

Enhancing the effectiveness of fiscal policy for achieving MDG targets

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1 Introduction

The purpose of this paper for the Economic Commission for Africa is to consider the relationship between fiscal policy and development financing in Africa. Because of the great diversity across the continent a study covering all the fifty-four countries would reveal no general conclusions of importance. Just as one would not expect many useful policy guidelines for a study of all European countries (including for example, Belarus and Sweden), the diversity of the African continent must be recognised. To make the empirical part of the study manageable, twelve countries of Eastern, Central and Southern Africa are treated in detail with regard to revenue performance and trends in development expenditure, a sample of twenty-six countries for an analysis of revenue structure, and the other countries of the continent are briefly treated.

. The overall goal of the paper is to present alternatives for increasing the mobilization of resources to accelerate growth and facilitate poverty reduction. Section 2 of the paper places the discussion of fiscal policy in current context of global crisis and recession, reviewing growth rates, revenue performance and trends in deficits and public expenditures, in detail for twelve countries of East, Central and southern Africa, and briefly for the other countries of the continent. This section also considers the appropriate size of the public sector. Section 3 treats the role of fiscal policy in the short run, namely its potential to act as a counter-cyclical mechanism for reducing fluctuations in output and maintaining economies near their potential growth path. Section 4 addresses the issue of generating public revenue from commodity exports. This is followed, in Section 5, by an analysis of fiscal policy and private saving. In Section 6 the issue of public resource mobilisation is discussed, with a focus on different types of taxes. Section 7 deals with the role of official development assistance in public finance. Two important complementary issues, remittances and capital outflow are the subject of Section 8. The final section summaries the discussion with emphasis on policies.

2 The context of fiscal policy in Africa

2.1 Role of Fiscal Policy and the Public Sector

Fiscal policy can be an important policy tool in the short, medium and long term. In the short run increases in public expenditure can compensate for falls in domestic private spending or export demand, preventing output losses due to inadequate aggregate demand. In the medium term this short term policy can be used systematically and purposefully as a counter-cyclical instrument to reduce fluctuations and maintain output near its potential. In the long term, public investment helps raise the potential growth rate by increasing capacity and lowering costs.

These roles are complementary. Public investment creates the possibility of faster growth, but to realize this possibility a countercyclical fiscal policy is necessary for the potential of these investments be realised rather than squandered in idle capacity. Therefore, to be an effective instrument of policy, public expenditure must have the flexibility to be adjusted in response to short term fluctuations in the aggregate economy. In general, public current expenditure is more flexible than capital expenditure. It follows that the short and medium term functions of fiscal policy are realized via current expenditure and the long term function through capital expenditure.

After the Second World War it was generally accepted among economists and politicians that fiscal policy should be used to maintain an economy near full potential in the short term and enhance growth in the long run. In the policy literature doubts were expressed as to whether this would be feasible and effective in developing countries, because their economies might be constrained by structural factors. For example, in an agriculture based economy, weather conditions might render aggregate supply highly inelastic. It was also suggested that developing countries tended to have relatively high import elasticities with respect to growth, with the result that an expansionary fiscal policy could generate an unsustainable trade deficit. Concern was also expressed that an active fiscal policy might be diverted from its technical role in demand management by so-called populist ventures into excessive expenditures to gain political support. To summarise, post-war economists accepted the principle of an active fiscal policy, and their scepticism was limited to its practice.

This pragmatic view of fiscal policy came under severe attack in the late 1970s, and by the 1980s had been supplanted by a pre-Keynesian orthodoxy dictating

lower public spending, balanced budgets and a sharply restricted role for public sector intervention. After more than a quarter of a century, this rejuvenated pre-Keynesian orthodoxy suffered a devastating blow from the global depression that began in 2008. With few exceptions, the governments of the major industrial countries have adopted active fiscal policies, in the case of the United States and the United Kingdom aggressively,¹ stressing both countercyclical intervention in the short and medium term, and public investment to foster growth and productivity in the long run. As a result, the profession has returned to the pragmatic approach of the post-war consensus: use fiscal policy when it can achieve the desired policy goals. This approach applies equally to all economies, though the circumstances of countries, including their level of development, partly determine its effectiveness as explained below.

Though the pre-Keynesian orthodoxy is in retreat, it is worthwhile to review its arguments, first because they may linger in disguised form, and second because understanding their flaws serves as a guide for current policy. Complementary arguments, particularly by international financial institutions, against an active fiscal policy were made based on an assertion of public sector inefficiency and market efficiency:

- 1) in all that it does, the public sector is assumed to be inefficient compared to the private sector, because it is not motivated by cost minimisation and profit seeking; hence, anything that can be privatised should be;
- 2) markets are self-regulating, and with public intervention minimised, they automatically move the economy towards its optimal level and growth path; thus
- 3) an active fiscal policy discourages private sector development by crowding out private investment, generating inflationary pressures, and creating inefficiencies.

Whatever may be the theoretical arguments, the hypothesis that the private sector operates in a more efficient manner than the public sector was shown to be demonstrably wrong well before the economic crisis of 2008. A series of high-profile private sector fiascos, most in the United States, demonstrated that the process of

¹ In the first half of 2009, the British government programmed spending that might produce a fiscal deficit of over ten percent of GDP, an attempt to halt the contraction of the economy. See <http://www.bloomberg.com/apps/news?pid=20601102&sid=aX71Wieckjbg&refer=uk>.

competition was not sufficient to prevent inefficient and anti-social behaviour in markets.² By 2009 it became clear to any rational observer that the relative efficiency of the public and private sectors in any activity was an empirical question. This general rule applies equally to all countries, developed and underdeveloped.

A necessary condition for a passive fiscal policy argument is that the market will automatically generate a socially desirable outcome, defined as maintaining the economy near its potential, minimising its fluctuations, and fostering long term growth. One can demonstrate theoretically that this is a special case based on very restrictive assumptions,³ but this is hardly necessary in 2009 when the contrary is so obvious. However, there are more specific arguments that carry superficial credibility, and we consider the most important.

It is argued that an actively interventionist public sector discourages the private sector because it must be funded by taxation which raises ‘the cost of doing business’.⁴ This is an unfortunate term, with ideological undertones, since the purpose of public policy should be to ensure that ‘business’, the private sector, operates in a socially beneficial manner, rather than at the least cost from its own perspective. While public sector interventions, including taxation, may raise private costs, their purpose is to ensure that the private sector operates for the public good. It is on this pragmatic and empirical basis that they should be judged. With regard to ‘business’ taxation specifically, its purpose is to raise the public revenue that funds socially necessary expenditures that benefits the private sector itself, with the burden being equitably distributed.

The specific hypothesis that raising resources, either through taxation or borrowing, reduces, i.e., ‘crowds out’, private sector investment is an empirical question about which no general conclusion can be drawn. Economic theory tells one that this will occur when an economy is constrained by a scarce resource, and the public sector expenditure competes with the private sector for access to that resource. If there is general under-utilisation of resources, as is the case in most African countries, resources are not scarce in the technical sense, and ‘crowding out’ will not

² For example, the collapse of the energy speculator Enron, the multi-billion dollar ‘bait-out’ of the deregulated savings and loan associations, and, recently, the mortgage markets in the United States and the United Kingdom.

³ See Weeks (1989) for the theoretical argument.

⁴ The term is commonly used by the World Bank. See, for example, the discussion of Uganda in Svenssen (2000).

occur. Indeed, the opposite is likely: public expenditures, by raising demand or being directly complementary to private investment, can ‘crowd-in’ private spending directly or indirectly via aggregate demand. Even in the case of a scarce resource and ‘crowding out’, additional public investment may be socially desirable if it has a lower capital-output ratio, creating more employment and growth per unit of capital outlay than private investment.

These obvious practical arguments for public sector interventions are frequently rejected in the African context with the argument that corruption and inefficiency render increases in public expenditure socially undesirable. This is an argument that should be applied to governments in Africa with the same empirical and practical criteria that would be used when considering the public sector in developed countries.

The important issue is the appropriate fiscal stance for prevailing economic conditions. If a short term fiscal expansion is required as the technical solution to economic stagnation or contraction, there are two major reasons why it might not be implemented. First, the initial fiscal deficit may be too high to allow for further deficit spending. This is not a simple issue of the size of the initial deficit, but of the likely impact of increasing it through fiscal expansion, which is discussed in a subsequent section when deficits are considered in detail.

Second, fiscal expansion should be treated as a countercyclical policy, to as a framework for government expenditure. In general, expenditures should be funded by public revenue, not initiated for political expedience, a central message of this paper. If this principle is not followed, the result can be continuous inflationary pressures, or inefficient public programmes that contribute little to growth and poverty reduction, or both. Using fiscal policy for demand management is a policy requiring careful planning and technical expertise. It should not be a license for excessive public spending.

2.2 Growth and Public Revenue

To consider the mobilisation of resources for development and poverty reduction, we review economic growth performance, because growth is closely related to revenue performance. The revenue accruing to African governments is of two general types, domestic revenue from taxation and fees, and external revenue

from official development assistance. The domestic revenue generated from growth can be used for public investment, which can increase productive capacity and growth potential. The interaction between growth and revenue generation can function as a vicious or virtuous circle: slow growth results in low increases in revenue, which limits public investment and reduces growth potential; rapid growth generates the revenue that allows public investment to complement and ‘crowd-in’ private investment.

The relationship between public revenue and growth can be derived from the familiar national accounts identity:

$$Y = C + I + G + (X - N) + \Delta inv$$

Where Y = national income, C = private consumption, I = private investment, G = government expenditure (current plus capital), X = exports, N = imports, and Δinv = inventory change.

Assuming equilibrium, Δinv equals zero, we can substitute the standard behavioural relationships, with an important difference. In the typical specification, it is assumed that all income is distributed to households, and all taxes are from personal income. We also assume that all income is distributed to households, but separate taxes into those on household income and those on imports and exports. This reflects the situation with African countries, which can potentially derive a substantial portion of tax revenue from charges on trade. Tariff reduction, in many cases the result of external conditionality, resulted in a decline in the weight of trade taxes in total revenue in the 1990s and 2000s. As discussed in Section 6, they remain an important revenue source in most countries.⁵

$C = a(Y - T) = a(Y - t_1 Y)$, a is the marginal propensity to consume;

$T_1 = t_1 Y$, and $(Y - t_1 Y)$ is disposable income, with t_1 the average income tax rate;

$I = I^*$, investment, fixed in the short term;

$G = G^*$, government expenditure is a policy variable;

$X = X_g(1 - t_2)$, X_g is exports including taxes and t_2 the average export tax rate, so $T_2 = t_2 X$;

$N = bY$, b is the marginal propensity to import,

⁵ Much of the so-called value added taxation is on imported commodities, collected through formal sector retailers.

$N = N_g(1 - t_3)$, N_g is imports including taxes and t_2 the average tariff rate, so
 $T_3 = t_3N$.

Substituting, total tax revenue is:

$$T = T_1 + T_2 + T_3 = t_1Y + t_2X + t_3bY$$

The autonomous expenditure multiplier is

$m = 1/\{[1 - a(1 - t_1) + b(1 - t_3)]\}$, and national income in equilibrium is

$$Y = m[I + G + X]$$

By substitution, one obtains the following for the average tax ratio:

$$T/Y = t_1 + a t_3[t_2X_g/[m(I + G + X)]]$$

The last expression has a simple interpretation. If the three tax rates do not change (and the MPC and MPN are constant), and exports and income grow at the same rate, the elasticity of tax revenue with respect to output is one (unity). To reverse the proposition, with constant average tax rates, tax revenue grows faster than output increases (namely, T/Y rises) if exports grow faster than output either directly for those countries with export taxes, or indirectly via taxes on the income and consumption generated by the multiplier process. If all levies on exports are eliminated, the elasticity of revenue with respect to growth is unity in the absence of increases in tax rates or coverage or efficiency.⁶

To estimate the effect of economic growth, export growth and other variables on tax performances, we select a sample of 12 countries from East, Central and Southern Africa. Two criteria were used for selection: 1) with the exception of Zimbabwe, these countries are the ones in a separate study for ECA covering public sector finances along with other issues, allowing for direct comparison, and 2) oil producing Angola and conflict-affected Zimbabwe are excluded. The time period is 1992-2007, and data are from IMF studies. The estimating equation derives from the national income identity expanded to include two additional variables. The literature on revenue performs stresses the importance of the level of development of a country for several reasons: the more developed a country, 1) the larger is its formal sector, and 2) the greater is the capacity of the public sector to monitor incomes and collect taxes. Since the public finance literature also suggests that inflation can affect tax shares, we include that variable lagged one year. The other two explanatory variables

⁶ In sub-Saharan exports grew faster than output during the 1990s and 2000s (Weeks 2008).

are the rate of growth of exports, discussed above, and the rate of growth of output, which is relevant if marginal and average tax rates differ. The countries are combined in the same estimation by use of country binary variables, with Burundi the omitted binary variable because its average tax share was never the twelve country mean. The policy conclusion would apply to other countries not characterised by petroleum production or the complications for revenue and expenditures of conflict-affected countries such as Congo and Liberia. Other countries are considered in less detail in separate sections.

The results indicate the following:

- 1) though of the predicted sign, inflation is not a significant variable, perhaps because none of the twelve countries had an inflation rate high enough to produce an Olviera-Tanzi effect;⁷
- 2) per capita income is highly significant, supporting the hypothesis that the level of development plays a major role in revenue performance;
- 3) export growth is very weakly significant at the maximum ten percent level, perhaps because of the reduction of export levies since the 1980s; and
- 4) economic growth is strongly significant, indicating that marginal tax rates exceed average rates, perhaps due to tax exemptions on companies and commodities or changes in the composition of output.⁸

When one controls for these four variables, most of the countries show substantial and significant derivations from the omitted Burundi, whose share was less than one percentage point above the average for all 12 countries. All country binary variables are significant except for Botswana, and negative except for Lesotho, indicating that their revenue shares are below what would be predicted by the explanatory variables.

Several conclusions can be drawn from Table 1. First, low per capita income is a major constraint on raising domestic revenue. This is not primarily because households are poor, but because of the structure of the economy of a low income country. Effective tax collection requires formal sector institutions. In countries in

⁷ The Olviera-Tanzi effect occurs in the context of high inflation, which results in a decline in the volume of tax collection and a deterioration of real tax proceeds. It is the result of a gap between tax assessment and payment (Tanzi 1977).

⁸ If marginal and average rates are the same for all categories of taxation and the distribution of output were constant, then the aggregate tax rate would be constant, implying a constant tax share. With a constant tax share the growth variable would be non-significant.

which most employment is by publicly-registered companies, tax collection is relatively simple. In an agricultural economy of small landowners, taxation of households is almost impossible,⁹ limiting revenue to levies on imports and exports and commodities sold by formal sector retailers. This is indicated by the high revenue share of Lesotho, which is possible because of large customs revenues (see discussion below of SACU).

Second, export levies require a more nuanced assessment than the simplistic view that they discourage production of tradables.¹⁰ For a low income country, export levies can represent a major source of revenue growth and should be considered on a pragmatic basis. The same applies to import tariffs, which are easily collected and would have a positive income distribution effect if appropriately designed.¹¹ Finally, and perhaps most importantly, better revenue performance requires more rapid economic growth. More rapid growth itself requires an active fiscal policy with a strong component of public investment.

The analysis of this section would not apply to either petroleum producing countries or those severely affected by conflict, which would require a different analysis. For the petroleum producing countries, public revenue and expenditure are overwhelmingly determined by the international price of petroleum (see discussion of North Africa and other oil exports below). Oil production is insensitive to the exchange rate, and growth rates are derivative from petroleum production and prices. While the exports of Botswana are mineral-based, their prices have been considerably less volatile than petroleum and are exchange rate sensitive. In the case of Zambia, the importance of copper in export earnings is relatively recent, a consequence of the dramatic increase in international copper prices in the mid-2000s which induced rapid increases in output after two decades of decline. For conflict-affected countries public revenue performance is largely an issue of collection in the context of severe social tension, even social disintegration.

⁹ Taxation of agriculture requires estimation of the value of output, which manifests itself in small local markets which are themselves almost impossible to tax.

¹⁰ In the standard full employment, general equilibrium analysis, a tax on either exports or imports reduces the return to tradable production. In the absence of full employment, the effect of trade taxes is ambiguous.

¹¹ For example, differential import levies can be applied to luxuries and necessities.

Table 1: Determination of the revenue share, 12 East, Central And Southern African countries, 1992-2007

Variable	Coefficient	Standard Error	T-stat	Sgn @
Constant	-3.479	.421	-8.268	.000
<u>explanatory</u>				
lnPCY	.371	.088	4.236	.000
lnInft1	-.033	.084	-.397	.692
lnxptgrwt1	.108	.065	1.658	.099
lngdpgrwt	.599	.151	3.972	.000
<u>binaries</u>				
Botswana	-.448	.296	-1.513	.132
Kenya	-.227	.121	-1.871	.063
Lesotho	.320	.128	2.506	.013
Malawi	-.115	.054	-2.123	.035
Mozambique	-.686	.080	-8.541	.000
Rwanda	-.866	.077	-11.210	.000
South Africa	-.963	.290	-3.327	.001
Swaziland	-.416	.217	-1.913	.057
Tanzania	-.798	.088	-9.024	.000
Uganda	-.766	.076	-10.117	.000
Zambia	-.379	.109	-3.467	.001
Adj R sq =	.935			
F-stat =	164.65	Sgn @		
DF =	173	.000		

Notes:

Burundi omitted.

Variables, all in natural logs:

lnPCYt –per capita income, current year

lnInft1 –inflation rate, lagged one year

lnxptgrwt1 – export growth rate, lagged one year

lngdpgrwt – GDP growth rate, current year

Source: *World Development Indicators 2008*, on line, and IMF country studies listed in the references.

2.3 Revenue performance and expenditure trends

2.3.1 Eastern, Central and Southern Africa

This section considers public revenue and expenditure at the country level, with the purpose of identifying trends. For countries to achieve substantial poverty reduction, including MDG targets whose internationally agreed deadline approaches, increased expenditure is required, per capita and as a share of GDP (Weeks and McKinley 2007). The need for greater expenditure is in the context of a growing international recession which could reach a severity comparable to the Great Depression of the 1930s. The crisis creates the possibility that the major providers of

development assistance might reduce their support to African countries. This implies that domestic financing of expenditures could become increasingly necessary.

Were the current global crisis somehow avoided, the need for increased domestic financing would remain, though with less urgency. It is well documented that many of the sub-Saharan countries are extremely aid-dependent. A strategy to replace foreign assistance by domestic resources is an essential element in long-term development. As shown in the previous section, development itself creates the possibility of achieving increased resource mobilisation. Realising the possibility requires purposeful policies. This section reviews the progress made by twelve non-petroleum producing countries in generating increased public resource mobilisation, using statistics from IMF country reports.

Table 2 reports the share of public revenue in GDP excluding external grants for twelve East, Central and Southern African countries for the 1990s and 2000s. Three countries had revenue shares in excess of thirty percent of GDP, Botswana, Lesotho and Swaziland, all members of the Southern Africa Customs Union (SACU), which was formed in 1969 with the South African apartheid regime, and renegotiated in 2000. For all three countries a substantial portion of revenue derived from SACU customs levies, especially in the 2000s: about one-fourth for Botswana, over one-half for Lesotho and two-thirds for Swaziland in 2006.

