempt goods consumed by low-income earners or to effect graduated rates of VAT. The regressive nature of VAT has implications for poverty reduction. It imposes a greater burden on the poor, hence reducing the redistributive effect of the tax system.

The reform of VAT in Kenya provides an interesting analysis. VAT replaced the sales tax in Kenya in 1990. Several items subject to VAT were moved from specific to ad valorem rates and the coverage in the service sector was broadened. Four measures were applied to broaden the base of VAT:

* Retail-level sales were changed to manufacturer-level VAT including business services from 1990.
* The tax point was gradually moved from the manufacturer to the retail level in a number of sectors such as jewellery, household appliances and entertainment equipment, furniture, construction materials, vehicle parts, and pre-recorded music.
* "Goods" were redefined to exclude the supply of immovable tangible and all intangible property and rental or immovable property.
* The coverage of the service sector was expanded to include business services, hotel and restaurant

services, entertainment, conferences, advertising, telecommunications, construction, transportation, the rental, repair and maintenance of all equipment (including vehicles), and a range of personal services (Musiithi and Moyi, 2003: 8).

Further, VAT rationalization involved the reduction of the maximum rate from over 150% to 15% (between 1990 and 1997) and reduction of the rate bands from 15 to 3. While the low rate was increased from 50% to 78%, all the other rates were reduced; the top rate from 150% to 15% and the standard rate from 18% to 16%. It is important that the rates be further reduced in order to lessen the burden on the poor. In Nigeria, the VAT rate is 5%. In SSA countries, it is crucial to continue to improve on the VAT refund system and proper record keeping.

In a country like Nigeria designing and implementing VAT have posed some challenges. Given the fiscal federalist nature of the economy, revenues from VAT are shared among the three tiers of government. Controversies on the agreed sharing formula continue to be a problem, however. Within that context, some states have argued that states that have banned the sale and consumption of alcoholic drinks should not benefit from the sharing of VAT.

In terms of poverty reduction, goods and services consumed by the poor ought to be exempted from VAT, while constant fine-tuning of the rates particularly of goods used for production with the attendant positive multiplier effects on the economy is necessary.

4.2 International Trade Taxes

In theory, liberalization is expected to have significant implications for government revenue, expenditure and fiscal deficit. According to theory, the effect of the trade regime on

the budget may depend on the direct impact on trade tax revenues and the economy's response to changes in relative prices.

A country seems not to be completely liberalizing trade for fear of losing substantial revenue. The negative effects on tax revenue suggest that at least for some imported products, the continuation of price increases due to devaluation and price reduction due to decreases in import duties may result in a reduction in tax revenue. In the short run, trade liberalization with devaluation may reduce output and employment in some sectors enough to have a negative impact on tax revenue.

Tanzi (1989) argues that trade liberalization with devaluation would increase tax revenue. Cheasty (1990) maintains that the magnitude of these effects will depend on the price elasticity of demand for imports, income related effects, the elasticity of substitution among imports, the market structure of import trade, the public's perception of liberalization and the response of the economy. Empirical evidence from Africa shows that there is no precise relationship between trade taxes and trade reform (Greenaway and Milner, 1993; Jebuni et al. , 1994).

The introduction of VAT has raised issues on the design of international trade taxes. In most SSA countries export taxes have been abolished, but there is reluctance to eliminate import duties. In Ghana in 1990 import tax replaced export duty as the major source of revenue in the foreign trade subsector. In Nigeria, import duties play a less significant role. In terms of poverty reduction, however, taxing, the importation of luxury consumer goods will ensure some redistribution provided the revenue so derived will be used in enhancing social services or pro poor programmes.

4.3 Restriction of Taxation

The most important tax restriction is the problem of taxing trades within agriculture. "Such a tax restriction destroys the logic behind the standard production efficiency result, because producer prices can no longer be manipulated to ensure production efficiency without a direct effect on consumer prices and hence welfare" (Heady, 2001: 10). It has been argued that commodity tax restrictions result in a divergence between domestic market prices and shadow prices (the prices at which public sector activities should be valued). The conclusion is that there should be trade taxes or subsidies on agricultural inputs and outputs. That is, an ability to tax agricultural transactions directly results in the desirability of taxing agriculture through its trades with the rest of the world. In Africa, most of the people reside in the rural areas and are farmers. While the rich farmers can be identified, agriculture taxes will involve taxing the poor, which is regressive. It will be extremely difficult to tax trades with agriculture in Africa.