Of the three, Botswana experienced a slow but statistically significant decline in its revenue share, due to the stagnation of revenue from mineral taxation and royalties. The strong positive trend in revenue for Lesotho was the direct result of SACU customs income, which rose from less than twenty percent of GDP in 2000 to near forty percent in 2006 and 2007. This category of revenue is relatively inflexible, set by treaty, and likely to decline should the global crisis affect South Africa's growth rate. For these countries, maintaining their strong revenue performance requires greater emphasis on direct taxes. South Africa was the only other country of the twelve with a revenue share consistently over twenty percent of GDP. However, as the result of a policy focus on deficit reduction, it had a significantly downward trend in public expenditure (Table 3).

The remaining eight countries demonstrate the considerable variation in revenue performance possible for low-income countries. Rwanda had the lowest average tax share for the twelve countries, even if one excludes 1994 and 1995 when the country suffered from extreme conflict. The average for 2003-2007 was slightly

less than thirteen percent, compared to almost twenty percent for Burundi with half Rwanda's per capita income, and almost fifteen percent for Malawi whose per capita income was forty percent lower. Tanzania and Uganda were other countries notable for a low revenue shares, approximately eleven and thirteen percent for 2003-2007. Dependence on development assistance does not appear to have affected revenue performance for the low income countries, with Burundi receiving the largest amount as a share of GDP of the twelve countries during 2003-2007. However, it is beyond the scope of this paper to rigorously investigate this possibility, which would require deducing debt payments to donors and distinguishing between donor commitments and recipient disbursements.

Zambia showed a consistent revenue performance over the two decades, rarely falling below eighteen percent and only twice moving out of the teens. The Zambian government had anticipated substantial revenue gains from copper toward the end of the 2000s (see Section 4),¹² but the global downturn may dash those hopes, with copper prices falling from about four US dollars a pound to US\$ 1.50 from June 2008 to the end of the year.

In part as a result of the rather weak revenue growth across the countries, Table 3 shows that only five of the twelve sustained a significant increase in domestic public expenditure over the two decades (total expenditure less external debt service), and South Africa, despite significant revenue growth showed a consistent expenditure decline. Expenditure per capital was slightly more expansionary, with statistically significant increases in seven of the twelve countries (Table 4). Capital expenditure, key to increasing potential growth, significantly declined in three countries, showed no increase in seven, and increasing only in Lesotho and Rwanda (Table 5).

Despite external conditionalities and formal commitments in most of the countries, little significant reduction occurred in fiscal deficits. External grants allowed Burundi and Rwanda to reduce their deficits, but for all the other countries except South Africa (whose grants were miniscule) there was no significant trend (Table 6 and Figure 1). On the basis of domestic revenue (Table 7 and Figure 2),

¹² The privatisation of copper production in Zambia at the end of the 1990s and early 2000s granted tax 'holidays' that prevented government revenue from benefiting substantially from the boom in copper prices during 2005-2007. As these concessions expired or the price went above 'trigger points', copper revenue increased. For a detailed discussion of copper revenues in Zambia, see Weeks, Patel, Seshamani and Mukungu (2007) and Weeks, Chisala, Geda, Dagdeviren, McKinley, Saad Filho and Oya (2006).

Burundi's deficit had an increasing trend, as did Tanzania's. Mozambique showed significant deficit reduction on domestic resources, though in 2007 its deficit was almost as high as it had been in the mid-1990s. Only Zambia could claim a major reduction, from an average of over twelve percent of GDP during 1992-1995, to below eight percent during 2004-2007.

Table 8 summaries the trends in revenue, expenditure and deficits, and suggests the following conclusions.

- 1) public revenue performance for these non-petroleum countries was mixed, with the strongest performances by countries recovering from low revenue shares during conflict periods (Burundi, Rwanda and Uganda), or as a result of new major source of revenue in the case of Mozambique (energy exports to South Africa); other countries showed no significant increase in revenue shares;
- 2) the public expenditure share increased in five of the six countries, but in only two did the development share rise, while falling in three; and
- 3) fiscal deficits remained large for most of the countries with no tendency to narrow (rising in two).

In overall summary, one can conclude that for these non-petroleum countries the 1990s and 2000s brought little substantial strengthening of revenue performance that could be the basis for accelerated development. Persistent fiscal deficits limited the potential for domestic borrowing as an alternative source of development finance. As a result, the low income countries remained dependent on external grants, perhaps at an unsustainable level in the context of a gathering global crisis.

Table 2: Total public revenue excluding grants, 12 East, Central and Southern African countries, percent of GDP, 1992-2007

Country	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	Trend
Botswana	51.0	49.3	36.9	39.5	43.8	41.4	35.5	49.2	50.7	40.0	39.0	38.2	37.4	39.1	40.0	38.1	-1.1
Burundi	16.9	16.8	18.1	17.7	15.5	13.6	17.1	16.2	19.2	20.0	20.1	21.1	20.1	20.0	18.9	17.7	+1.4
Kenya	23.3	28.0	29.2	29.9	26.3	27.3	26.9	23.1	22.6	19.8	19.8	19.7	21.2	20.8	20.8	20.2	-2.6
Lesotho	31.5	34.2	34.4	37.5	43.5	43.3	42.8	40.3	42.8	40.8	39.3	42.6	46.7	48.2	58.4	63.8	+3.3
Malawi	18.4	16.9	16.1	17.9	17.0	15.0	18.1	17.2	18.4	17.2	17.7	16.0	16.8	18.5	17.5	19.1	nsgn
Mozambique	11.0	11.5	10.2	10.6	10.5	11.4	11.5	12.0	12.9	12.4	13.2	13.3	13.1	14.1	15.9	16.5	+2.7
Rwanda	9.5	9.1	3.7	6.7	9.2	10.3	10.4	9.4	9.3	11.4	12.2	12.7	12.8	13.6	12.9	12.4	+4.7
South Africa	21.8	21.8	22.6	22.3	23.0	23.3	24.4	24.2	23.6	23.4	23.2	23.2	24.1	25.6	26.5	27.2	+1.1
Swaziland	30.1	28.3	28.4	30.5	28.8	29.9	29.6	30.4	28.3	26.2	25.0	24.7	30.8	32.1	41.7	37.9	nsgn
Tanzania	10.6	12.0	12.5	13.2	13.5	12.0	11.5	11.3	12.0	9.3	9.7	10.1	10.4	11.1	12.0	13.5	nsgn
Uganda	7.8	8.9	10.7	11.1	11.6	10.6	11.6	11.8	11.3	10.4	11.7	12.2	12.7	12.8	13.1	13.4	+2.5
Zambia	<u>18.4</u>	<u>15.9</u>	<u>21.2</u>	<u>19.8</u>	<u>20.7</u>	<u>19.9</u>	<u>18.8</u>	<u>17.7</u>	<u>19.4</u>	<u>18.1</u>	<u>17.0</u>	<u>18.0</u>	<u>18.2</u>	<u>17.4</u>	<u>16.9</u>	<u>19.1</u>	<u>nsgn</u>
Average	20.9	21.1	20.3	21.4	21.9	21.5	21.5	21.9	22.5	20.7	20.7	21.0	22.0	22.8	24.6	24.9	nsgn

Table 3: Total public expenditure minus external debt service, 12 East, Central and Southern African countries, percent of GDP, 1992-2006

Country	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	Trend
Botswana	39.9	40.7	33.7	35.9	33.2	35.0	40.8	41.9	40.4	43.2	43.6	38.7	36.5	32.2	29.3	nsgn
Burundi	24.7	25.2	20.0	20.6	17.5	18.8	19.8	21.6	21.2	23.7	22.0	29.8	26.2	31.7	33.7	+2.7
Kenya	25.8	24.0	18.5	20.9	22.6	24.0	23.2	18.0	22.5	20.0	20.3	19.4	20.3	21.0	22.5	nsgn
Lesotho	30.8	31.0	31.4	35.2	42.6	40.1	43.4	54.0	41.4	35.6	38.7	40.1	40.4	41.4	43.6	+1.9
Malawi	19.8	19.0	25.8	24.2	20.5	17.3	22.7	22.7	25.9	22.9	23.2	22.4	27.1	30.2	30.4	+2.4
Mozambique	30.4	27.1	33.6	23.5	22.8	20.0	19.7	22.6	24.2	29.9	28.6	25.3	24.0	21.5	27.7	nsgn
Rwanda	19.5	22.5	15.5	18.4	21.0	18.3	17.5	17.5	16.2	19.8	21.1	21.2	22.7	24.6	23.0	nsgn
South Africa	30.2	30.9	25.5	24.5	24.6	22.6	23.4	22.9	22.6	21.2	20.4	23.4	24.6	24.8	23.9	-1.4
Swaziland	33.0	32.2	32.4	29.5	28.3	25.5	27.8	30.7	28.5	27.9	28.4	27.2	34.2	33.1	30.4	nsgn
Tanzania	14.4	13.2	14.2	13.0	10.9	13.5	14.2	16.4	15.4	13.3	16.5	15.6	17.0	19.2	21.0	+2.8
Uganda	15.8	15.2	15.1	15.2	15.7	14.3	17.0	24.4	20.5	20.1	23.2	21.7	21.9	19.3	19.2	+2.9
Zambia	<u>19.0</u>	<u>17.5</u>	<u>21.6</u>	<u>23.9</u>	<u>24.0</u>	<u>22.4</u>	<u>26.7</u>	<u>24.7</u>	<u>26.1</u>	<u>25.4</u>	<u>24.2</u>	<u>17.7</u>	<u>17.4</u>	<u>21.5</u>	<u>21.5</u>	<u>nsgn</u>
Average	25.3	24.9	24.0	23.7	23.6	22.6	24.7	26.5	25.4	25.2	25.8	25.2	26.0	26.7	27.2	+0.8

Table 4: Total public expenditure minus external debt service per capita, 12 East, Central and Southern African countries, 1992-2006

Country	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	Trend
Botswana	1035	1046	873	948	904	1027	1299	1406	1444	1602	1688	1573	1559	1410	1298	+4.0
Burundi	38	36	27	25	19	20	22	24	23	25	24	31	27	32	34	nsgn
Kenya	109	99	76	87	96	99	96	74	91	82	82	78	84	89	99	nsgn
Lesotho	122	126	130	150	195	195	198	242	187	162	179	189	196	205	230	+3.4
Malawi	25	26	32	34	31	26	35	35	39	32	30	30	37	42	44	+2.6
Mozambique	53	49	63	44	44	42	44	54	57	76	77	71	71	67	91	+4.1
Rwanda	54	62	23	37	46	42	40	39	36	45	51	51	56	63	60	nsgn
South Africa	885	897	749	726	743	685	695	681	683	646	637	747	810	852	852	nsgn
Swaziland	428	419	422	386	374	338	369	410	379	369	379	368	466	457	426	nsgn
Tanzania	38	34	36	32	27	34	36	43	40	36	46	45	51	60	68	+4.4
Uganda	28	28	28	31	34	31	38	57	49	49	58	55	57	52	53	+7.0
Zambia	66	63	69	73	76	72	82	76	81	81	78	59	60	77	80	nsgn
Average	240	240	211	214	216	218	246	262	259	267	277	275	289	284	278	+2.1

Table 5: Public investment, percent of GDP, 12 East, Central and Southern African countries, 1992-2006

Country	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	Trend
Botswana	15.8	14.7	7.6	9.3	9.2	10.1	14.8	16.2	19.3	24.4	23.1	17.1	15.3	11.5	10.2	nsgn
Burundi	9.2	8.6	7.1	5.4	1.1	5.1	6.1	7.1	6.7	7.3	6.7	12.2	13.7	10.3	8.9	nsgn
Kenya	18.6	21.2	16.3	16.5	14.5	13.6	11.7	7.6	12.1	7.8	7.3	5.3	4.8	6.7	8.1	-9.5
Lesotho	18.7	18.5	17.4	20.3	29.2	26.5	27.0	39.3	27.9	25.0	29.0	27.4	26.5	27.9	28.0	+3.0
Malawi	6.5	4.8	7.7	6.6	5.0	6.1	7.9	9.6	6.6	7.2	8.1	8.3	na	na	na	nsgn
Mozambique	23.2	22.3	26.9	23.2	21.1	16.3	14.6	16.7	17.6	23.2	21.1	16.6	14.6	12.5	17.5	-3.2
Rwanda	6.0	9.3	4.9	9.7	10.8	9.9	8.5	8.1	7.7	9.2	10.3	7.4	11.2	12.4	10.7	+3.0
South Africa	10.0	10.8	7.7	8.5	8.5	7.9	7.9	7.8	7.5	6.7	6.4	5.9	6.1	6.6	6.6	-3.4
Swaziland	12.0	10.2	10.4	8.4	5.9	4.4	7.7	8.6	6.4	12.1	11.4	10.0	14.0	8.1	4.2	nsgn
Tanzania	.1	-1.0	1.3	6.0	3.5	7.4	9.3	11.2	6.7	3.4	5.2	1.7	2.2	3.3	3.8	nsgn
Uganda	10.2	8.9	7.2	6.4	6.4	3.6	6.4	13.7	8.1	7.2	9.2	8.3	8.7	7.0	6.1	nsgn
Zambia	<u>16.2</u>	<u>11.1</u>	<u>20.5</u>	<u>17.3</u>	<u>13.9</u>	<u>11.6</u>	<u>17.6</u>	<u>16.8</u>	<u>22.6</u>	<u>20.5</u>	<u>18.7</u>	<u>16.4</u>	<u>8.6</u>	<u>16.2</u>	<u>12.9</u>	<u>nsgn</u>
Average	12.2	11.6	11.2	11.5	10.8	10.2	11.6	13.6	12.4	12.8	13.0	11.4	11.4	11.1	10.7	nsgn

Table 6: Fiscal deficit including grants, percent of GDP, 12 East, Central and Southern African countries, 1992-2007

Country	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	Trend
Botswana	9.9	8.4	1.6	2.0	7.8	5.0	-6.0	6.4	9.3	-4.0	-5.7	-1.0	.9	6.7	10.7	8.2	nsgn
Burundi	-2.9	-3.6	-4.3	-4.9	-10.1	-5.3	-5.2	-6.7	-1.9	-5.2	-1.6	-2.5	-3.5	-2.9	-1.9	.7	+3.6
Kenya	-9.6	-6.6	-1.1	-.2	-2.9	-1.7	.0	.7	-2.0	-2.3	-3.9	-1.7	-.1	-1.7	-2.5	-3.2	nsgn
Lesotho	2.4	2.3	3.9	2.8	3.0	1.8	-2.8	-16.2	-2.3	.6	-3.8	-.4	5.6	4.8	13.4	15.1	nsgn
Malawi	-12.0	-5.3	17.1	-5.8	-2.8	-5.6	-5.1	-5.6	-5.8	-7.9	-12.1	-4.7	-4.8	-1.1	-1.3	-2.8	nsgn
Mozambique	-7.0	-5.1	-8.2	-5.0	-5.2	-2.5	-2.4	-1.5	-5.6	-6.6	-7.9	-4.2	-4.4	-2.2	-1.4	-5.6	nsgn
Rwanda	-9.0	-8.2	-11.6	-2.4	-5.7	-2.5	-2.9	-3.8	.7	-1.1	-1.1	-2.1	-.2	.6	-.4	-.6	+0.7
South Africa	-8.4	-9.1	-5.1	-4.5	-4.6	-3.8	-2.3	-2.0	-2.0	-1.6	-1.6	-2.0	-1.6	-.6	.4	.9	+0.6
Swaziland	-3.6	-5.1	-5.5	-.3	-1.3	2.8	.5	-1.5	-1.4	-2.5	-3.6	-2.9	-4.7	-1.6	10.4	-.4	nsgn
Tanzania	-5.3	-2.6	-3.9	-2.1	2.0	-.7	-1.6	-3.3	-1.6	-1.1	-2.6	-1.2	-2.7	-2.8	-4.7	-3.9	nsgn
Uganda	-3.4	-4.1	-3.1	-2.1	-1.9	-1.1	-2.7	-9.1	-2.6	-5.3	-5.7	-4.3	-1.7	-.6	-.8	-2.3	nsgn
Zambia	<u>-2.5</u>	<u>-5.6</u>	<u>-6.8</u>	<u>-3.8</u>	<u>-5.4</u>	<u>-4.1</u>	<u>-8.0</u>	<u>-4.0</u>	<u>-7.0</u>	<u>-6.9</u>	<u>-5.6</u>	<u>-6.0</u>	<u>-2.9</u>	<u>-2.7</u>	<u>-3.0</u>	<u>-1.7</u>	<u>nsgn</u>
Average	-4.3	-3.8	-2.7	-2.7	-2.6	-2.1	-3.7	-5.2	-2.4	-4.0	-4.8	-2.6	-2.1	-1.2	-.8	-.4	nsgn

Table 7: Fiscal deficit excluding grants, percent of GDP, 12 East, Central and Southern African countries, 1992-2007

Country	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	Trend
Botswana	8.8	6.6	1.0	1.7	7.3	4.4	-6.7	5.9	9.1	-4.1	-5.8	-1.2	.3	6.4	10.1	7.6	nsgn
Burundi	-11.5	-12.3	-6.4	-6.8	-5.6	-8.3	-6.1	-9.1	-5.0	-7.2	-5.7	-13.8	-19.7	-16.8	-19.3	-21.0	-0.9
Kenya	-11.0	-7.7	-2.3	-1.4	-3.4	-1.8	-1.0	-.3	-4.6	-4.0	-4.6	-3.6	-1.3	-3.0	-3.6	-4.1	nsgn
Lesotho	-2.0	.5	.5	-.8	-2.1	-.3	-5.2	-18.5	-4.3	-2.2	-7.4	-3.1	3.0	2.7	12.3	12.3	nsgn
Malawi	-14.4	-8.3	-28.1	-13.9	-7.3	-9.0	-11.4	-12.5	-14.9	-14.8	-19.0	-12.6	-15.1	-12.8	-14.2	-16.1	nsgn
Mozambique	-24.0	-22.2	-29.7	-20.8	-17.0	-11.7	-10.8	-13.2	-13.7	-19.9	-17.3	-13.9	-12.3	-8.8	-12.7	-18.7	+0.9
Rwanda	-11.0	-14.5	-12.4	-13.3	-13.1	-9.2	-8.1	-9.7	-8.9	-9.5	-9.9	-9.8	-11.3	-12.1	-11.3	-13.0	nsgn
South Africa	-8.4	-9.1	-5.1	-4.5	-4.6	-3.8	-2.3	-2.0	-2.0	-1.6	-1.6	-2.0	-1.6	-.6	.4	.9	+0.6
Swaziland	-5.2	-6.0	-6.3	-.4	-1.7	2.5	-.3	-2.8	-2.6	-3.6	-5.0	-3.9	-5.4	-2.6	9.6	-1.2	nsgn
Tanzania	-9.1	-6.4	-5.9	-4.3	-1.6	-3.7	-5.6	-7.8	-5.3	-5.6	-7.9	-6.4	-7.7	-9.2	-9.9	-8.6	-0.2
Uganda	-12.0	-11.1	-8.2	-6.5	-6.6	-6.3	-7.7	-14.8	-10.5	-10.6	-12.7	-10.9	-10.7	-8.5	-7.3	-8.6	nsgn
Zambia	<u>-12.8</u>	<u>-13.6</u>	<u>-12.4</u>	<u>-12.9</u>	<u>-11.5</u>	<u>-9.2</u>	<u>-14.6</u>	<u>-12.0</u>	<u>-12.7</u>	<u>-12.6</u>	<u>-13.6</u>	<u>-13.0</u>	<u>-8.4</u>	<u>-8.3</u>	<u>-6.2</u>	<u>-6.7</u>	<u>+0.4</u>
Average	-9.4	-8.5	-9.7	-7.3	-5.8	-5.1	-6.9	-9.2	-6.6	-8.2	-9.3	-7.3	-7.5	-6.5	-6.6	-6.7	nsgn