It is possible to tax agricultural land based on sizes, however. Large landholdings should attract taxation; this will partly induce the owner to put the land into productive use rather than keeping it fallow. It seems that the taxing of agricultural land must be country specific, because landowner systems differ across countries.

For example, in most part of Southern Nigeria, agricultural land may be owned by the family, by the community or by an individual through inheritance. Communal land may be difficult to tax directly in terms of who pays.

4.4.1 Personal Income Taxation

The design issues here will centre on broadening the base and reducing the maximum rates. However, the design

must be done in such a way as to avoid loss of revenue. Base broadening will raise revenue, improve economic efficiency and achieve greater redistribution. Concerning personal income tax, a mix of exemptions is administratively feasible and will result in more redistribution.

In Kenya, the top rate for individual tax was reduced from 65% in 1987 to 31.5% in 1998. In addition, tax allowances were increased and simplified while the simple credit per individual was introduced in 1997 (Muriithi and Moyi, 2003). Kenya's Income Tax Act provides for personal relief to taxpayers. Since 1990, tax brackets and tax relief have been reviewed with the aim of cushioning low-income earners against "bracket creep while ensuring that high income earners bear a larger proportion of the tax burden". During the period 1990–1997, there were substantial increases in the single and family relief in directly affecting positively poverty reduction.

In Ghana, significant changes in the personal income tax (PIT) were introduced during the period 1980–1990. The tax brackets were reduced from 17 to 5 with new effective tax rates that provided substantial relief to the low-income earners. The changes allowed for a reduction of the top marginal rate of 60% to 55% applicable only when a taxpayer's yearly chargeable income exceeds 180,000 cedis. Personal income tax relief to unmarried persons was increased by 100%.

The design issues on personal income tax that are pro poor will include broadening the base and allowing for reliefs that will result in lower tax rates for those with less income, while ensuring that some marginal increase will ensure progressivity without adversely affecting investment.

4.4.2 Corporate Income Taxation

Taxes affect the input decision of firms to the extent

that they influence the marginal benefit and the marginal cost of input. In terms of revenue performance, corporate income tax (CIT) has provided substantial revenue to economies of SSA. Between 1970 and 1989, CIT represented 6% of non-oil revenue in Nigeria. For the period 1960–1990, CIT had an elasticity coefficient of 1.21, suggesting an improved efficiency in tax collection. It also probably reflects the ability to bring into the tax net the numerous limited liability companies that sprang up all over the country following the oil boom (Ariyo, 1997: 31).

Corporate income taxation on companies of different sizes is more justifiable. Design issues may address the problem of size of companies if tax procedures are simplified and efforts are made to improve capital markets. Corporate income taxes, if properly designed, can attract foreign direct investment. This would contribute to the increase in productivity by introducing modern machinery and providing skills to a poorly trained workforce. For the most part, tax holidays, accelerated depreciation and investment tax credits have not attracted the much-desired FDI into most African countries, hence the need to rely on properly designed CIT. Risk and uncertainty owing to conflicts and political instability remain problems for attracting FDI (Ekpo, 2001: Kusi, 1998).

Some CIT exemptions and/or incentives may be linked to poverty reduction. For example, in Nigeria a "rural investment allowance" is applicable to companies that incur capital expenditure on the provision of facilities such as power, water, tarred roads or telephone for the purpose of a business located far from such facilities provided by government. The aim of this allowance is to encourage businesses to establish and develop the rural areas where a substantial number of the poor reside. The impact has been minimal.

In addition, companies in Nigeria are required to pay a 2% education tax in order to assist in the provision of funds for all levels of education. This kind of tax, by supporting the acquisition of skills, helps in reducing poverty.

4.5. Taxation of Land

It has been argued that land taxation is particularly attractive in many developing countries since ownership is concentrated amongst the rich. This is too general a conclusion and needs country specific analysis. There is no question that from the point of theory, land is in fixed supply and so the incidence of the tax will be on the landowner and the tax will not generate an excess burden.