Table 8: Summary of trends in public revenue, expenditure & fiscal deficit, for 12 East, Central and Southern African countries 1992-2007

Country	Public Rev/GDP	Public Exp/GDP	Public Exp per capita	Public Inv/GDP	Deficit incl grants/GDP	Deficit excl grants/GDP
Botswana	-1.1	nsgn	+4.0	nsgn	nsgn	nsgn
Burundi	+1.4	+2.7	nsgn	nsgn	+3.6	-0.9
Kenya	-2.6	nsgn	nsgn	-9.5	nsgn	nsgn
Lesotho	+3.3	+1.9	+3.4	+3.0	nsgn	nsgn
Malawi	nsgn	+2.4	+2.6	nsgn	nsgn	nsgn
Mozambique	+2.7	nsgn	+4.1	-3.2	nsgn	+0.9
Rwanda	+4.7	nsgn	nsgn	+3.0	+0.7	nsgn
South Africa	+1.1	-1.4	nsgn	-3.4	+0.6	+0.6
Swaziland	nsgn	nsgn	nsgn	nsgn	nsgn	nsgn
Tanzania	nsgn	+2.8	+4.4	nsgn	nsgn	-0.2
Uganda	+2.5	+2.9	+7.0	nsgn	nsgn	nsgn
Zambia	nsgn	nsgn	nsgn	nsgn	nsgn	+0.4
Average	nsgn	+0.8	+2.1	nsgn	nsgn	nsgn
minus, nsgn, plus	2/4/6	1/6/5	0/6/6	3/7/2	0/9/3	2/7/3

Notes:

Public Rev/GDP – public revenue excluding grants as percent of GDP

Public Exp/GDP – public expenditure minus external debt service as percent of GDP

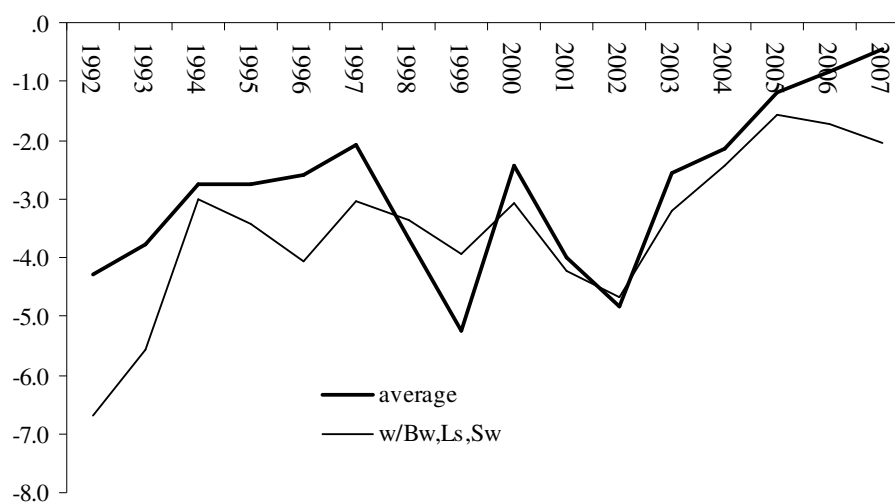
Public Exp per Capita – public expenditure minus external debt service per capita

Public Inv/GDP – public investment as percent of GDP

Deficit incl grants/GDP – fiscal deficit including ODA grants as percent of GDP

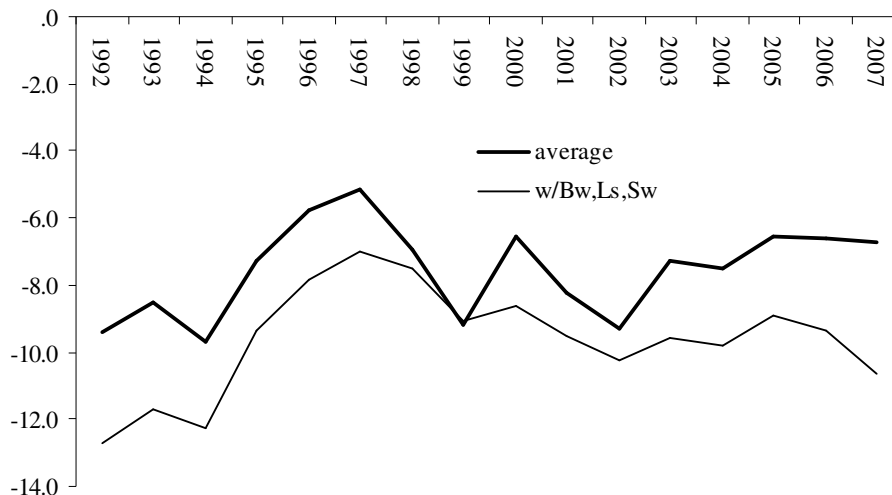
Deficit excl grants/GDP – fiscal deficit excluding grants as percent of GDP

Figure 1: Total fiscal deficit including grants, for 12 East, Central and Southern African countries, 1992-2007



Note: w/Bw,Ls,Sw – without Botswana, Lesotho and Swaziland

Figure 2: Total fiscal deficit excluding grants, for 12 East, Central and Southern African countries, 1992-2007



2.3.2 North Africa

For several reasons North African countries face quite different circumstances with regard to fiscal policy than the sub-Saharan countries of Africa. First, all of the North African countries are much more developed as measured by per capita income or the share of industry in total output. Second, three of the countries, Algeria, Libya and Egypt are exporters of hydrocarbons, with Algeria and Libya the second and third largest exporters of the continent (with Nigeria first). Third, the two other countries of the sub-region, Morocco and Tunisia, are closely linked with Western Europe in trade and tourism. All of these make the revenue potential for the sub-region considerable greater than for the sub-Saharan countries, with the exception of South Africa.

With the exception of Tunisia, growth rates for the five North African countries were low in the 1990s, though slow growth in population allowed these rates to generate increases in per capita income in four of the countries (with no data from Libya, see Table 9).¹³ During the 2000s growth rates increased slightly (or did not fall in the case of Tunisia). Morocco and Tunisia, whose exports of petroleum are insignificant, had low inflation rates, in contrast to Algeria and Libya with double digit rates in both decades, though substantially lower in the 2000s for Algeria.

¹³ In The mid-2000s, the population growth rates were: Algeria, 1.2 percent per annum; Egypt, 1.6; Libya 2.2; Morocco 1.5; and Tunisia one percent.

Statistics on revenue performance in Table 10 demonstrate the impetus to public income of international prices for the producers of hydrocarbons. In the 1990s, when petroleum prices were low, Algeria's revenue share in GDP was the same as that of Tunisia (with no data for either Libya or Morocco). In the 2000s, the former country's revenue share rose above forty percent of GDP and averaged close to forty percent. In sharp contrast to the sub-Saharan countries, all of the four North African countries for which we have data had low fiscal deficits. As a consequence of the high price of petroleum in the 2000s, Algeria enjoyed a substantial budget surplus, and Tunisia's deficit, the highest of the group, would have met the strict Maastricht criterion of three percent.

For these five countries the policy choices were clear. With strong revenue potential, they possess the capacity to generate public funds for reducing poverty, which is relatively low for the continent, and to enhance growth. The greatest challenges are faced by Algeria and Libya, to diversify production away from hydrocarbons in order to be less vulnerable to falls in petroleum prices. The statistics in Table 10 end before the sharp fall in world oil prices in 2008, which would have placed severe strain on the public revenues of these two countries. For Morocco and Tunisia, it is likely the direct effect of the price decline was positive in terms of growth, though the same global downturn that reduced oil prices would also have depressed exports.

2.3.3 Sub-Saharan oil exporters

The sub-Saharan region had seven substantial exporters of petroleum, though only two, Angola and Nigeria, were major suppliers on the world market, well over one million and two million barrels a day, respectively. For the other four countries petroleum was the major driver of economic growth, especially in the case of Equatorial Guinea with its small population of less than one million. For these countries even more than Algeria and Libya, economic diversification was the main policy challenge.

These sub-Saharan oil exporters tended to be prone to inflation. This true even when one excludes hyper-inflation Angola, which, it appears, had brought its price changes under control by the mid-2000s. The shift from hyper to high, then to moderate inflation coincided with the decline of armed conflict in the country.

Nigeria, with domestic political tensions but no comparable level of conflict, suffered from persistent high inflation except briefly in the late 1990s. This inflation, like that of much smaller Equatorial Guinea, can be explained by excessive domestic demand generated by revenues from petroleum.

It is unfortunate that it was not possible to obtain consistent and comparable revenue and deficit data for any of these seven countries. Even in the absence of that data, some generalisations are possible. In the absence of a petroleum sector, all seven countries would be low income, heavily dependent upon agriculture. This combination, a booming petroleum sector and underdevelopment elsewhere, makes countries prone to inflation because of the relative inelasticity of supply of the non-oil sectors. The structural inflationary pressures imply that fiscal surpluses are required to maintain macroeconomic stability. The vehicle for managing these surpluses for development is through 'resource funds', in which a substantial portion of oil revenues are set aside during periods of high prices, to be used to cover revenue shortfalls when prices are low.

The alternative to rational and purposeful use of resource funds is persistent inflation, severe cyclical instability, and long term dependence on a single export commodity. Used properly, a resource fund can counteract the currency appreciation and boom in non-tradables that fosters so-called Dutch disease. By focusing on public investment, policymakers can ration expenditure to reduce the tendency of oil economies to 'over-heat'. As we shall see, the challenge for governments of non-oil producing countries is to manage fiscal deficits. For governments of oil-producing countries the challenge is to generate and manage fiscal surpluses.

2.3.4 West Africa

This section treats the non-oil-producing countries of the West African sub-region, which includes many of the smallest countries of the continent in terms of both area and population. The countries differ dramatically in terms of ecology, coastal countries with heavy rainfall and the arid countries of the Sahel. As a result, generalisations, even about fiscal policy, must be made cautiously. This is particularly the case because the limited potential for generating public revenue has in several countries been weakened by domestic conflict, especially in Liberia and Sierra

Leone, which suffered from extended civil wars that undermined public institutions as well as causing terrible human suffering.

Over the two decades 1990-2007, the growth rates of the sixteen non-oil producing countries of West Africa have been quite slow. If one takes three percent as the borderline rate at which per capita income increased, this was achieved and surpassed in only 56 percent of the eighteen years for the sixteen countries, less than half the years for Cote d'Ivoire, Guinea-Bissau, Mauritania, Niger, Senegal, Sierra Leone, and Togo. In these eight countries and Liberia per capita income consistently fell. These statistics and the weak performances of several other countries, Gambia, Mali and Cameroon, suggest that the priority in this sub-region is to increase growth rates.

As discussed in the next section, increasing growth rates requires an active fiscal policy with deficit spending that is counter-cyclical and stresses public investment. Deficit finance is constrained by its possible impact on inflation, and Table 13 reports the inflation rates for the sixteen countries for 1990-2007. The countries fall into two categories, those consistently characterised by inflation in double digits, and those consistently below ten percent. In the former category are Ghana (over twenty percent both decades), Guinea (close to twenty percent in the 2000s), Guinea-Bissau (almost forty percent in the 1990s but near zero in the 2000s), and Sierra Leone (over forty percent in the 1990s), but only the first two had double digits in the 2000s. For the other twelve countries, inflation averaged below ten percent for both decades. These inflation rates suggest that most governments in the sub-region could pursue an active fiscal policy with moderate deficits without fuelling excessive inflation. In order to be non-inflationary, an active fiscal policy should follow the guidelines discussed in section 3.2, below.

2.3.5 Other sub-Saharan

The survey of fiscal indicators finishes with two countries from the horn of Africa (Eritrea and Ethiopia), three from west central and southwest Africa (Democratic Republic of Congo, Central African Republic and Namibia), and two islands, Madagascar and Mauritius. Of these seven, the second largest, Congo, suffered from severe internal conflict that was complicated by the military intervention of several neighbouring countries. Despite suffering severe conflict,

Congo did not have the lowest growth rate of the seven (see Table 16). This undesirable distinction fell to the Central African Republic, barely one percent per annum over the eighteen year period (the lowest for the continent for the two decades). In contrast, the largest country, Ethiopia, enjoyed a growth rate of eight percent in the 2000s despite a border war with its neighbour Eritrea.

Five of the countries were characterised by low or moderate inflation rates, the exceptions being Congo and Madagascar. Along with Angola, Congo was the only country of the region to manifest hyper-inflation, though it fell into low double digits after 2003. For Congo, controlling inflation was more of an issue of political stability than fiscal policy. Of the other six countries, only for Madagascar would price stability represent a constraint on an active fiscal policy.

The fragmentary data available show a wide range in revenue performance (Table 17). Namibia, because of its mineral wealth, and Mauritius due to its relatively high level of development, showed strong revenue potential, with the share of public income over thirty percent of GDP for the former country and over twenty percent for the latter. Except for Mauritius and Congo, statistics on fiscal deficits are insufficient to draw policy conclusions. Data which cannot be used for cross-country comparisons because of problems of definition indicate relatively high fiscal deficits for Ethiopia and Eritrea. Being cautious, one should conclude that it is likely that several of the countries in this group had substantial public deficits which would constrain the application of an active fiscal policy despite moderate inflation rates. Of particular concern would be the potential for the accumulation of large domestic public debts that would imply a substantial debt service component in public budgets.

Table 9: GDP growth and inflation, five North African countries, 1990-2007

	GDP growth						Inflation					
	Algeria	Egypt	Libya	Morocco	Tunisia	Mean	Algeria	Egypt	Libya	Morocco	Tunisia	Mean
1990	1	6	na	4	6	4	30	18	na	5	4	14
1991	-1	1	na	7	4	3	54	14	na	7	7	21
1992	2	4	na	-4	8	3	22	20	na	4	6	13
1993	-2	3	na	-1	2	1	14	8	na	4	5	8
1994	-1	4	na	10	3	4	29	8	na	2	5	11
1995	4	5	na	-7	2	1	29	11	na	8	5	13
1996	4	5	na	12	7	7	24	7	na	1	4	9
1997	1	5	na	-2	5	2	7	10	na	2	4	6
1998	5	4	na	8	5	6	-3	4	na	12	3	4
1999	3	6	na	1	6	4	11	1	na	1	3	4
2000	2	5	1	2	5	3	25	5	24	-1	3	11
2001	3	4	5	8	5	5	1	2	-2	1	3	1
2002	5	2	3	3	2	3	2	3	30	1	2	8
2003	7	3	-3	6	6	4	8	7	30	1	2	10
2004	5	4	5	5	6	5	11	12	23	1	3	10
2005	5	4	6	3	4	4	16	6	29	1	3	11
2006	2	7	5	8	6	6	11	7	14	2	4	8
2007	<u>3</u>	<u>7</u>	<u>7</u>	<u>3</u>	<u>6</u>	<u>5</u>	<u>7</u>	<u>13</u>	<u>5</u>	<u>4</u>	<u>2</u>	<u>6</u>
Mean												
1990-99	2	4	na	3	5	3	22	10	na	5	5	10
2000-07	4	5	4	5	5	4	10	7	19	1	3	8
Coef Var												
1990-99	1.5	.3	na	2.3	.4	.6	.7	.6	na	.8	.3	.5
2000-07	.4	.4	.9	.5	.3	.2	.8	.6	.6	1.1	.3	.4

Source: <http://ddp-ext.worldbank.org/ext/DDPQQ/>

Table 10: Revenue and cash deficit in GDP, five North African countries, 1990-2007

	Revenue/GDP						Deficit/GDP					
	Algeria	Egypt	Libya	Morocco	Tunisia	Mean	Algeria	Egypt	Libya	Morocco	Tunisia	Mean
1990	na	23	na	na	31	27	na	-2	na	na	-3	-3
1991	na	30	na	na	29	30	na	2	na	na	-5	-2
1992	na	33	na	na	29	31	na	-1	na	na	-2	-2
1993	na	35	na	na	30	33	na	4	na	na	-2	1
1994	29	37	na	na	31	32	-4	3	na	na	-1	-1
1995	30	35	na	na	30	32	-1	3	na	na	-2	0
1996	32	29	na	na	30	30	3	-1	na	na	-3	0
1997	33	26	na	na	29	29	2	-2	na	na	-3	-1
1998	27	na	na	na	29	28	-4	s	na	na	0	-2
1999	29	na	na	na	29	29	-1	na	na	na	-2	-2
2000	38	na	na	na	29	34	10	na	na	na	-3	4
2001	35	na	na	na	29	32	4	na	na	na	-2	1
2002	35	30	na	30	30	31	1	-3	na	-3	-2	-2
2003	38	29	na	29	29	31	5	-3	na	-3	-2	-1
2004	37	30	na	30	29	32	5	-2	na	-2	-3	-1
2005	42	31	na	31	29	33	14	-2	na	-2	-3	2
2006	43	31	na	31	29	34	14	1	na	1	-3	3
2007	40	35	na	35	30	<u>35</u>	6	3	na	3	-2	<u>3</u>
Mean												
1990-99	30	31	na	na	30	30	-1	1	na	na	-2	-1
2000-07	39	31	na	31	29	33	7	-1	na	-1	-3	1

Source: <http://ddp-ext.worldbank.org/ext/DDPQQ/>

Table 11: GDP growth and inflation, seven sub-Saharan oil exporting countries, 1990-2007

Years	GDP growth								Inflation							
	Angola (1.250)	Chad (249)	Congo, Rep (227)	Eq Guinea (356)	Gabon (226)	Nigeria (2600)	Sudan (363)	Mean	Angola	Chad	Congo, Rep	Eq Guinea	Gabon	Nigeria	Sudan	Mean
1990	-1	-4	1	3	5	8	-5	1	11	8	-1	-2	15	7	66	16
1991	-1	9	2	-1	6	5	8	5	165	3	-1	4	-11	20	89	17
1992	-7	8	3	11	-3	3	7	2	253	-13	-2	0	0	84	109	30
1993	-25	-16	-1	6	4	2	5	-5	1253	-1	-1	-1	-1	53	97	24
1994	4	10	-6	5	4	0	1	2	2125	44	37	54	47	28	159	62
1995	10	1	4	14	5	2	6	5	1895	9	3	3	1	56	105	30
1996	11	2	4	29	4	4	6	5	5400	11	18	25	14	37	33	23
1997	8	6	-1	71	6	3	11	6	94	4	5	28	1	1	48	15
1998	7	7	4	22	3	2	4	5	35	7	-18	-24	-18	-6	18	-7
1999	3	-1	-3	41	-9	1	3	-1	557	-8	29	41	19	12	16	18
2000	3	-1	8	13	-2	5	8	4	418	5	47	47	28	38	9	29
2001	3	12	4	62	2	3	6	5	108	14	-14	-12	-6	11	2	-1
2002	14	8	5	21	-1	2	5	6	121	2	-2	-2	-1	31	8	6
2003	3	15	2	13	2	10	7	7	103	0	-3	1	-1	11	10	3
2004	11	34	4	32	1	11	5	11	43	10	7	14	6	21	15	12
2005	21	8	8	7	3	5	6	9	34	23	30	44	17	20	12	24
2006	19	0	6	-6	1	6	11	7	15	6	19	19	8	20	6	13
2007	<u>21</u>	<u>1</u>	<u>-2</u>	<u>13</u>	<u>6</u>	<u>6</u>	<u>10</u>	<u>7</u>	<u>7</u>	<u>2</u>	<u>-8</u>	<u>-6</u>	<u>5</u>	<u>5</u>	<u>7</u>	<u>1</u>
Mean																
1990-99	1	2	1	20	3	3	5	2	702	7	8	13	7	25	45	17
2000-07	12	10	4	19	2	6	7	7	106	8	10	13	7	20	9	11
Coef Var																
1990-99	11.9	3.6	4.9	1.1	1.9	.8	.9	1.5	2.4	2.2	2.0	1.8	2.7	1.1	1.0	1.0
2000-07	.7	1.2	.8	1.1	1.6	.5	.3	.3	1.3	1.0	2.2	1.7	1.6	.6	.5	1.0

Notes: Congo, Rep is Congo (Brazzaville). Eq Guinea is Equatorial Guinea. GDP growth average excludes Equatorial Guinea. Inflation average excludes Angola. Numbers in parenthesis under country names are oil production in 2008 in thousands of barrels per day.