There are problems in designing a land tax in Africa. The ownership structure is a major one; in some instances land is communally owned hence who pays. Even if the owner is identified, it increases the risk of landowners, since the tax is certain but the revenue may not be. There is also the problem of variation in land quality and ensuring that the right person pays the tax. "For a land tax to be horizontally equitable, the tax should be paid by the landowner and depend not only on the land area but also on its value" (Heady, 2001: 13). In designing land tax matters, issues such as long leases and value need to be addressed so as to ensure horizontal equity.

4.6 Taxation of the Informal Sector

There is a large and growing urban informal sector in Africa. The underground economy in Tanzania, Kenya and Nigeria accounts for a substantial share of GDP, yet this sector is hardly taxed. One way of taxing the informal sector is by placing particularly heavy taxes on the type of goods that are consumed by them. It has been shown that this is desirable and can reduce inequality but the difficulty is in

identifying the goods to tax and enforcing collection. In Nigeria, persons working in the informal sector do not pay income taxes. For some businesses located in local government areas, the authorities charge certain fees and rates sometimes using brutal force.

5. TAX ADMINISTRATION

Tax administration is crucial in the implementation of a properly designed tax. Tax administration consists of three interrelated activities: (a) the identification of tax liabilities based on existing tax laws; (b) the assessment of taxes to determine if the taxes actually paid are smaller (or larger) than liabilities; and (c) the collection, prosecution and penalty activities that impose sanctions on tax evaders and ensure that taxes and penalties due from taxpayers are actually collected.

Some countries have established revenue authorities in order to increase revenue and reduce or minimize corruption. This model has been instituted in Ghana (1985), Uganda (1991), Zambia (1994), Kenya (1995), Malawi (1995), Tanzania (1996), South Africa (1997) and Rwanda (1997). In some Nigerian states where some autonomous revenue bodies exist, states are known to use consultants for tax collection.

It is expected that a single purpose agency can integrate tax operations and focus its effort on collecting revenues better than what obtains under civil service rules. An autonomous revenue authority allows for more widespread reforms of tax administration.

Reforms of the tax administration in Tanzania and Uganda in the 1990s, in the form of the establishment of semi-autonomous and well-funded revenue authorities, resulted in short-term revenue increases (Fjeldstad and Rakner, 2003: 17).

Reforms of the tax administration systems in Tanzania and Uganda in the 1990s through the establishment of semi-autonomous and well-funded revenue authorities resulted in short-term revenue increases that could not be sustained. The reasons include the limits of autonomy and patterns of fiscal corruption. After the initial success, revenues share in GDP started to decrease and fiscal corruption increased. This pattern was observable in some African countries e.g. Ghana, Tanzania, Uganda and Nigeria.

In Ghana, until 1986, the primary function of tax administration, which included the facilitation and monitoring of taxpayers compliance and averting non-compliance, operated very inefficiently. After substantial tax reforms including changes in organizational structures, the Inland Revenue Services (IRS) operated better. The tax reforms in Ghana also affected the indirect taxation system. The lowering of tariff rates resulted in achieving horizontal and vertical equity through a wider spread of the burden of indirect taxation during the period 1987–1993 (Kusi, 1998).

Evidence from revenue authorities shows that the establishment of autonomous bodies to administer taxation has not reduced political interference. To the contrary, the revenue authority has become "a more attractive target because the authority offers both relatively well paid jobs and considerable rent-seeking opportunities" (Therkildsen, 2002b ; 2002a). In most SSA countries, political elites do not respect the revenue authorities, hence it is crucial that more people be brought into the taxable bracket. It follows, that in the design and implementation of taxes that are pro poor attention must be given to anti-corruption measures by widening the tax base and simplifying the tax system.

There is a limit to taxation, however, If an economy is not growing, the revenue authority cannot perform magic no matter the degree of autonomy. Hence, the problem is multi-

faceted and needs further research.

6. CONCLUSION

African countries have the challenge of designing and implementing tax system that will enhance their revenue profile. Recent tax reforms indicate that the VAT has increased tax revenues in all countries where it has been implemented and the design issues were articulated in the paper. We also focused on income taxation, land taxation, taxation of the informal sector and tax administration. It is apparent that policy makers must be innovative in designing certain taxes such as land tax and taxing the urban informal sector.

It is important to tax large landholdings in order to compel owners to use such land for production. In implementing this, the measurement problem should be examined. Regarding the urban informal sector, the goods consumed by practitioners in the market ought to be taxed to excluding items consumed by the poor.

The tax administration system needs reform so as to reduce coercion and fiscal corruption. A situation where roadblocks and the police have to be used in collecting taxes indicates a need for review of the entire tax system. African economies must grow and generate employment so that more adults will enter the taxable bracket.

There is the need for further research in the following areas:

* The impact of taxation, growth and development in Africa. It will be useful to examine the role of taxation (revenue) in the performance of the African economy over the period of reform.
* Equity and efficiency effects of trade liberalization. The debate whether to liberalize fully or partially, particularly with the recent WTO disagreement,

may have implications for the equity–efficiency trade-off in Africa.

* Empirical evidence on fiscal corruption in selected countries. It is important to ascertain the precise impact of corruption on tax revenues.
* Design of local government taxes. The design of fees, rates, etc., charged by this level of government needs to be investigated and compared with the higher levels of government.
* Incentives and corporate income taxes in Africa. Country-specific studies are required to guide policy makers.
* Taxation and the urban informal sector. This is an area where new insights are required given the dominance of the informal sector in some SSA economies.

The paucity of tax information on African countries remains a fundamental problem. This prevents a more robust analysis of the subject matter. Governments in Africa must endeavour to improve the quality of tax data.

Poverty reduction is now at the core of economic policy-making in all low-income African countries because of the adoption of the Millennium Development Goals and NEPAD. Poverty reduction remains crucial in implementing the poverty reduction strategy papers. However, poverty reduction must be financed by mobilizing domestic and external resources. Tax issues have been examined in order to ensure that the design and implementation of tax systems will make the maximum and equitable contribution to poverty reduction in Africa.

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APPENDIXES

Table A1: GDP growth rate in selected African countries

Country	1960-70	1970-79	1980-89	1990-99	1999-2001
Botswana	-	-	11.3	4.3	5.2
Cameroon	3.7	5.4	3.2	1.3	2.2
Congo, Re	2.7	2.9	3.9	0.9	-0.1
Côte d'Ivoire	8.0	6.7	1.2	3.7	3.1
Egypt	4.2	7.6	5.4	4.4	4.6
Ethiopia	4.4	1.9	1.9	4.8	4.9
Ghana	2.1	-0.1	2.8	4.3	4.2
Kenya	6.0	6.5	4.1	2.2	2.0
Lesotho	4.6	7.0	3.7	4.4	3.9
Malawi	4.9	6.3	2.7	4.0	3.7
Morocco	4.2	6.1	4.1	3.3	2.5
Nigeria	3.1	7.5	-0.4	2.4	2.5
Rwanda	2.7	4.1 1	.5	-1.5	0.8
South Africa	6.4	3.6	1.5	1.9	2.1
Tanzania	6.0	4.9	2.6	3.1	3.1
Tunisia	4.7	7.6	3.4	4.6	4.7
Uganda	5.9	-0.4	2.5	7.2	6.8
Zimbabwe	4.3	1.6	2.7	2.4	1.8

Source: World Bank, *World Development Report*, various issues.

Table A2: People living on less than $1 a day, by millions and percent

People living on less than $1 a day (millions)				Share of people living on less than $1 a day (%)		
	1990	1999	2015	1990	1999	2015
East Asia & Pacific	486	279	80	30.5	15.6	3.9
Excluding China	110	59	7	24.2	10.6	1.1
Europe & Central Asia	6	24	7	1.4	5.1	1.4
Latin America & Caribbean	48	57	47	11.0	11.1	7.5
Middle East & North Africa	5	6	8	2.1	2.2	2.1
South Asia	506	488	264	45.0	36.6	15.7
Sub-Saharan Africa	241	3 15	404	47.4	49.0	46.0
Total	1,292	1,169	809	29.6	23.2	13.3
Excluding China	917	845	735	28.5	25.0	15.7

Source: *2003 World Development Indices*, p.5

Table A3: People living on less than $2 a day, by millions and percent

People living on less Than $2 a day (millions)				Share of people living on less than $2 a day (%)		
	1990	1999	2015	1990	1999	2015
East Asia & Pacific	1,114	897	339	69.7	50.1	16.6
Excluding China	295	269	120	64.7	50.2	18.4
Europe & Central Asia	31	97	45	6.8	20.3	9.3
Latin America & Caribbean	121	132	117	27.6	26.0	18.9
Middle East & North Africa	50	68	62	21.0	23.3	16.0
South Asia	1010	1,128	1139	89.8	84.8	68.0
Sub-Saharan Africa	386	480	618	76.0	74.7	70.4
Total	2712	2,602	2320	62.1	55.6	38.1
Excluding China	1892	2,173	2101	58.7	57.5	44.7