Sources: <http://ddp-ext.worldbank.org/ext/DDPQQ/> and <http://www.clickafrique.com/Magazine/ST014/CP0000002232.aspx>.

Table 12: GDP growth, sixteen West African countries, 1990-2007

GDP growth																	
year	<u>Benin</u>	<u>Burkina Faso</u>	<u>Came-roon</u>	<u>Cape Verde</u>	<u>Cote d'Ivoire</u>	<u>Gambia</u>	<u>Ghana</u>	<u>Guinea</u>	<u>Guinea-Bissau</u>	<u>Liberia</u>	<u>Mali</u>	<u>Mauri-tania</u>	<u>Niger</u>	<u>Senegal</u>	<u>Sierra Leone</u>	<u>Togo</u>	<u>Mean</u>
1990	3	-1	-6	1	-1	4	3	4	6	-51	-2	-2	-1	-1	-1	-1	0
1991	5	9	-4	1	0	3	5	3	5	-14	2	2	3	3	-1	3	3
1992	4	0	-3	3	-1	3	4	3	1	-35	8	2	-7	1	-4	1	1
1993	4	3	-3	7	-1	3	5	5	2	-33	-2	6	1	1	-15	1	1
1994	4	1	-3	7	1	0	3	4	3	-22	1	-3	4	-1	15	-1	2
1995	5	6	3	7	7	1	4	5	4	-4	6	10	3	5	8	5	5
1996	6	11	5	4	8	2	5	5	12	12	3	6	3	2	9	2	6
1997	6	6	5	5	6	5	4	5	6	106	7	-4	3	3	14	3	5
1998	5	7	5	7	5	3	5	5	-28	30	6	3	10	6	-2	6	3
1999	5	7	4	9	2	6	4	5	8	23	7	7	-1	6	2	6	5
2000	6	2	4	7	-4	6	4	2	8	26	3	2	-1	3	-1	3	3
2001	5	7	5	4	-1	6	4	4	0	3	12	3	7	5	-1	5	4
2002	4	5	4	5	-1	-3	4	4	-7	4	4	1	3	1	4	1	2
2003	4	8	4	6	-2	7	5	2	-1	-31	7	6	4	7	3	7	4
2004	3	5	4	-1	2	7	6	3	2	3	2	5	-1	6	3	6	3
2005	3	6	2	7	1	5	6	3	4	5	6	5	7	6	1	6	5
2006	4	6	3	11	1	7	6	2	2	8	5	12	5	2	4	2	5
2007	5	4	4	7	2	6	6	2	3	9	3	2	3	5	2	5	4
Mean																	
1990-99	5	5	2	5	1	4	5	4	4	3	4	3	4	4	4	4	4
2000-07	4	5	4	6	0	5	5	4	5	4	4	4	4	4	4	4	4
> 3%	83	72	56	78	22	56	89	56	44	50	56	44	33	44	33	44	56
Coef Var																	
1990-99	.2	.8	2.7	.5	2.9	.4	.2	.2	2.7	13.2	1.0	1.3	1.2	.7	2.5	.7	.5
2000-07	.2	.3	.2	.6	5.6	.7	.2	.2	.9	4.0	.8	.9	.7	.5	.5	.5	.2

Note: Mean excludes Liberia.

Source: <http://ddp-ext.worldbank.org/ext/DDPQQ/>

Table 13: Inflation, 16 West African countries, 1990-2007
Inflation

year	<u>Benin</u>	<u>Burkina Faso</u>	<u>Came-roon</u>	<u>Cape Verde</u>	<u>Cote d'Ivoire</u>	<u>Gambia</u>	<u>Ghana</u>	<u>Guinea</u>	<u>Guinea-Bissau</u>	<u>Liberia</u>	<u>Mali</u>	<u>Mauri-tania</u>	<u>Niger</u>	<u>Senegal</u>	<u>Sierra Leone</u>	<u>Togo</u>	<u>Mean low</u>	<u>Mean high</u>
1990	2	2	2	2	-5	12	31	17	30	-1	5	3	-2	-1	71	3	2	37
1991	1	-4	4	4	1	8	20	26	68	6	2	11	-5	-2	129	3	4	61
1992	3	0	-1	3	-1	7	11	26	65	-1	2	35	1	-1	82	3	5	46
1993	1	-1	16	2	6	5	32	1	49	7	3	12	-1	-1	27	-8	6	27
1994	34	15	14	8	46	4	30	1	23	5	28	11	33	34	25	36	23	20
1995	15	7	9	4	11	4	43	6	45	7	18	3	5	7	34	11	11	32
1996	7	0	3	6	5	3	40	1	39	5	5	2	5	4	26	5	7	27
1997	5	2	4	8	4	4	19	2	34	-10	1	12	3	2	16	2	4	18
1998	5	8	4	5	5	3	17	2	8	3789	0	5	3	3	27	10	6	14
1999	2	4	2	5	1	4	14	3	5	1	-3	2	2	0	25	1	3	12
2000	3	-2	3	-1	-1	4	27	11	3	-1	6	1	5	2	6	-2	3	12
2001	3	4	2	3	4	15	35	5	-5	12	-1	8	4	3	2	3	7	9
2002	8	6	3	2	5	16	23	3	4	26	16	8	3	3	-4	1	9	7
2003	2	0	0	2	1	27	29	11	-2	3	1	2	-3	1	8	-3	5	12
2004	0	4	2	6	1	12	14	21	2	1	-1	12	1	0	16	3	4	13
2005	3	-1	3	2	4	4	15	29	8	14	2	18	7	2	13	1	6	16
2006	3	-1	4	5	4	1	13	37	-1	9	4	30	2	3	12	0	6	15
2007	<u>3</u>	<u>3</u>	<u>2</u>	<u>4</u>	<u>3</u>	<u>6</u>	<u>15</u>	<u>17</u>	<u>4</u>	<u>16</u>	<u>4</u>	<u>-3</u>	<u>3</u>	<u>5</u>	<u>10</u>	<u>1</u>	<u>5</u>	<u>12</u>
Mean																		
1990-99	8	3	6	5	7	5	26	9	37	381	6	10	4	5	46	7	7	29
2000-07	3	2	2	3	3	11	21	17	2	10	4	10	3	2	8	1	6	12
Coef Var																		
1990-99	1.4	1.7	1.0	.5	1.9	.5	.4	1.2	.6	3.1	1.6	1.0	2.4	2.4	.8	1.8	.9	.5
2000-07	.7	1.8	.5	.8	.6	.8	.4	.7	2.5	.9	1.4	1.1	1.1	.6	.8	4.3	.3	.3

Note: 'mean, low' excludes Ghana, Guinea, Guinea-Bissau and Sierra Leone; 'mean, high' is the average of these four excluded countries. Liberia's hyper-inflation rate for 1998 is excluded.

Source: <http://ddp-ext.worldbank.org/ext/DDPQQ/>

Table 14: Revenue as percent of GDP, 16 West African countries, 1990-2007

Revenue/GDP																	
year	<u>Benin</u>	<u>Burkina Faso</u>	<u>Came-roon</u>	<u>Cape Verde</u>	<u>Cote d'Ivoire</u>	<u>Gambia</u>	<u>Ghana</u>	<u>Guinea</u>	<u>Guinea-Bissau</u>	<u>Liberia</u>	<u>Mali</u>	<u>Mauri-tania</u>	<u>Niger</u>	<u>Senegal</u>	<u>Sierra Leone</u>	<u>Togo</u>	<u>Mean</u>
1990	na	na	14	na	na	19	12	na	na	na	na	na	na	na	6	na	13
1991	na	na	15	na	na	20	15	na	na	na	na	na	na	na	8	na	15
1992	na	na	16	na	na	21	12	na	na	na	na	na	na	na	10	na	15
1993	na	na	12	na	na	24	17	na	na	na	na	na	na	na	12	na	16
1994	na	na	10	na	18	na	na	na	na	na	na	na	na	na	13	na	14
1995	na	na	12	na	20	na	na	na	na	na	na	na	na	na	9	na	14
1996	na	na	na	na	20	na	na	na	na	na	na	na	na	15	8	na	14
1997	na	na	na	na	19	na	na	na	na	na	na	na	na	16	10	na	15
1998	na	na	15	na	18	na	na	11	na	na	na	na	na	16	7	na	13
1999	na	na	14	na	16	na	na	12	na	na	na	na	na	16	7	na	13
2000	na	na	na	na	17	na	na	na	na	na	13	na	na	17	11	na	15
2001	16	na	na	na	17	na	18	na	na	na	15	na	na	17	13	na	16
2002	17	na	na	na	18	na	18	na	na	na	14	na	na	na	12	na	16
2003	17	na	na	na	17	na	20	na	na	na	16	na	na	na	12	na	16
2004	17	13	na	na	18	na	24	na	na	na	18	na	na	na	12	15	17
2005	16	13	na	27	17	na	24	na	na	na	18	na	11	na	na	15	18
2006	17	13	na	28	18	na	22	na	na	na	17	na	13	na	na	16	18
2007	na	na	na	na	19	na	25	na	na	na	16	na	14	na	na	17	18
mean																	
1990-99	na	na	14	na	19	21	14	12	na	na	na	na	na	16	9	na	14
2000-07	17	13	na	28	18	na	22	na	na	na	16	na	13	17	12	16	17

Source: <http://ddp-ext.worldbank.org/ext/DDPQQ/>

Table 15: Cash deficit as percent of GDP, 16 West African countries, 1990-2007

year	Revenue/GDP																
	<u>Benin</u>	<u>Burkina Faso</u>	<u>Came-roon</u>	<u>Cape Verde</u>	<u>Cote d'Ivoire</u>	<u>Gambia</u>	<u>Ghana</u>	<u>Guinea</u>	<u>Guinea-Bissau</u>	<u>Liberia</u>	<u>Mali</u>	<u>Mauritania</u>	<u>Niger</u>	<u>Senegal</u>	<u>Sierra Leone</u>	<u>Togo</u>	<u>mean</u>
1990	na	na	-6	na	na	0	na	na	na	na	na	na	na	na	na	na	-3
1991	na	na	-5	na	na	na	na	na	na	na	na	na	na	na	na	na	-5
1992	na	na	-2	na	na	na	na	na	na	na	na	na	na	na	na	na	-2
1993	na	na	-1	na	na	na	na	na	na	na	na	na	na	na	na	na	-1
1994	na	na	-2	na	na	na	na	na	na	na	na	na	na	na	na	na	-2
1995	na	na	0	na	na	na	na	na	na	na	na	na	na	na	na	na	0
1996	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
1997	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
1998	na	na	1	na	na	na	na	-4	na	na	na	na	na	na	na	na	-2
1999	na	na	0	na	na	na	na	-2	na	na	na	na	na	-1	-9	na	-3
2000	na	na	na	na	na	na	na	na	na	na	-3	na	na	-1	-9	na	-4
2001	1	na	na	na	3	na	-7	na	na	na	-4	na	na	-2	-9	na	-3
2002	-1	na	na	na	2	na	-5	na	na	na	-4	na	na	na	-8	na	-3
2003	-2	na	na	na	-3	na	-4	na	na	na	-1	na	na	na	-6	na	-3
2004	1	-4	na	na	-2	na	-1	na	na	na	-3	na	na	na	-2	-1	-2
2005	-1	-4	na	-3	-1	na	-1	na	na	na	-2	na	-2	na	na	-6	-3
2006	0	-6	na	-2	-1	na	-7	na	na	na	na*	na	na*	na	na	-4	-3
2007	na	na	na	na	-1	na	-8	na	na	na	-6	na	-1	na	na	-1	-3
Mean																	
1990-99	na	na	-2	na	na	0	na	-3	na	na	na	na	na	-1	-9	na	-2
2000-07	0	-5	na	-3	0	na	-5	na	na	na	-3	na	-2	-2	-7	-3	-3

Note: Mali and Niger had large accounting surpluses in 2006 as a result of debt cancellation, indicated by 'na*'.
Source: <http://ddp-ext.worldbank.org/ext/DDPQQ/>

Table 16: GDP growth and inflation, seven other sub-Saharan countries, 1990-2007

	GDP growth								Inflation							
	CAR	Congo, DR	Eritrea	Ethiopia	Mad'gar	Mauritius	Nambia	Mean	CAR	Congo, DR	Eritrea	Ethiopia	Mad'gar	Mauritius	Nambia	Mean
1990	-2	-7	na	3	3	6	2	1	2	109	na	3	11	11	4	6
1991	-1	-8	na	-7	-6	6	8	-1	-2	2202	na	19	13	9	5	9
1992	-6	-11	na	-9	1	5	7	-2	2	4078	na	16	14	6	10	10
1993	0	-13	13	13	2	6	-2	3	-3	1662	-1	13	12	8	17	8
1994	5	-4	21	3	-1	5	7	5	23	26762	10	3	42	9	16	17
1995	7	1	3	6	2	4	4	4	10	466	10	13	45	4	6	15
1996	-4	-1	9	12	2	5	3	4	2	638	9	0	18	5	14	8
1997	5	-6	8	3	4	6	4	3	1	193	4	5	7	7	7	5
1998	5	-2	2	-3	4	6	3	2	1	27	9	-1	8	6	9	5
1999	4	-4	0	5	5	6	3	3	1	442	2	1	10	7	6	5
2000	2	-7	-13	6	5	4	3	0	3	516	25	7	7	4	11	10
2001	0	-2	9	8	6	6	2	4	4	384	17	-6	7	4	14	7
2002	-1	3	3	2	-13	3	7	1	3	32	18	-4	15	7	11	8
2003	-8	6	-3	-2	10	3	3	1	-1	13	17	13	3	6	-1	6
2004	1	7	1	14	5	5	7	6	0	6	19	4	14	6	1	7
2005	2	6	3	12	5	5	5	5	4	22	36	10	18	5	4	13
2006	4	5	-1	11	5	4	3	4	4	13	10	12	11	4	9	8
2007	4	6	1	11	6	5	6	6	2	17	6	17	10	7	1	7
Mean																
1990-99	1	-6	8	3	2	6	4	2	3	2088	13	7	15	6	8	9
2000-07	1	3	1	8	4	4	5	3	2	125	1	7	11	5	6	8
Coef Var																
1990-99	3.4	-.8	.9	2.8	2.0	.1	.7	1.1	2.4	3.9	.3	1.1	.9	.3	.6	.5
2000-07	7.7	1.7	12.6	.7	1.9	.2	.4	.7	.8	1.6	18.2	1.2	.5	.2	.9	.3

Notes: Inflation average excludes Congo, DR.

Source: <http://ddp-ext.worldbank.org/ext/DDPQQ/>

Table 17: Revenue and the cash deficit as percent of GDP, seven other sub-Saharan countries, 1990-2007

	Revenue/GDP								Deficit/GDP							
	CAR	Congo, DR	Eritrea	Ethiopia	Mad'gar	Mauritius	Nambia	Mean	CAR	Congo, DR	Eritrea	Ethiopia	Mad'gar	Mauritius	Nambia	Mean
1990	na	10	na	na	na	24	31	22	na	-7	na	na	na	0	na	-4
1991	na	5	na	na	na	24	37	22	na	-14	na	na	na	1	-3	-5
1992	na	3	na	na	na	24	35	21	na	-14	na	na	na	-1	-5	-7
1993	na	5	na	na	na	23	33	20	na	-13	na	na	na	1	na	-6
1994	na	3	na	na	na	23	31	19	na	-2	na	na	na	-1	na	-2
1995	na	5	na	na	na	22	32	20	na	0	na	na	na	-1	na	-1
1996	na	5	na	na	na	20	31	19	na	-1	na	na	na	-4	na	-3
1997	na	5	na	na	na	22	33	20	na	-1	na	na	na	-2	na	-2
1998	na	6	na	na	na	22	32	20	na	-3	na	na	na	-1	na	-2
1999	na	5	na	na	na	21	35	20	na	-6	na	na	na	-2	-3	-4
2000	na	4	na	na	12	22	33	18	na	-4	na	na	-2	-1	-3	-3
2001	na	5	na	na	10	20	32	17	na	-1	na	na	-4	-4	-3	-3
2002	na	8	na	14	8	20	31	16	na	-1	na	-8	-4	-4	-1	-4
2003	na	na	na	na	11	22	28	20	na	na	na	na	-4	-3	-7	-5
2004	na	na	na	na	12	22	na	17	na	na	na	na	-5	-3	na	-4
2005	na	na	na	na	11	21	na	16	na	na	na	na	-5	-2	na	-4
2006	na	na	na	na	12	22	na	17	na	na	na	na	-1	-3	na	-2
2007	na	na	na	na	12	21	na	17	na	na	na	na	-3	-2	na	-3
Mean																
1990-99	na	5	na	na	na	22	32	20	na	-5	na	na	na	-2	-4	-3
2000-07	na	6	na	14	11	21	31	17	na	-2	na	-8	-4	-3	-4	-3

Source: <http://ddp-ext.worldbank.org/ext/DDPQQ/>

3 A counter-cyclical fiscal policy

3.1 Deficits and counter-cyclical intervention

Because of their dependence on commodity exports with volatile world prices, growth rates of developing countries tend to fluctuate. This is particularly true of sub-Saharan countries, which have few manufactured exports, and also for the petroleum exporters of North African. Part of the neoliberal ideology was the argument that liberalising the external current account and deregulating the capital account would create relative price adjustments that would reduce the effects of the external ‘shocks’ that destabilise growth. This section focuses on the commodity-exporting countries of East, Central and Southern Africa to demonstrate that, to the contrary, growth instability has persisted.

An active fiscal policy can be used effectively to reduce growth fluctuations through management of the public budget. The policy objective is to manage the demand generated by fiscal policy to compensate for fluctuations in private sector consumption demand, domestic investment and exports, which is called ‘counter-cyclical’ fiscal policy. In theory taxes can be used for this purpose, but in practice they are a clumsy instrument for demand management. Changing the public sector’s net contribution to aggregate demand with the tax instrument requires either new taxes or altering tax rates. In most countries these require legislative action, followed by changes in the administration of taxes. This can be a lengthy process that fails to achieve demand changes with the speed necessary to respond to short falls in private demand. Public expenditure offers the more effective mechanism for compensating for private demand fluctuations.

A country’s medium and long term growth rates are determined by the development of capacity, skills and technical change, with the latter embodied in capital investment. Since public investment is a contributor to increasing capacity, it is unwise to use it as a counter-cyclical instrument. Counter-cyclical expenditure involves increasing public spending when the economy is growing below its long run potential, and decreasing it when output rises close to potential and threatening to cause resource scarcities that provoke inflationary pressures. Since public investments by their nature mature over several years, to use them as a counter-cyclical instrument would imply abandoning or suspending capital projects, resulting in waste of resources. The expenditure flexibility necessary for an effective counter-

cyclical policy must be found in the current account of the public budget. Types of expenditures which could serve this purpose, expenditures which can be increased and decreased quickly without waste of resources, are discussed at the end of this section.

To summarise, if a country's long term average growth rate is low, it is appropriate to increase public investment to increase the long term potential. Simultaneously a government would use current expenditure to generate the additional demand necessary to reach the greater potential created by the public investment. The extent to which counter-cyclical policies are necessary is determined by the degree of instability of an economy and requires a case-by-case inspection of country growth rates.

Figures 3-5 show growth rates for twelve countries, divided into the four SACU members, four East African countries (which includes Mozambique), and four Central African countries, for three decades, 1980-2007. In each table the legend reports the average growth rate for the entire period. As a rough rule of thumb, a country's potential growth rate can be estimated as the rate of labour force growth plus the rate of technical change. This is the maximum growth rate which can be sustained in the long run, and the capital stock consistent with this growth rate is achieved by the combination of public and private investment.¹⁴ The rate of growth of the labour force for these countries was about 2.5 percent per annum. For developed countries a typical estimate of technical change is about two percent. This is low for African countries because they have the opportunity to adopt techniques that have been applied by developed countries, but are new in developing countries. Thus, a potential growth rate of at least five percent would apply to the countries in Figures 3-5. By this guideline, all the countries except Botswana (and possibly Uganda) grew below potential over the three decades, with rates rising close to potential in the mid-2000s. We conclude that all of the countries except Botswana could realise a higher long term average growth rate through country-cyclical policies to move towards their potential growth rates. This requires greater capital investment, including from the public sector.

¹⁴ Using the terminology of the Harrod-Domar model, labour force growth plus technical change is the 'natural rate of growth' and the growth of the capital stock is the 'warranted rate of growth'. This is a rare case in which there is agreement between orthodox (neoclassical) and heterodox (structuralist) economists. In neoclassical theory the sum of labour force growth and technical change is the 'steady state' growth rate (Swan 1956 and Harrod 1939).

It is clear from the charts that for most of the countries there were substantial short-falls from the potential rate of growth, were it high (Botswana) or low (the other eleven). Figure 6 highlights this, measuring the absolute percentage point deviation of each year's growth rate from the mean for the entire period, averaged across the twelve countries. From the early 1980s until the end of the decade there was a seven year up-swing, followed by decline during 1989-1992. The subsequent up-swing proved to be slow and faltering, reversing into a four-year period of stagnation (1996-2000). While Figure 6 hides the specifics of each country, it indicates the need for counter-cyclical use of current expenditure to realise what appears to be a rising potential growth rate for the countries.

A further and related argument for counter-cyclical fiscal policy is shown in Figure 7, which measures the average coefficient of variation of growth across countries on the vertical axis and the average growth rate on the horizontal. The graph shows clearly a negative relationship between growth variability and the rate of growth. This is a relationship verified in more rigorous statistical testing by other research (Weeks 2001).

Using current expenditure to compensate when private demand is insufficient to keep growth near its potential implies increasing fiscal deficits or reducing surpluses. The orthodox view is that such deficits would be self-defeating. First, they tend to be inflationary, which among other effects would have a negative impact on private sector expectations, reducing the already weak private demand. Second, the government borrowing (or lower surplus) would 'crowd out' private domestic expenditure (but not exports), further weakening demand. These allegations can be empirically tested, and the results are presented in Tables 9 and 10.

Table 18 reports the estimation of inflation rates across the twelve countries, 1992-2007. By definition, the price level is equal to the weighted average of tradable and non-tradable prices. In an open economy, tradable prices are determined by the exchange rate, and non-tradable prices by the demand and supply of money and structural factors. If as before the propensity to import (average assumed equal to marginal) is b , then,

$$p = bp_t + [1 - b]p_{nt}$$

Using implicit functions,

$$p = bp_t(e) + [1 - b]p_{nt}(R, d, y^*)$$

Inflation in tradable price is predicted to be a negative function of the change in the exchange rate (e , where an increase is an appreciation). Non-tradable prices are a negative function of the real central bank rate (R , which affects the cost of credit), a positive function of the change in the fiscal deficit (for its impact on the money supply when public borrowing is monetised), and a positive function of the volatility of growth (which increases inflationary expectations).

In summary, we test the hypothesis that the nominal exchange rate, growth instability and the fiscal deficit increase inflation, and the central bank rate reduces it. Table 18 shows that the deficit hypothesis can be rejected; the coefficient is non-significant and not of the predicted sign. One reason for its non-significance is that several of the countries are prohibited by law or severely restricted in monetising their deficits (e.g., Zambia and South Africa). The other variables are significant, though the exchange rate only marginally and well below the average import share. Zambia, the omitted country, had the highest rate of inflation of the twelve countries, and all country binaries are negative and significant.

The large, very significant constant term and with highly significant country variables are consistent with the inference that inflation was overwhelmingly a structural phenomenon. This in part explains why the deficit has no significant impact. The highly significant real central bank rate suggests an inflation reduction mechanism that works through reducing the growth rate: an increase in the central bank lending rate shifts public expenditure to unproductive purposes by raising the domestic interest payments of the government, and discourages private sector activity by raising the cost of borrowing.

With the hypothesis that deficits contribute to inflation rejected, Table 19 tests the ‘crowding-out’ hypothesis. The investment share is specified as a function of the growth rate averaged over five years, the real central bank rate (cost of borrowing), and the fiscal deficit. As for inflation, the model’s explanatory statistic is high and the deficit is non-significant and not of the predicted ‘crowding out’ sign. The dependent variable is not ideal, since it includes both private and public investment. The positive sign on growth can be interpreted as affecting private sector profit expectations, and generating revenue that allows higher public investment.¹⁵ The real

¹⁵ The private sector component is the familiar ‘accelerator’ mechanism.

central bank rate affects the cost of private borrowing, and, as noted for inflation, raises public interest payments, reducing scope for funding public investment.

To summarise, a consistently applied counter-cyclical fiscal policy requires governments to increase fiscal deficits or reduce surpluses when there is a short-fall in private demand. Statistical evidence suggests that the deficits would not be self-defeating by generating inflation or ‘crowding-out’ private expenditure. These results are to be expected when growth rates are below long run potential, as was the case for all the countries except Botswana.

3.2 Policies for counter-cyclical intervention

As discussed above, public expenditure is a more effective instrument for counter-cyclical intervention than taxation, because of the inflexibility of the latter. Capital projects are inappropriate because they often cannot be initiated quickly enough to respond to demand declines, and cannot be stopped without wastage when the economy becomes over heated. Much of current expenditure is also inappropriate because it is not practical or rational to suspend it. For example, it would not be rational health or education policy to hire more medical staff or teachers during a downturn, and lay them off when the economy recovers.

Effective counter-cyclical expenditure could be based on what might be called ‘semi-capital’ programmes, defined as programmes that use relatively simple capital equipment to create rapidly-completed facilities that have a large component of repair and maintenance, similar to what the ILO defines as ‘labour-intensive public works’.¹⁶ Examples of such programmes are digging sanitation ditches, repair of public buildings, environmental improvement through erosion reduction, and clearing of rural footpaths.

While projects should make a contribution to community welfare, their primary purpose is to increase expenditure through the consumption outlays of those employed directly and indirectly. The criteria for selection of the programmes are the following:

¹⁶ See, for example, the ILO website on this type of project, <http://www.ilo.org/public/english/employment/recon/eiip/index.htm>

- 1) they can be identified and ‘stock-piled’ in anticipation of the need to implement them, and accounting procedures designed to reduce the likelihood of corruption;
- 2) they can be easily initiated and quickly terminated, which suggests that they should be implemented by the central government in order to avoid delays due to limited administrative capacity of local governments; and
- 3) wages and salaries should be the major element of expenditure, implying a low capital component.

Some issues which plague public works projects with debate need not be relevant for ones whose purpose is primarily counter-cyclical. For example, the wage at which workers are paid is a secondary consideration because these are not long or even medium term employment schemes. Because they are not primarily employment schemes, the amount of demand they generate is more important and the number of workers they employ. While projects for counter-cyclical demand impact should not pay wages that disrupt local labour markets, their impact on internal migration will be small because of their short term nature.

Finally, and of great practical importance, clear rules should be established for the initiation and termination of counter-cyclical projects to reduce politically motivated use of fiscal policy. Because a ‘counter-cyclical’ expenditure which becomes permanent negates its purpose, initiation and termination could be triggered by a policy rule relating to a relevant macroeconomic indicator. The specific indicator will vary by country, determined by the development and structure of the economy. For example, in South Africa, with its large formal sector and well-developed system of data collection and analysis, indicators like those used in developed countries could be applied, such as quarterly GDP and employment statistics. In a very underdeveloped economy such as Malawi, formal sector employment is low and quarterly GDP statistics, were they collected, would have little relevance because of agricultural seasonality.

Figure 3: GDP growth, five-year moving average, four Southern African countries, 1980-2007

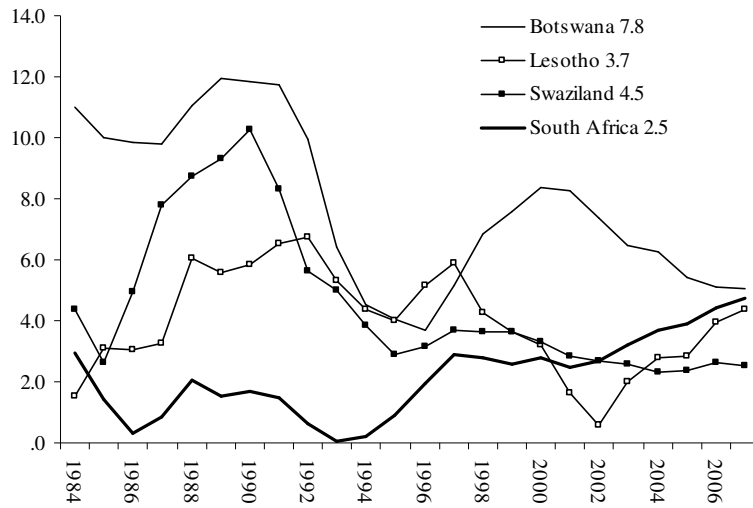


Figure 4: GDP growth, five-year moving average, three East African countries and Mozambique, 1980-2007

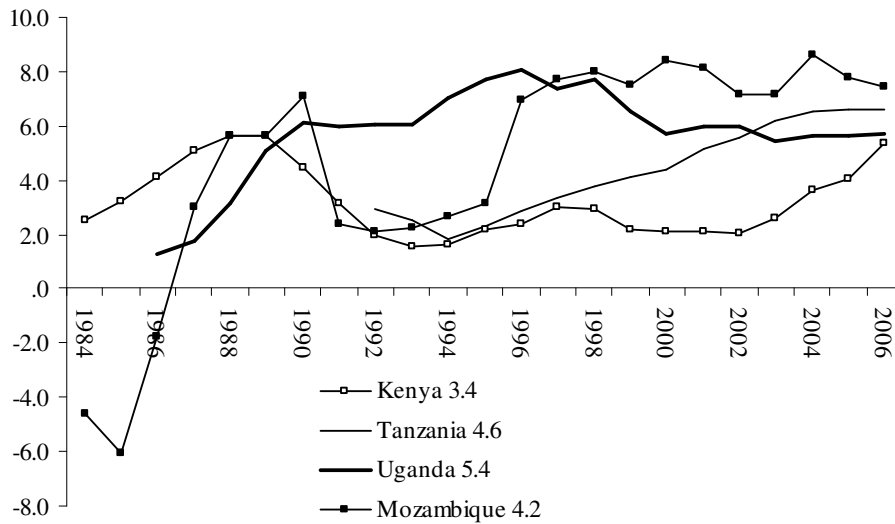


Figure 5: GDP Growth, five-year moving average, four Central African countries, 1980-2007

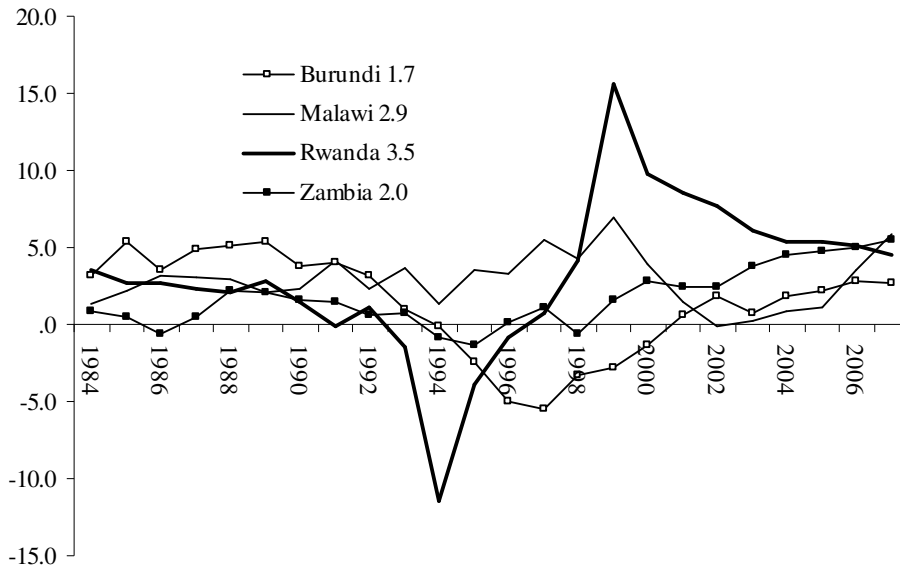
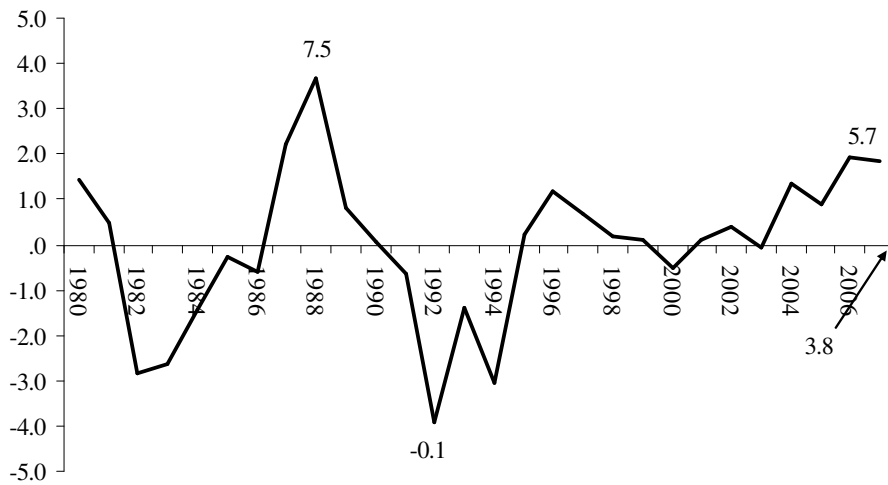
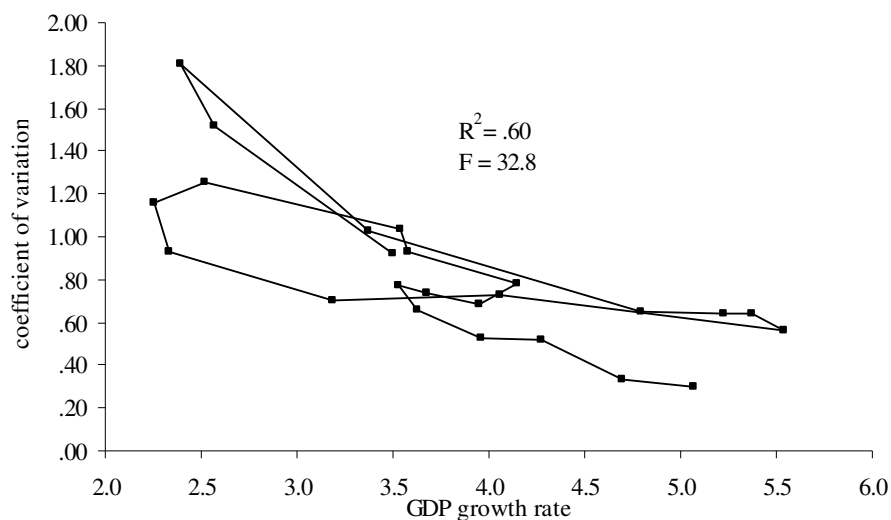


Figure 6: Growth rates for twelve countries, absolute deviation from average, 1980-2007



Note: The numbers on the chart, 7.5, -0.1 and 5.7, are the averages for the year. The number with the arrow is overall average, 3.8.

Figure 7: Growth rates and their variation, 12 countries, 1980-2007



Notes: The growth rate is the five year moving average by country, averaged across eleven countries (Botswana, Burundi, Kenya, Lesotho, Malawi, Mozambique, South Africa, Swaziland, Tanzania, Uganda and Zambia). Rwanda is excluded from this chart because of the extreme values during 1993-1996. Variation is measured as the coefficient of variation (standard deviation divided by the mean). With a five year average, there are 24 observations.

Table 18: Dependent variable: Annual Rate of Inflation, 12 countries, 1992-2007

Variable	Coefficient	T-stat	Sig@
Constant	.325	19.22	.000
Ln[SDgrw]5y	.011	2.20	.029
Ln[NER]t-1	-.050	-1.79	.076
Ln[RCBR]t-1	-.656	-14.84	.000
Ln[DDfct]t	-.084	-1.12	.263
Botswana	-.208	-11.76	.000
Burundi	-.204	-11.55	.000
Kenya	-.152	-8.84	.000
Lesotho	-.203	-11.67	.000
Malawi	-.038	-2.19	.030
Mozambique	-.170	-8.77	.000
Rwanda	-.229	-11.16	.000
South Africa	-.202	-11.28	.000
Swaziland	-.198	-9.97	.000
Tanzania	-.233	-10.01	.000
Uganda	-.186	-10.10	.000
Adjusted R-sq =	.825	DF =	126
F-stat =	39.53	@.000	

Notes: The variable are stable.

Ln[SDgrw]5y is the five year moving standard deviation of the growth rate, t-4 to t=0.

Ln[NER]t-1 is the percentage change in the nominal exchange rate lagged one year (appreciation is an increase)

Ln[RCBR]t-1 is the real central bank rate, lagged one year.

Ln[DDfct]t is the fiscal deficit without grants as percent of GDP, current year.

In this case Zambia is the omitted country.

Table 19: Dependent variable: Annual investment share in GDP, 12 countries, 1992-2007

Variable	Coefficient	T-stat	Sig@
Constant	.150	20.68	.000
Ln[grw]5y	.306	2.44	.016
Ln[RCBR]t-1	-.049	-3.28	.001
Ln[DDfxct]t	-.181	-1.33	.187
Botswana	.053	4.22	.000
Burundi	-.083	-6.78	.000
Lesotho	.239	21.61	.000
Malawi	-.038	-3.29	.001
Adjusted R-sq =	.799	DF =	155
F-stat =	92.77	@ .000	

Ln[grw]5y five year moving average growth rate, t -4 to t=0.

Ln[RCBR]t-1 is the real central bank rate, lagged one year.

Ln[DDfxct]t is the change in the fiscal deficit without grants, current year.

Non-significant country binaries omitted. Zambia was the excluded country.

4 Policies to enhance commodity revenues

For all developing countries a policy challenge is how to enhance revenues from the exploitation of natural resources, and direct these toward development objectives. At the same time, these revenues need to be managed in a way to prevent negative impact on the domestic economy, such as so-called Dutch disease effects, excess liquidity and inflationary pressures. Enhancing this type of revenue is especially important for the sub-Saharan region, because of the limited ability to raise revenue from the manufacturing sector because of its small size, as discussed above.