Source: *2003 World Development Indices,* World Bank, p. 5

Table A4: Revenue position and tax mix for selected African countries (1997/8)

Country	Revenue as % of GDP	Def. % of GDP	Income Tax as % of rev	Sales taxes as % of rev	Trade taxes as % of rev	Other taxes as % of rev	Non-tax rev as % of rev
Burundi	13.7	5.5	22	45	16	2	7
Cameroon	-	-	17	25	28	3	27
Congo, Dem. Rep.	5.3	6.5	25	18	28	9	20
Congo, Rep	29.4	8.6	9	5	9	0	77
Cote d'Ivoire	21.6	1.3	20	17	50	3	4
Kenya	26.2	0.9	34	37	15	1	14
Lesotho	44.7	3.7	15	12	52	0	21
Madagascar	8.7	1.3	18	24	53	2	2
Sierra Leone	10.2	5.8	17	33	46	0	3
Zimbabwe	29.4	5.0	43	24	20	2	10

Note: First two columns contain data for 1998 and the remaining columns for 1997.

Source: Heady (2001: 3).

Table A5: Changes in revenue position and tax mix for selected low-income countries

Country	Revenue as % of GDP	Def. % of GDP	Income Tax as % of rev	Sales taxes as % of rev	Trade taxes as % of rev	Other taxes as % of rev	Non-tax rev as % of rev
Burundi	-4.5	2.2	3	20	-24	-6	1
Cameroon	-	-	-5	7	-10	-2	19
Congo, Dem. Rep.	-4.8	-5.7	-5	6	-10	4	8
Congo, Rep.	6.9	-5.5	-40	-3	-4	-3	53
Cote d'Ivoire	-0.4	-1.6	7	-8	7	-3	-4
Kenya	3.8	-2.9	5	-2	-4	0	1
Lesotho	5.7	2.7	2	2	-9	-2	7
Madagascar	-2.8	0.4	1	-15	25	-1	0
Sierra Leone	6.1	4.0	-5	17	-4	-2	-7
Zimbabwe	5.3	-0.3	-3	-4	16	1	-10

Note: First two columns contain changes from 1990 to 1998 remaining columns reports changes from 1980 to 1999.

Source: Heady, C. (2001: 6).

Table A6: Tax policies in selected African countries

Country	Export duties as % of tax revenue		Import duties as % of tax revenue	
	1990	2001	1990	2001
Botswana	-	-	24.7	-
Cameroon	1.7	3.9	18.9	31.6
Congo, Dem. Rep.	4.1	1 .0	45.1	33.7
Congo, Rep.	0.0	0.0	32.3	23.2
Côte d'Ivoire	3.7	15.3	28.4	27.6
Ethiopia	2.4	2.9	18.0	26.3
Gabon	2.8	-	23.4	-
Gambia	0.2	-	45.6	-
Ghana	12.4	-	28.7	-
Kenya	0.0	-	17.8	-
Malawi	0.0	-	18.7	-
Mauritius	4.6	0.0	45.7	29.3
Morocco	0.3	0.0	20.3	18.8
Mozambique	-	-	-	-
Namibia	3.6	-	26.9	-
Nigeria	-	-	-	-
Senegal	-	-	-	-
Sierra Leone	0.4	0.0	41.3	49.8
South Africa	0.0	0.0	3.9	2.9
Swaziland	2.0	0.0	50.5	54.7
Tanzania	-	-	-	-
Uganda	-	0.0	-	50.3
Zimbabwe	0.0	-	18.8	-

Source: 2003 World Development Indicators.