However, the competition among governments of the region to attract foreign investment has led governments to offer potential investors concessions that have severely limited potential revenue. The excessive use of concessions is not limited to mineral rich countries, though it is most obvious in such countries. Beginning in the 1980s, a policy orthodoxy developed that placed overwhelming emphasis on the quantity of foreign investment a government could attract into its country, rather than on the quality of that investment.

Implicitly or explicitly, the success of governments in encouraging foreign investment came to be measured by how much was attracted, which is contrary to the most basic principles of policy rationality. The fundamental principle is that foreign investment is sought by a government for the net benefits it would bring to the

country, which requires an assessment of costs and benefits.¹⁷ There is a standard method for measuring these net benefits, which tend to vary across countries.¹⁸ For fiscal policy, the most important aspect of foreign investment is the net effect of tax and other revenue-related concessions.

Unless the investment generates externalities that cannot be realised by the investors through the market, concessions for foreign investors have no economic justification. When externalities exist, the technically appropriate level of concession is justified, but there is no justification for restricting the concessions to foreign operators. To offer to foreign operators what domestic firms cannot have creates a number of obvious distortions. First, it is discriminatory. Second, and of great practical importance, the discriminatory concessions discourage domestic private sector development, by making foreign operators more profitable for a similar activity.

With regard to revenue, the common form of direct taxation for businesses is a corporate tax. Other mechanisms to tax such companies are trade, capital gains and VAT taxes. Reduction of these taxes is commonly used to attract foreign investment, though a rigorous assessment of the cost and benefit of tax concessions is rarely made. In general, tax experts argue that the lost revenue of tax incentives can quickly exceed the benefits of increased investment. (Himes 2008)

To render this discussion concrete, two cases are briefly presented, Zambia and Tanzania, whose governments suffered substantial revenue loss from excessive concessions. Also considered is a country that achieved a better outcome in its arrangements with foreign investors, Malawi. In the late 1990's due to low copper

¹⁷ THE OECD gives the following list of potential costs of foreign investment:

Potential drawbacks include a deterioration of the balance of payments as profits are repatriated (albeit often offset by incoming FDI), a lack of positive linkages with local communities, the potentially harmful environmental impact of FDI, especially in the extractive and heavy industries, social disruptions of accelerated commercialisation in less developed countries, and the effects on competition in national markets. Moreover, some host country authorities perceive an increasing dependence on internationally operating enterprises as representing a loss of political sovereignty. Even some expected benefits may prove elusive if, for example, the host economy, in its current state of economic development, is not able to take advantage of the technologies or know-how transferred through FDI. (OECD 2002, 6)

¹⁸ To quote from an OECD report on foreign investment,

[T]he benefits of FDI do not accrue automatically and evenly across countries, sectors and local communities. National policies and the international investment architecture matter for attracting FDI to a larger number of developing countries and for reaping the full benefits of FDI for development (OECD 2002, 5).

prices, a large international debt and pressure from the IMF and the World Bank, Zambia privatised its copper mining industry. Over three years of negotiation, the government divided the state company into seven groups, and sold them to multinationals while retaining a small share in each. The government granted generous tax concessions within binding agreements for up to twenty years, during which the general royalty (tax) rate was set at less than one percent of declared profits.

Though the government held a small share in each company it received no dividends (Bova, 2008). During the 2000s, public revenue amounted to twelve million British pounds sterling out of revenues of UK£2 billion of copper production. (Christian Aid, 2008). Because of the low royalty rate, during the copper price boom that began in 2005, the government gained little revenue benefit (see Weeks *et. al.* 2006, and Weeks *et. al.* 2007). In 2008 the government sought to raise the royalty rate to three percent and announced the introduction of ‘windfall taxes’ linked to the increase in copper prices. Even should the mining owning companies did accept these proposals, the falling copper price meant that the government had missed an opportunity for substantial revenue gains.

In the 2000s, Tanzania was the third largest gold producer in Africa, with gold accounting for more than ninety percent of mineral exports. The government sought to attract foreign private investment with the support of the international financial institutions. After extended negotiations, the government signed contracts with two major mining companies, the British-South African AGA and the Canadian Barrick Gold Corporation, which took control of six of the largest gold mines in the country. The concessions offered to the companies, presented in Table 20, resulted in a significant loss of potential revenue.

During the 2000s, royalties from gold averaged £8.8m per year and all other taxes were about UK£3 billion (Christian Aid 2008). Government suspicions about the accuracy of reporting by the corporations led to hiring of external auditors in 2003, who concluded that four of the biggest mining companies had over-declared losses; i.e., falsified their reports. Despite the low level of royalty fees, the mining companies apparently minimised their tax liabilities by inflating losses, with the resultant revenue losses. The revenue losses for the Tanzanian government were

estimated to be more than US\$ 400 million during the 2000s (Lissu 2008).¹⁹ In 2007 the fourth government review of contracts recommended a range of changes to mining and fiscal laws, which had not been implemented by early 2009.²⁰

When the Malawian government recognised there was foreign interest in the uranium reserves of the country, it reviewed the unsuccessful privatisation experiences of neighbouring countries in order to avoid similar mistakes. As a result, the government achieved agreements with mining companies involving substantial public income. For the first three years of uranium production, the agreed royalty was 1.5 percent and at three percent subsequently. More important for revenue, the corporate tax was set at 27.5 percent,²¹ and the government retained a fifteen percent equity holding.

These briefly presented examples indicate the substantial flexibility that governments have in negotiating with foreign investors, and carry several lessons:

1. Malawi demonstrates that low revenue capture is not a necessary condition for successfully attracting foreign investment in natural resources;
2. Zambia's experience shows that unconditionally granted concessions can have a very high opportunity cost to the public sector; and
3. natural resources can generate substantial public revenue, if a rigorous cost-benefit analysis is made of all aspects of contracts under negotiation and acted upon.

¹⁹ Furthermore, it is argued that the existence of these TNCs in Tanzania is not causing any positive spillovers to the infrastructure around the mining areas nor to the wages and allowances of their local staff.

²⁰ In 2005, the president committed to review all mining contracts and make the necessary adjustment to ensure that the country benefits from its natural wealth.

²¹ After the first agreement several CBOs raised the issues of environmental threats that the mining of uranium implied and the lack of measures in the agreement to safeguard the environment and people of Malawi.

Table 20: Concessions to gold mining companies in Tanzania

Tax concessions	Import & duty concessions	Other concessions
Right to deduct 100% of capital expenditure from taxable income in the year in which it is incurred	5 % import duty on spare parts for first year and 0% after	Allowed to keep accounts in \$US
Right to increase claim on capital expenditure by 15% (annual) if companies declare taxable loss	Exemption from VAT on imports and local supplies of goods & services	Rights to repatriate 100% of profits
Royalty rate of 3% on exports	0 % import duty on capital goods and fuel	100% guaranteed ownership of mines for foreign firms
If cash operating margin falls under 0, royalty payment can be deferred	Reduction from a initial 4% to max of 0.3% of stamp duty on buying shares or property	Right to employ unlimited number of foreign nationals
Exemption from capital gains tax and if operating at a cash loss, exemption from corporation tax of 30% of profits		Losses not 'ring-fenced' within the country, allowing companies to combine cost and income of different mines when calculating tax liability

Source: Christian Aid (2008).

5 Fiscal policies to enhance private saving

5.1 Saving in a low-income country

Fiscal policy can play an important role in meeting the major challenge of raising domestic saving and investment in sub-Saharan countries. Although savings rates in middle-income countries and some energy exporters are relatively high, the rates for low-income countries are low. Brief reference to economic analysis and empirical evidence tells one that this difference should be expected.

Private saving in every economy derives from the profits of businesses and the decisions of households. In the US economy, the saving of households exceeded ten percent of personal income in only eight years from 1959 to 2008, and was less than one percent in the latter year. In most years, even before household saving began to fall sharply in the 1990s, business profits exceeded personal saving, and were almost nine percent of GDP in 2008 (US Office of President 2009, Tables 28 and 32). A substantial portion of personal saving in the US national accounts is principle payments on home mortgages, and does not contribute to investment in plant and equipment.²² Even in developed countries that have higher personal saving rates than

²² 'Personal saving is equal to personal income less personal outlays and personal taxes; it may generally be viewed as the portion of personal income that is used either to provide funds

the United States, business investment is the major source of private investment. As discussed above, the ‘business sector’ in sub-Saharan countries is typically quite small, so business profits are correspondingly small.

For households saving is consumption deferred or postponed.²³ Other things equal, the lower a household’s income the greater will be the opportunity cost of postponing consumption. Because many of the countries of the sub-Saharan region are among the poorest in the world, one would expect household saving rates to be quite low. An IMF study in 1995 concluded that household saving in the sub-Saharan region was insensitive to the policy instruments available to governments.²⁴

For Africa south of the Sahara as a whole, domestic saving, public and private, as a ratio to GDP averaged almost twenty-four per cent during 2005-2007, substantially higher than during 1997-2002 (see Table 21). This average hides considerable diversity. The domestic savings rate of seven sub-Saharan oil-exporting countries, generated primarily by foreign corporations, was almost forty per cent during these years. For eight middle-income countries, e.g., Botswana, Namibia and South Africa, the average saving rate was about 19 per cent. These two groups pushed up the regional average, and much of the overall increase in the domestic savings rate between 1997-2002 and 2005-2007 can be attributed to increased saving in the oil exporters; in other words, to profits of petroleum enterprises.

For fifteen low-income countries which were not regarded as ‘fragile states’, the average savings rate was only ten per cent. For the remaining grouping of 14 countries, overwhelmingly low-income and classified as fragile states, the average was 8.3 per cent during 2005-2007. In 1997-2002, this latter group had a cross-country average saving rate of over fourteen per cent.²⁵

to capital markets or to invest in real assets such as residences’ (US Department of Commerce 2008, page 2-6).

²³ This is true in the aggregate if the economy is at full capacity. If increased expenditure generates increased output, the multiplier process creates new saving.

²⁴ ‘Raising real interest rates has been cited as a way to increase private saving, and thus provide the resources for growth. But this may not be a viable approach in the poorest developing countries in which most people live at subsistence level. In these situations, consumption is not very responsive to fluctuations in real interest rates and financial liberalization may not be the catalyst to higher saving rates.’ (Reinhart and Ostry 1995)

²⁵ The household saving part of this percent is almost entirely imputed in the low-income sub-Saharan countries, and a substantial component the by-definition counterpart of investments that are not monetised such as the clearing of new land and construction of farm buildings.

Concerted measures need to be undertaken to improve the investment rate in sub-Saharan Africa. This will not be done through an increase in the personal saving of the vast majority of households, because of their low incomes. However, fiscal policy can have a significant influence on domestic saving both directly and indirectly. Since public investment can help build economic and social infrastructure and stimulate private investment, fiscal policy has a decisive effect on generating long-term growth. As incomes rise, saving rates should also increase.

Fiscal policy can also directly affect the capacity of a country to save and invest by strengthening the domestic financial institutions into which wealthy households and business can direct their deferred consumption. Almost without exception, low-income countries have weak financial institutions or have financial sectors that are dominated by a small set of foreign banks unwilling to undertake broad-based lending.

Banks in sub-Saharan Africa tend to hold excess liquidity, charge high lending rates of interest and prefer short-term, risk-free government securities. They are not inclined to engage in long-term development-oriented lending at moderate rates of interest (Stallings and Studart 2006). It is such forms of development finance that low-income countries in Africa need in order to expand public and private investment. African households are also reluctant to hold their wealth in the form of financial saving. For the wealthy this may be due to a lack of confidence in banking institutions. Hence, a major contribution of fiscal policy could involve its financing of a deposit insurance system in order to help instil such confidence.

Table 21: Domestic Saving Rates in Africa south of the Sahara, percent of GDP

Group	1997-2002	2005-07
All sub-Saharan countries	18.1	23.8
Oil Exporters	28.2	39.9
Middle-Income	19.3	19.3
Low-Income	7.1	10.0
'Fragile' States	14.4	8.3

Note: A 'fragile' state is defined by the World Bank as 'unable to provide physical security, legitimate political institutions, sound economic management and social services for the benefit of its population'.

Source: IMF 2008, Table SA7.

5.2 Improving development finance

The major approaches used to strengthen domestic financial institutions can be organised into three categories. The first would be to improve the market incentives of financial institutions to mobilize saving and channel it into public and private investment. The second approach would be to link formal financial institutions with informal financial institutions in order to broaden the base for both saving and lending. The third approach would be to revive or rebuild public institutions, such as agricultural banks or development banks. All three presume the existence of saving to be mobilised, which would not apply to the vast majority of households.

If governments choose to rely on market incentives, it could provide public guarantees for a proportion of the loans offered by commercial banks. Such loans could carry a lower rate of interest. In return, borrowers would be held accountable for repaying such concessional loans. This would require borrowers to supply collateral and institute monitoring and performance targets. Borrowers could also be required to deposit part of the loan in an escrow account, which would be returned to them upon repayment of the loan.

The parameters of such loans could be adjusted to ensure that the government does not bear a substantial fiscal burden through guaranteeing them. A recent UNDP-supported study of South Africa calculated that if one quarter of domestic investment were financed by such loans, if the government guarantee covered only three quarters of each loan, and if the default rate were fifteen per cent, the government would face a cost of only one-to-two per cent of its annual budget (Pollin *et al.* 2006). South Africa is a middle income country, so the design of such a programme would require some modification for low-income countries.

An alternative approach, which could achieve similar objectives, would be to institute differential asset-based reserve requirements across economic sectors. Such requirements would enable the government to motivate banks to lend to sectors that had strong growth or employment potential. For such loans, banks would be required to hold a smaller proportion of their assets as required reserves, held in non-interest bearing deposit accounts at the central bank. Providing such latitude would enable banks to provide more lending to designated sectors.

Differentials in reserve requirements have been used to correct sectoral imbalances in investment, i.e., diminishing loans to sectors with over-investment or

increasing loans to sectors with under-investment. A complement to such positive incentives could be disincentives, or explicit restrictions, on lending to certain sectors or economic activities. Some countries have established, for example, ceilings on the percentage of bank loans that support 'non-priority' activities, such as real estate, securities trading and off-shore investments.

Banks in underdeveloped economies often prefer to hold short-term government securities because they are risk-free and pay a relatively high rate of interest. As a result a significant proportion of public revenue goes finance interest payments that have little relationship to public investment. To address this problem a government could develop a market for public bonds which would have longer maturity and lower interest rates. Such bonds would be more suited to finance public investment in infrastructure, which requires a longer-term commitment of funds. Also, such bonds would help avoid the common problem of a mismatch of revenues that are generated only over the medium term and liabilities that come due in the short term. Such a mismatch exerts significant pressure on government budgets. If lowering the average interest rate is a priority of the government, it could enhance the competitiveness of the process by which its debt is marketed. One such method would be to institute public auctions of securities.

5.3 Linking formal and informal institutions

A second important measure to strengthening domestic resource mobilisation would link formal and informal institutions. Although commercial banks may have excess liquidity, they may be reluctant to lend because borrowers are perceived as risky or transactions costs are high. Rotating savings and credit societies may have more accurate information on borrowers' risks and operate with lower transaction costs.

However, these non-corporate institutions lack the resources for extensive lending. A similar problem confronts many micro finance institutions and other small-scale financial institutions. To link institutions successfully, only well-established informal lenders, such as recognized lending associations, cooperatives or credit unions, should be involved in such programs. Linking commercial banks with such institutions would also require formulating a broader regulatory framework that

could incorporate informal institutions. This linkage might also provide a mechanism for constraining usury in informal markets.

If these two sets of institutions were linked in partnership, there could be improved opportunities for both channelling saving to investment. If more private saving could be drawn from lower-income households, it could be monetized and more loans extended to small-scale entrepreneurs and businesses. Commercial banks could increase their deposit base and informal credit institutions could extend more loans to low-income borrowers.

5.4 Public Finance Institutions

A third major approach to enhancing the capacities of financial institutions, particularly for directing credit to sectors with considerable growth and employment potential, is to revive public financial institutions. One such institution would be Development Banks, which before the 1980s were common in Africa and other developing regions. Despite reported inefficiencies, these banks often effectively performed the essential function of mobilizing and allocating long-term, investment-focused development finance. Domestic commercial banks have been unwilling to undertake such a function, particularly in the wake of financial liberalization.

Development banks were publicly financed and managed in Brazil, the Republic of Korea and Japan. They could also be organized as a public-private partnership, which could raise capital on international markets. Historically, such institutions have been the spearhead of industrial policies and public investment programs that have been critical to the accelerated growth of 'late developing' countries. Where they have been successful, they have harnessed substantial domestic financial resources for development objectives.

Their success was often explained by the support of 'developmental' central banks. Prior to the global crisis of the late 2000s, the reigning orthodoxy was that central banks should focus on a narrow range of stabilization goals using a narrow range of instruments, the short-term interest rate and the money supply targets. Before this orthodoxy gained general acceptance, central banks in many developing countries played a developmental role, helping development banks promote sectoral and industrial development, and enabling governments to foster more rapid economic growth (Epstein and Grabel 2007). In China and India, for example, the central bank

was linked to the planning apparatus in order to facilitate the allocation of medium and long term credit to industrial sectors. Consistent with the view that short term monetary policy is only one part, and not necessarily the important part, of economic policy, central banks were not established as independent institutions.

Another public institution to consider strengthening is agricultural banks. Prior to the neoliberal orthodoxy they offered an extensive network of rural outlets in many countries that could draw in saving from rural households and extend agricultural loans. Commercial, urban-based banks had little interest in engaging in the financing of agricultural activities since they were regarded as being too risky. But financial liberalization swept away much of the rural infrastructure associated with agricultural banks. A third public institution that could usefully be built up and expanded is postal savings banks. Since postal offices represent, in many cases, a widespread institutional network in rural areas, they represent a promising basis on which to build the capacity to mobilize small-scale household saving.

5.5 Investing in institutional capacity

Implementing any of the three major approaches outlined above would require a substantial commitment of public resources. These resources could be regarded as financing investment in institutional capacities. Since such capacities would eventually enable the mobilization and allocation of a greater pool of domestic resources as growth increased, the corresponding investment could have a relatively high social rate of return.

A similar logic could apply to how Official Development Assistance might be deployed. Many African countries will remain reliant on ODA for the foreseeable future, particularly during the current period of global crisis and recession. But the medium to long-term goal of such external assistance should be to progressively diminish such aid reliance. There is a compelling case for directing ODA towards strengthening domestic financial institutions as suggested above. In conjunction with helping governments to mobilize more domestic revenue, assisting financial institutions to mobilize more savings would contribute in a critical way to eventually eliminating aid dependence.

6 Enhancing the effectiveness of fiscal policy for domestic resource mobilisation

The analysis of revenue performance in East, Central and Southern Africa indicated that revenue generation was significantly related to the level of income per capita and economic growth. A low level of income per capita is a major constraint on raising domestic revenue primarily because it reflects the underdeveloped economic structure of low-income countries. Such a structure usually contains large agricultural sector and informal sectors. Formal-sector employment is customarily available to only a small minority of the workforce. As economic growth increases, revenue should rise as a ratio to GDP as the structure of employment shifts from agriculture to non-agriculture and from informal to formal employment.

Important as it is, growth alone cannot explain revenue performance. The regression that underlined the importance of income per capita and economic growth also showed a great range of revenue shares across countries. This suggests that revenue could be substantially raised either through increased tax rates or more effective tax administration. Much of the recent discussion in the international development community has focused on the need to 'scale up' ODA in order to promote growth and development in low-income countries, and especially in the Least Developed Countries. This has been linked to the Millennium Development Goals and MDG-based national development strategies. However, much less attention has been paid to mobilizing domestic revenue even though this is widely recognized as the primary aspect of long-term financing of development.

The conventional wisdom on taxes has shifted in the last twenty years. Instead of being regarded as a funding mechanism for development, taxes are treated as a disincentive to private sector initiative and a reduction from household welfare. The emphasis has been on the loss of private income, but not on the ensuing benefit of revenue-financed public expenditures and investment.²⁶ Concern for an equitable structure of taxation has also receded, with emphasis placed on the negative incentive effects on so-called wealth creation of progressive personal and corporate taxes. In terms of policy, rates on personal income and corporate profits have fallen and the

²⁶ Into the late 1970s the standard assumption in the public finance literature was that public revenue was matched by an equal public benefit from the services the revenue financed (see Musgrave and Musgrave 1973).

spread of rates reduced in the Anglo-Saxon countries, a policy approach simultaneously pressed upon governments of developing countries.

Trade taxes have also fallen into disrepute, and governments were urged to become increasingly 'open' to trade and financial flows by radically reducing or eliminating tariffs. Since trade taxes and taxes on corporate taxes have represented two of the most reliable sources of revenue for governments in low-income countries, their reduction has exerted strong pressure on governments to find alternative sources of revenue.

Conventional tax advice highlighted value-added taxes (VATs) as the chief means to recover losses from trade liberalization and the lowering of rates on direct taxes. This approach was consistent with 'supply-side' tax analysis that lowering rates on direct taxes will expand the base by encouraging more households or businesses to pay taxes. However, there is a lack of persuasive evidence of a correlation between lowering rates and expanding the tax base. In the context of low-income countries, the VAT is unlikely to be as efficient as in developed countries, in part because of the need for extensive book-keeping and a large informal sector. Experience suggests that when the VAT was introduced across many developing countries, it did not significantly boost revenue from the levels achieved by previous indirect taxes, such as sales taxes (Roy and Weeks 2004). Nor has it compensated, in many cases, for the losses incurred from reducing or eliminating tariffs.

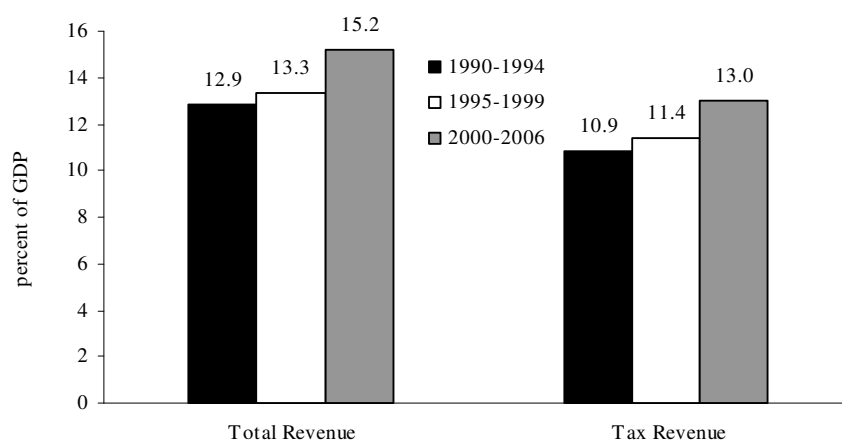
We can consider the impact on the revenue structure of low-income countries in the sub-Saharan region of such tax reforms. To examine this issue, we collated revenue data from the IMF for twenty-six low-income countries, taken directly from the Statistical Appendices of Article IV Agreements for the early 1990s to the mid 2000s. The data are grouped into three periods in order to identify broad trends: 1990-1994, 1995-1999 and 2000-2006.

The focus is on low-income countries because the data indicate that revenue mobilisation has been the slowest and most difficult in these countries, as suggested in the first section. The countries include a number of low-income countries that the IMF would regard as 'fragile countries'. Their revenue performance has been more erratic, falling during crisis periods then recovering, sometimes rapidly. The country sample does not include middle-income countries and some of the prominent oil exporters. Including these countries would produce a ratio of revenue to GDP of twenty-five per cent or more, significantly above the sub-Saharan average.

Although the IMF supplied data on total revenue for countries in the sub-Saharan region that cover 2007, and even estimates for 2008, these are not used because it is not possible to separate tax revenue from non-tax revenue or disaggregate revenue into its major components (see IMF 2008). We note that the IMF data indicate that revenue shares in GDP rose in 2007 and 2008. There appears to have been an upward trend in total revenue in the mid-to-late 2000s compared to estimates for earlier periods. This trend is likely to have been heavily influenced by a rise in commodity-related revenue (Gupta and Tareq 2008), thus unlikely to continue. Our own estimates appear to be in line with those of the IMF study of Gupta and Tareq, which investigated the same period, through 2005-6.

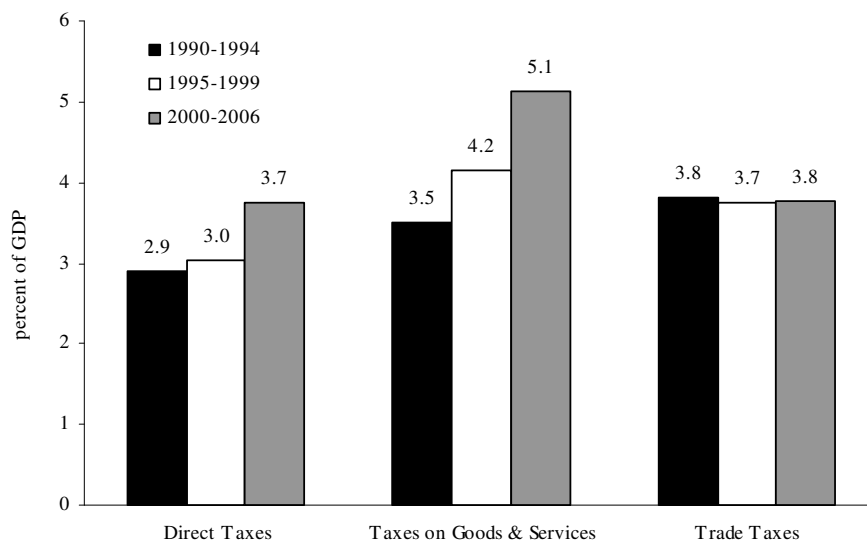
During 1990-1994, average total revenue was 12.9 percent of GDP. By 1995-1999, it had risen to only 13.3 percent. During 2000-2006 it increased to 15.2. This represented an overall increase of the revenue share of eighteen percent, most of it in the 2000s. Average total tax revenue during 1990-1994 was 10.9 percent of GDP, only slightly higher at 11.4 for 1995-1999, and rose to thirteen percent during 2000-2006. Tax revenue increased as a share of GDP, but any trend was weak. To investigate further, we disaggregate total tax revenue by its three main components to help explain what accounted for the modest increase in tax revenue over the period under review. Any residual percentages are accounted for by ‘other taxes’. Indirect domestic taxes (taxes on goods and services) rose, from 3.5 percent of GDP during 1990-1994 to 4.2 during 1995-1999, and then to 5.1 for 2000-2006.

Figure 8: Total revenue and tax revenue in 26 sub-Saharan countries, 1990-2006



Source: Calculations by Katerina Kyriili from the annexes from IMF country reports..

Figure 9: Major tax categories, 26 sub-Saharan countries, 1990-2006



Source: Calculations by Katerina Kyrili from the annexes from IMF country reports..

Direct taxes on personal income and corporate profits rose less than indirect domestic taxes, increasing from 2.9 percent of GDP during 1990-1994 to three percent in 1995-1999, and then to 3.7 during 2000-2006. Trade taxes stayed almost the same over the whole period. During 1990-1995, they were 3.8 percent of GDP, higher than either direct taxes or indirect domestic taxes. By the late 1990s, they declined slightly to 3.7, and during 2000-2006 rose to 3.8. Given the difficulties in measuring GDP in these countries, these changes are insignificant.

During 2000-2006, trade taxes accounted for twenty-nine percent of tax revenue, down from a 34.9 in the early 1990s. By contrast, indirect domestic taxes rose from a 32.1 percent of total tax revenue in the early 1990s to a 39.2 in the 2000s. Direct taxes rose only marginally, from a 26.6 percent share to twenty-eight percent. Between the early 1990s and late 1990s, both direct taxes and trade taxes were stagnant. Only domestic indirect taxes showed any increase, from 3.5 to 4.2 percent of GDP. We should place these tax statistics within the general context of trends in growth and trade. Between the early 1990s and late 1990s, trade did not increase significantly, either for imports or exports. Imports increased substantially between the late 1990s and mid-2000s, from 30.5 to 36.5 percent of GDP. For the same periods, exports rose from twenty-one to 24.3 percent of GDP, with the trade deficit

actually increasing. If trade taxes remained the same, the stagnation in the share of trade taxes thus implies that tariff rates or coverage fell.

Growth of GDP also increased between the early 1990s and the late 1990s, and more so from the late 1990s to the 2000s. While the growth rate of GDP was less than one percent for our countries during 1990-1994, it rose to 4.3 during 1995-1999, and then 4.7 during 2000-2006. For the three years 2004-2006, growth achieved 5.6 percent. One would have expected indirect domestic taxes to increase more than they did, based on increases in expenditures as national income rose. The sluggish increases in direct taxes do not appear to match the faster increases in incomes, particularly during the transition from the late 1990s to the 2000s. This apparent anomaly was probably the result of 'reforms' that reduced rates for direct taxes, especially on corporate profits.

During 2000-2006 both growth and trade increased compared to the 1990s, yet revenue performance was weak. One would have expected recognition of this weakness in the IMF study that examined tax data only from 1990 to 2000 (Keen and Simone 2004). The IMF study covered all low-income countries, not just those in sub-Saharan Africa. The value of this study is that it anticipated some of the trends in tax structure that continued into the mid-2000s. In low-income countries in general, the study found that tax revenue rose from 14.5 percent of GDP to only 14.9 during period. The level of direct taxes was stagnant, 3.8 percent of GDP in 1990, 3.9 percent in 2000. Indirect domestic taxes rose modestly, from 5.3 of GDP to 5.9, while trade taxes fell from 4.3 to 3.7 of GDP.

When the IMF study disaggregated the main categories of taxes, it found that corporate taxes had fallen (from 2.6 to two percent of GDP), which is consistent with the 'reforms' to cut tax rates. Revenue from personal income taxes rose, from 2.8 to 3.5 percent of GDP. Revenue from property taxes, a form of revenue generation often neglected, was miniscule, declining from three-tenths to two-tenths of GDP.

Within indirect domestic taxes, revenue from sales taxes and VAT rose slightly from 2.8 percent of GDP to 3.5. Excise taxes, the other main component of indirect domestic taxes, showed almost no change. As the VAT rose to prominence, excise taxes were relatively neglected as a source of revenue. The IMF results suggest stagnation in total tax revenue during the 1990s. This finding is consistent with our results. While statutory rates for corporate taxes were dramatically reduced, the IMF study finds that the tax base did not increase as supply siders would hope.

Indeed, it decreased and corporate taxes fell. This fall reflects a broad tendency of international competition, 'race to the bottom', to lower rates in the hope of attracting foreign investment.

The IMF study concludes that the VAT was 'effective', but its efficiency gains in comparison to previous sales taxes were not substantiated, especially in sub-Saharan countries. An earlier IMF study had found that in low-income countries, the VAT did not compensate for the loss of trade taxes, contrary to orthodox expectations (Baunsgaard and Keen 2003). VAT was found in practice to recover only about thirty percent of the revenue lost in low-income countries from lowering trade taxes. The Keen and Simone study concludes that in many developing countries, especially low-income and least developed, further trade liberalization would reduce revenue. Consequently, there would be a greater need to sequence the reduction of tariffs with the introduction and strengthening of the VAT. With VAT introduced in many countries, the study notes that the tasks were to improve its design and strengthen its administration. The Keen and Simone study cautions against the widespread view that tax rates on corporate profits should be lowered. These results point toward several tax policies that low-income countries in sub-Saharan Africa could be advised to follow.

First, governments should delay reduction of tariffs until domestic indirect and direct taxes are able to substantially boost revenue. Increases in imports, as mentioned above, should have increased revenue from trade taxes. It is a cause of concern from a public finance perspective that tariffs might fall more in the future as countries join free trade areas and customs unions or global recession affects trade flows. Since trade taxes account for a significant share of tax revenue, the revenue losses from further liberalization, especially under conditions of declining trade, could be substantial.

Second, domestic indirect taxes need to increase at a faster rate than hitherto has been the case. Reducing VAT exemptions could contribute to this. Raising VAT rates for luxury consumption items would also augment revenues as well as enhance the equity of the tax structure. Such a change in policy would help shift some of the tax burden to higher-income households during the global recession, for example by increasing taxes on alcohol, tobacco and vehicles. Such taxes were relatively neglected during the introduction of the VAT. Simultaneously, governments could keep tax rates low on commodities of mass consumption. This would imply

instituting in compensation higher levies on consumption of luxuries or non-essential items.

Increases in revenue from direct taxes have been too small. Wealthy taxpayers, who account for most direct tax revenue, could be covered more effectively. This would improve equity without the necessity of raising rates. Establishing special units in the ministry of finance of high-income taxpayers has produced some significant results in some countries. As shown in the previous section on commodity taxation, reducing 'tax holidays' and exemptions for corporations would also increase revenue. Governments should halt their participation in the self-defeating international competition to lower rates on corporate profits. Doing the same for personal income taxes would also make sense.

Statutory rates for the corporate income tax fell significantly in sub-Saharan Africa in the 1990s, with the result that the revenue from this source either remained unchanged or fell as a share of GDP. The supply-side prediction of an increase in the tax base did not occur. Further declines in rates on corporate profits should be resisted. In cases in which corporate profits have are based on extraction of natural resources, there is a case for raising rates on taxes and royalties. Governments of low-income countries should also reconsider the widespread policy of exempting high-income expatriates from paying income taxes. This exemption creates an unfortunate demonstration effect for high-income nationals that it is legitimate for them avoid taxes.

A neglected mechanism in low-income countries has been property taxes, which could finance local governments. Such taxes typically apply to urban areas, where most of the rich and middle-class are concentrated. This implies that strengthening such taxes would help make the general tax structure more progressive. These taxes could help boost domestic production because they can finance the urban infrastructure on which many countries' manufactured export sectors rely. Some analysts argue that concentrating on property taxes will not produce substantial results because of the need for property registration. This argument could well operate in the reverse: stressing the importance of property taxes would elicit greater efforts to create credible databases of property registration. One reason property taxes are under-utilized is that collecting them would require long-term investments in government administration.

As discussed above, there are severe constraints on mobilizing revenue caused by the structural features of the underdeveloped economies of low-income countries. Widespread informality is one such problem. Many informal-sectors enterprises pay negligible taxes. In theory, VAT should tax the final consumption to which such enterprises contribute, provided that they were part of the value chain that produced the consumption item. But the formal bookkeeping that would be necessary to account for their contribution often fails to capture it.

Moreover, small enterprises face a disincentive to become part of the formal economy for they would then become subject to tax. They also face the problem of a lack of access to formal sector credit, training or output markets. One way to bring them into the formal sector and the tax net would be for the government to implement an explicit strategy that provides them with effective incentives. These could include relevant infrastructure investment, support for marketing and distribution and micro credit. Based on enhanced access to such benefits, informal-sector enterprises would have greater motivation to register with tax authorities.

The recent upheaval in international financial markets underscores the importance of instituting some reasonable degree of taxation of the domestic financial sector, especially to regulate speculation. Although capital markets are not well developed in most of sub-Saharan Africa, they are developing rapidly in some countries. Imposing a securities transaction tax, even below one per cent, could raise substantial revenue, and stem speculation and market volatility. Such a tax could cover, for example, equities, bonds, derivatives and government securities. Similarly, a tax on foreign exchange outflows could reduce the volatility of 'hot money', which often contributes to destabilizing a country's exchange rate. An exemption could be provided for values up to a specified limit and for essential imports.

7 The role of ODA in domestic resource mobilization

In the sub-Saharan region substantial inflows of overseas development assistance (ODA) will be critical to the success of attaining long-term growth and development in the context of the deteriorating conditions of global financial crisis and recession. It is unfortunate that ODA has not been directed to priority development objectives, such as building national capacities to mobilize investment

and raise domestic revenue. Consequently, public and private investments continue to languish in the region, where a substantial increase in investment is most needed.

In light of slow growth, it is not surprising that public investment has been in secular decline in sub-Saharan Africa since the early 1980s, falling from about ten percent of GDP to seven per cent in 2000, after having increased from about six per cent in the early 1970s. Until recently, public investment received a low priority among donors of development assistance. Poverty alleviation programmes did not include public investment in the 1990s, except for some projects for social infrastructure. The MDG framework put expansion of public investment back on the development agenda (Weeks and McKinley 2007). Recognition grew that increased public investment could ‘crowd-in’ private investment, instead of ‘crowd it out’. This impact is more likely when the capital stock has deteriorated over decades, as in the sub-Saharan region. Under such conditions, initial investments could have dramatically increasing returns.

As global conditions deteriorate, it is important to maintain some of the development impetus of the MDG agenda, even as fiscal policies concentrate on counter-cyclical interventions. In this context, it is important to try to design ODA to increase domestic the capacity of low-income countries to mobilize domestic sources of development finance. Such an emphasis implies greater concentration on reforming and strengthening domestic financial institutions, that they can more effectively perform the function of not only mobilizing savings but also channelling it into productive investment.

Mobilizing domestic sources of finance also implies greater attention to mobilizing domestic revenue. Instead of dampening the incentives for mobilizing revenue, as some analysts have claimed, ODA can be channelled into strengthening national capacities to mobilize much more. Much of the debate on aid effectiveness has focused on the danger to macroeconomic stability of an aid upsurge that was projected to accompany adoption of MDG-oriented national development strategies. This debate has only served to divert attention to short-term stabilisation issues and neglect how ODA could be reformed to contribute effectively to long-term development.

The 2007 evaluation, ‘The IMF and Aid to Sub-Saharan Africa’ by the IMF Independent Evaluation Office, evaluated the impact of ODA on Poverty Reduction Growth Facility (PRGF) countries during 1999-2005. It found that thirty-six per cent

of ODA allocated to these countries went, at the margin, into reserve accumulation (i.e., was not absorbed), and an equal percentage was used to retire domestic debt (i.e., was not spent domestically). That left only a modest twenty-seven per cent of ODA to finance fiscal expansion, and growth-enhancing public investment in particular. For promoting long-term growth and development, such an allocation is clearly suboptimal.

It is beyond doubt that domestic and external financial liberalization exposed developing countries to financial crises. This necessitated accumulation of reserves to ward off the effects of probable terms-of-trade or capital-outflow shocks. Those that have amassed a stock of reserves are in a stronger position at the onset of a global recession and slowdown in trade. Concentrated mostly in middle-income countries and energy exporters, reserve accumulation was excessive. In practice it channelled financial resources to the United States, instead of being used in developing countries to finance public and private investment.

In addition to the problem of the excessive stockpiling of reserves, the IMF study also found that fifty-eight per cent of the non-reserve financing available for fiscal expansion had been diverted into paying off domestic debt. During the 1990s, when ODA fell, low-income countries resorted to other means to finance government expenditures. Domestic debt was a major option, but short-term relief with high interest payments. Even when ODA rose, a significant proportion of ODA went to debt reduction, Zambia being the most infamous case (Weeks *et. al.* 2006). It is ironic that ODA was, in effect, compensating in the 2000s its relative absence during the 1990s when governments had to borrow.