Table A7: Tax policies in selected African countries

Country	Tax rev.	Taxes on income, profits and capital gains % of total rates		Domestic taxes on gains and services % of value added in industry and services	
	2001	1990	2001	1990	2001
Botswana	-	71.7	-	1.0	-
Cameroon	12.5	25.1	26.0	4.3	7.2
Congo Dem Rep.	-	28.5	16.7	2.6	0.0
Congo, Rep.	10.7	40.2	16.0	4.1	6.6
Cote d'Ivoire	16.9	18.1	21.0	8.9	4.9
Ethiopia	13.0	40.9	33.1	9.1	7.4
Gabon	-	35.9	-	5.0	-
Gambia	-	13.7	-	12.2	-
Ghana	-	25.1	-	6.8	-
Kenya	-	32.9	-	15.9	-
Malawi	-	42.5	-	13.9	-
Mauritius	17.4	15.2	14.0	7.0	9.2
Morocco	25.0	27.3	28.5	12.1	12.7
Mozambique	-	-	-	-	-
Namibia	29.9	39.4	35.3	8.4	8.8
Nigeria	-	-	-	-	-
Senegal	17.0	-	22.8	-	7.5
Sierra Leone	6.8	33.0	26.9	2.1	2.8
South Africa	26.5	55.0	57.0	10.3	10.8
Swaziland	26.6	33.2	26.4	5.2	6.6
Tanzania	-	-	-	-	-
Uganda	10.7	-	20.1	-	5.3
Zimbabwe	-	49.7	-	8.4	-

Source: 2003 World Development Indicators, p. 278–80.

Table A8: Tax policies in selected African countries highest marginal tax rate

Country	Individual rate (%) 2002	On income over $ 2002	Corporate rate (%) 2002
Botswana	25	14,085	15
Cameroon	60	10,726	39
Congo Dem Rep.	60	1,500	40
Congo, Rep.	50	14210	45
Cote d'Ivoire	10	3,432	35
Ethiopia	-	-	-
Gabon	50	31,462	35
Gambia	-	-	-
Ghana	30	7,079	33
Kenya	30	5,612	30
Malawi	38	946	38
Mauritius	25	828	25
Morocco	44	5243	35
Mozambique	20	5724	35

Namibia	36	17241	35
Nigeria	25	1,553	30
Senegal	50	22,469	35
Sierra Leone	-	-	-
South Africa	42	18,534	30
Swaziland	39	5,089	30
Tanzania	30	7,074	30
Uganda	30	2,860	30
Zimbabwe	46	15,273	30

Source: See Table.

Table A9: Tax policies and development indicators in selected African countries

Country	Pop. Below $2 a day	Pop. below $1 a day poverty line	Highest marginal tax rate	Tax burden index B1	Tax burden index B2	PPP income per capita
Benin	89.5	64.3	40	14.7	12.8	867
Burundi	88.7	42.3	60	29.6	47.9	570
Cameroon	87.4	68.4	60	25.6	17.21	474
Cen. Afri. Rep.	84.0	66.6	55	26.4	22.31	118
Chad	88.9	66.1	65	31.6	33.8	856
Congo, D.R.	90.8	65.7	50	57.76	6.9	822
Congo, Rep.	84.0	66.6	50	23.2	17.2	995
Ethiopia	89.0	46.0	40	16.4	35.7	574
Gambia	84.0	53.7	35	16.6	13.2	1453
Ghana	85.8	61.2	35	11.5	8.5	1735
Guinea	85.1	63.4	40	28.4	19.2	1782
Kenya	78.1	50.2	35	100.0	91.5	980
Lesotho	65.7	43.1	35	16.9	11.5	1626
Madagascar	93.2	72.3	35	25.8	28.5	756
Malawi	88.3	61.33	8	29.5	41.8	523
Mali	91.6	72.8	50	40.7	55.2	681
Mozambique	78.4	37.9	30	35.6	48.3	782
Niger	92.0	61.5	60	31.7	37.8	739
Nigeria	90.8	70.2	25	89.6	100.00	795
Rwanda	88.7	42.3	40	30.1	46.1	660
Senegal	79.6	54.0	50	13.3	9.5	1307
Sudan	88.4	60.6	30	24.9	19.9	1394
Tanzania	89.3	61.6	35	11.9	21.3	480
Togo	85.8	61.2	55	26.7	20.9	1372
Uganda	92.2	69.3	30	14.5	13.5	1074
Zambia	98.1	84.6	30	37.7	40.7	719
Zimbabwe	64.2	36.0	40	20.8	12.3	2669
Averages	85.8	56.6	41.1	29.3	30.9	1133
Rest of World	29.9	11.8	36.2	16.2	6.8	8824

Source: Pillarisetti (2003).

[1]This section draws from (Ekpo, 2002).