If paying off domestic debt could have lowered real rates of interest in sub-Saharan Africa, this would have been an important improvement. To the contrary, statistics suggest that interest rates remained high in the sub-Saharan region (Weeks 2008). The share of sub-Saharan Africa countries with real rates of interest higher than six per cent rose in the 2000s to near 80 per cent. Moreover, the spread between deposit and lending rates of interest has remained wide.

Risk is one explanation for wide spreads between borrowing and lending rates. The market power exercised by the small number of large, often foreign-owned, banks that dominate the financial sector in sub-Saharan African countries is another explanatory factor. It is unfortunately the case that as long as such high real rates of interest prevail and interest rate spreads remain wide, there is little prospect for

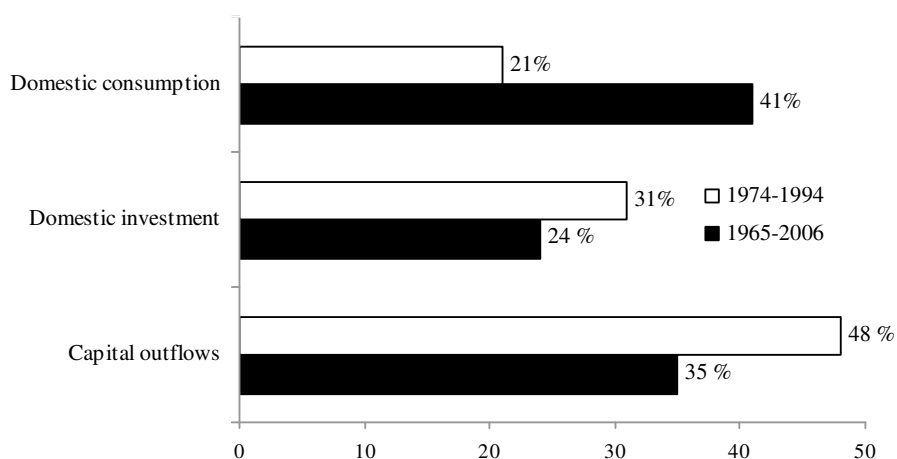
accelerated capital accumulation, which has to be the driving force for long-term growth and development. ODA could play a pivotal role in helping countries break this gridlock by building up the capacity of domestic financial institutions to mobilize domestic savings and direct it to productive public as well as private investment.

Empirical results suggest that ODA does not completely displace domestic savings. When a measure of saving is regressed on a set of independent variables, which usually include income per capita and the dependency ratio as well as ODA, the parameter of the ODA variable ranges between -1 and 0. This implies that ODA is used to boost both consumption, which will lower saving, and investment. However, such regression analysis ignores that a significant proportion of ODA might not be converted into the domestic financing of consumption or investment, but fund debt payments or become capital flight.

A recent study commissioned by the International Policy Centre for Inclusive Growth complements the earlier findings of the IMF evaluation cited above. The study found that a significant proportion of ODA became a reverse capital outflow, for debt payments, accumulation of foreign-exchange reserves, or the private purchase of foreign assets (see Serieux, forthcoming in 2009). Based on panel data for twenty-nine sub-Saharan countries for 1965-2006, the Serieux study finds that thirty-five percent of ODA was converted into capital outflows, while twenty-four percent financed domestic investment, and forty-one percent financed domestic consumption. During 1974-1994, when ODA increased continuously, the percentage of ODA converted into capital outflows rose to forty-eight percent, while thirty-one percent financed domestic investment, and 21 percent domestic consumption.

The study does not develop the policy implications of these results. It is important to do so because ODA should be much more directly tied to the financing of domestic investment, particularly in order to expand productive capacities and generate higher rates of growth. The study speculates that in the 1990s a significant proportion of ODA was being used to finance the payment of principal or interest on external debt (most of it being concessional debt). Subsequently, it appears that ODA was increasingly directed into the accumulation of foreign exchange reserves, as the IMF study of the 1999-2005 period suggests.

Figure 10: Destination of ODA to sub-Saharan countries, 1965-2006



For sub-Saharan countries to mobilize sufficient resources to finance development expenditures and continue making progress towards the MDGs, it would be necessary that current levels of ODA at the least not be reduced. In addition, because many low-income countries are facing heightened risks on their remaining debt, more debt relief is required. Providing such relief is not likely to have a significant immediate impact on the budgets of donor countries. Further debt relief should not be substituted for additional ODA, nor should additional ODA be used to substitute for debt relief.

Since a portion of ODA is also for the private purchase of foreign assets, it is important for governments to institute management of the capital account in order to safeguard the resources that are made available for domestic investment. As discussed in a subsequent section, ‘capital flight’ poses a serious problem in low-income countries, making management of capital outflows a priority. Whatever the proportion of ODA used for consumption or investment, it is important to press for a number of reforms in the allocation of ODA. In conjunction with the rise of national poverty reduction strategies, the donor community has skewed ODA more towards the social expenditure, health and education in particular. In the process, ODA financing of essential economic infrastructure has been in decline.

It is a mistake to consider ODA financing of social infrastructure as in competition with ODA financing of economic infrastructure. The MDG agenda should build a consensus for increasing public investment in both areas. Nevertheless, it is true that economic infrastructure has been under-funded by western donors for at least two decades. Without such infrastructure, economic growth is

unlikely to accelerate to the levels necessary to generate the public revenue needed to finance both social services and economic services.

It is well-documented that ODA is a fluctuating and unpredictable source of development financing compared to domestic revenue. Disbursements of ODA are even more variable than allocations. These problems point to the need to institute longer-term commitments of aid from both bilateral and multilateral donors. Lengthening the time commitment of ODA would be necessary in order to strengthen government capacity to mobilize domestic revenues. Following a 'matching-funds' approach could also be a useful part of such reform. Donors often provide budget support when a government specifies its expenditure needs and calculates the financing gap to be filled by ODA. Donors then promise to finance the revenue shortfall that is identified. But such an approach can lead to government disincentives to raise domestic revenue.

A better option would be have donors agree to match a percentage of the funds collected by government, up to a fixed limit. This limit could be reduced over time as the government gained greater capacity to raise domestic revenue. One of the advantages of such an approach is that governments would have an incentive to raise more revenue because higher revenues could lead to additional donor inflows of ODA.

8 Complementary issues

8.1 Remittances

It is beyond the scope of this report to consider rigorously the extremely complicated issue of the relationship between remittances and development. The discussion will restrict itself to the role of remittances with respect to resource mobilisation. For remittances, the word 'mobilisation' is singularly appropriate, because they represent an actual flow of resources whose access by governments is quite limited, except for those cases of migrant worker schemes regulated for treaties or other formal agreements.

Any discussion of remittances and their impact on development must begin with the fundamental principle that for every country the most valuable resource is its people. A country develops and accumulates wealth through utilising the skills and talents of its men and women, not by their export to other countries. The remittances

out-migrants send back to their families are a major source of income in many countries and may contribute to poverty reduction. However, remittances in themselves cannot sustain poverty reduction, which is achieved through growth of the domestic economy.

Commenting on the potential for remittances to foster growth under prevailing circumstances and mechanisms, two IMF experts wrote the following in 2007,

Empirical evidence on the growth effects of remittances, however, remains mixed. In part, this is due to the fact that the effects of remittances on human and physical capital are realized over a very long time period. In part, this is also due to the difficulty associated with disentangling their counter-cyclical response to growth which implies that the causality runs from growth to remittances, but the correlation between the two variables is negative...It would be easy to conclude that remittances have a negative effect on growth, but that would be erroneous...[T]o the extent that they increase consumption, remittances may increase individual income *levels* and reduce poverty, even if they do not directly impact growth. (Ratha and Mohapatra 2007, 5)

The quotation summarises well the current state of research: there is no rigorous evidence that remittances foster growth, but the possibility is intuitively appealing. It would be quite strange if remittances did not reduce poverty in sub-Saharan countries, since the prevalence of poverty is so high. Further, over three-fifths of recorded migratory labour is intra-regional (see Box 1), rather than to work in the developed countries where wages are high compared to the sending countries.

Table 22 provides World Bank estimates of remittances through official channels for 1995 and 2000-2007. In relation to all flows to developing countries, the sub-Saharan portion is small, about four percent in 2006. Even smaller was the portion of net flows in GDP for the region, barely one percent in 2006. On a World Bank 'blog' one reads the following, with is characteristic of much of the discussion of remittances to the sub-Saharan region.

Sub-Saharan Africa received almost \$12 billion in remittances in 2007, and that was only the official number. With 'informal' flows added the total amount can easily be double that number. Nigeria, Kenya, Sudan, Senegal, Uganda and South Africa received the highest volume of remittances, while in smaller countries such as Lesotho remittances represent up to a quarter of GDP. (Uy 2008)

If it is the case that remittances 'can easily be double' the official figure, their share of regional GDP would be about two percent. Almost all commentators on the

region agree that remittances have a substantial poverty-reducing effect.²⁷ Almost by definition a poverty-reducing effect implies that most of the remittances went for consumption. If the consumption rate for remittance recipients were a relatively low three-quarters, and total remittances in 2007 were double the net 'official' statistic, this would imply remittance saving of about US\$ 4 billion (US\$ 24 billion times .25), or approximately one-half of one percent of GDP.²⁸

The statistics on remittances indicate that remittances probably have a substantial impact on poverty reduction, but they are unlikely to make a significant contribution to either saving or investment in the majority of the countries of the sub-Saharan region. Important exceptions are shown in Box 1, with Lesotho the only country for which mobilising saving from remittances would have a substantial public revenue or growth impact. Measures such as those proposed by the IMF for mobilising saving from remittances are best viewed as potentially useful but minor contribution to funding investment in most countries.

²⁷ This is the conclusion of the few rigorous studies on the region, based on survey data from Ghana (Adams 2006).

²⁸ Ratha, Mohapatra and Plaza assert that a large market exists for 'diaspora bonds' in the sub-Saharan region, based on what appear to be arbitrary assumptions about overseas income levels of migrants. More problematical, their estimates assume that all saving by migrants goes to bonds and none to personal remittances (Ratha, Mohapatra and Plaza, 2008, 16). Further, they draw on 'diaspora bond' examples from India and Israel, whose schemes draw on earnings in developed countries. As shown in Box 1, less than thirty percent of regional migrants go to developed countries, principally Nigeria. See also Ketkar and Ratha (2007).

Box 1: Sub-Saharan Emigration, 2007

1. Stock of emigrants:
15.9 million or 2.1% of population
2. Top 10 emigration countries:
Mali, Burkina Faso, Ghana, Eritrea, Nigeria, Mozambique, Zimbabwe, South Africa, Sudan, Dem. Rep. of Congo
3. Identified destinations:
high-income OECD countries (25.2%)
high-income non-OECD countries (2.9%)
intra-regional (63.2%)
other developing countries (0.2%);
unidentified (8.5%).
4. Top 10 migration corridors:
Burkina Faso-Cote d'Ivoire
Zimbabwe-South Africa
Mali-Cote d'Ivoire
Eritrea-Sudan
Ghana-Cote d'Ivoire
Mali-Burkina Faso
Eritrea-Ethiopia
Mozambique-South Africa
Sudan-Saudi Arabia
Lesotho-South Africa
5. Top 10 remittance recipients (US\$ billions, 2007):
Nigeria (3.3), Kenya (1.3), Sudan (1.2), Senegal (0.9), Uganda (0.9), South Africa (0.7), Lesotho (0.4), Mauritius (0.2), Togo (0.2), Mali (0.2)
6. Top 10 remittance recipients, percentage of GDP (2006):
Lesotho (24.5), Gambia (12.5), Cape Verde (12.0), Guinea-Bissau (9.2), Uganda (8.7), Togo (8.7), Senegal (7.1), Kenya (5.3), Swaziland (3.7), Benin (3.6)

Source: Ratha and Zu (2007)

<http://siteresources.worldbank.org/INTPROSPECTS/Resources/334934-1199807908806/SSA.pdf>

Table 22: Remittance Flows, the Sub-Saharan countries and all developing countries, 1995-2007, US\$ billions

	1995	2000	2001	2002	2003	2004	2005	2006	2007
Sub-Sahara									
Inflows	3.2	4.6	4.7	5.0	6.0	8.0	9.3	10.3	10.8
Outflows	2.0	2.5	2.3	2.5	2.8	3.0	3.3	2.9	na
Net flow	1.2	2.1	2.4	2.5	3.2	5.0	6.0	7.4	na
All									
Inflows	57.5	84.5	95.6	115.9	143.6	161.3	191.2	221.3	239.7
Outflows	12.4	11.5	13.6	20.4	23.8	30.9	36.0	44.2	na
Net flow	45.1	73.0	82.0	95.5	119.8	130.4	155.2	177.1	na

Notes: Net flows were one percent of GDP in 2006 for the sub-Saharan region. The table reports officially recorded remittances

Source: : Ratha and Zu (2007)

8.2 Capital flight

In contrast to the modest role which remittances might play to mobilise saving and investment, capital outflow from the region provides the possibility of dramatic gains in both public revenue and private investment. The more extensive discussion the remittances compared to the capital flight cannot be explained by technical difficulties, for capital flows would be no more difficult to regulate than remittances, and perhaps less so because of the larger amounts involved.

A 2008 World Bank Working paper suggests substantial outflow of capital from the sub-Saharan region, as indicated by the passage summarising a graph in the working paper,

Capital outflows from Sub-Saharan African countries averaged \$8.1 billion annually from 1990 to 2005. Capital outflows from Sub-Saharan Africa increased until 2002 but have declined in recent years...The cumulated stock of outflows from Sub Saharan African countries was \$178 billion in 2006, nearly 30 percent of GDP—down from a high of 51 percent of GDP in 2002. Capital outflows increased faster from middle-income and resource-rich Sub-Saharan African countries in the 1990s, reaching 59 percent of GDP in 2002. (Ratha, Mohapatra and Plaza 2008, 14)²⁹

If the eight billion average were accurate, it would imply capital outflow substantially exceeded remittances in the 2000s, which supports the findings by Boyce and Ndikumana, who estimated the outflow to much larger (Boyce & Ndikumana 2000). In a recent study the same authors for forty African countries during 1970-2004 the constant price stock of flight capital, including imputed interest, reached US\$ 607 billion at the end of the period (constant US dollars of 2004, Ndikumana and Boyce 2008). This exceeded the combined external debt of the forty countries by US\$ 398 billion. During these years, as their earlier study demonstrated for 1970-1996, Africa was a net capital exporter to the rest of the world. Angola's stock of flight capital was 535 percent of its external debt in 2004, Cape Verde's 524

²⁹ The paper identifies the data as 'authors' calculations' based on the World Bank's *Global Development Finance 2007* (World Bank 2007). That source provides no division between middle and low income countries. The original graph measures on the vertical axis percentage from zero to sixty, not zero to six as on the graph above. The vertical axis on the original cannot be correct. In the quotation in the text the working paper gives the rough magnitude of the outflows, about US\$ eight billion on average for 1990-2005. In 2005 the national income of the sub-Saharan countries was US\$ 347 billion (World Bank 2005, 257), implying percentages of GDP below ten. Since the numbers decline in some years and the time series does not begin near zero, the mistake cannot be explained by the possibility that the original graph gave cumulative stocks. (Ratha, Mohapatra and Plaza 2008, 14)

percent, the Democratic Republic of Congo's 310 percent, Mozambique's 307 percent, Rwanda's 356 percent, and Sierra Leone's 407.

Consistent with the general approach of the World Bank, Ratha, Mohapatra and Plaza place stress on the role of orthodox macro policies for the reduction of capital flight.³⁰ A much more purposeful and effective approach to preventing excess capital outflow would be regulation of the external capital account. The benefit would be lower interest rates, faster growth and reduction of net external liabilities. Before the global financial crisis of 2008-2009, the orthodox policy approach was to condemn capital controls as counter-productive because they were alleged to reduce portfolio inflows and direct foreign investment. The obvious excesses resulting from unregulated capital flows discredited this approach in the developed countries, whose policymakers in 2009 entered into serious discussion of mechanisms of regulation.³¹

There are many reasons why capital regulation would be singularly appropriate for the sub-Saharan countries:

- 1) several of the countries have in the past or continued to suffer from various degrees of civil unrest, including armed violence;
- 2) private domestic financial capital markets were narrow, with a very limited range of asset type in which capital could be held; and

³⁰ The evidence presented to support this opinion is a diagram that divides sub-Saharan countries into two groups, those with 'low' and 'high' scored on what is called 'Country Policy and Institutional Assessment' (Ratha, Mohapatra and Plaza 2008, 15). One cannot ascribe importance to this argument because 1) the assessment in question is an ordinal measure, implying that the difference between 'low' and 'high' could vary from zero to infinity on cardinal scale; and 2) even the 'low' group shows cumulative capital flight of over twenty percent of GDP.

³¹ Commenting on the shift in attitude towards capital regulation, in 2009 Nobel laureate Paul Krugman wrote:

Back in 1998, in the midst of the Asian financial crisis, I came out in favor of temporary capital controls; a bit about that here. At the time it was regarded as a horribly unorthodox and irresponsible suggestion — and I had a long, very unpleasant phone conversation with a Senior Administration Official who berated me for my anti-market ideas. Today, that wild and crazy idea is so orthodox it's part of standard IMF policy.

(<http://krugman.blogs.nytimes.com/2009/03/02/capital-control-memories/>)

In 2008 an IMF programme that hoped to rescue the economy of Iceland after its financial collapse included controls on capital outflow and tight currency regulation. (See <http://blogs.ft.com/maverecon/2009/02/the-return-of-capital-controls/>) However, Krugman's conclusion that temporary capital controls became standard IMF policy may have been an exaggeration. In January 2009 during a visit to Indonesia, the IMF chief economist 'dispelled speculation that the I.M.F. would agree to an Indonesian effort to defend its faltering currency, the rupiah, by placing controls on the currency'. (See report at <http://query.nytimes.com/gst/fullpage.html?res=9506EFDD173FF935A35755C0A9669C8B63>)

3) exchange rate instability inherent in primary product dependence generate a high risk previous on domestic financial assets.

Capital regulation combined with public sector guaranteed saving instruments would both reduce capital flight and mobilise investment resources. It is beyond the scope of this study to specify the details of either the capital regulations or the financial instruments necessary to restrict capital outflow and direct to domestic investment. In countries that do not suffer from civil strife, Zambia for example, so-called market-based controls that rely on taxation of capital movements could be effective. In countries suffering from political instability quantitative controls would be necessary. Once the ideological objections to capital controls are discarded and they are treated as pragmatic policy instruments, the problem of design can follow from the successful and unsuccessful experiences of many countries.

9. Summary and conclusions

This report to ECA has reached several important conclusions about the use of fiscal policy for resource mobilisation. The current threat of the global contraction for Africa makes it a priority these conclusions transmit into policy action. The most fundamental conclusion is that the ideology of a 'neutral' fiscal policy characterised by a small public sector and balanced budgets, never based on sound theory, was discredited by the global crisis at the end of the 2000s. In Africa as elsewhere, fiscal policy can and should be used effectively to foster growth, reduce short run fluctuations and maintain economies close to their potential growth paths. The necessity to carry out these three tasks is emphasised by the following conclusions.

First, country evidence indicates an overwhelming need for governments to increase resource mobilisation and in particular to raise public revenue. Shares of government expenditure have been well below what is necessary for poverty reduction and fostering growth through public investment. Public revenue has been even lower, implying persistent fiscal deficits that show no tendency to decline in most countries. As a result, countries remain unsustainably dependent on external assistance.

Second, public investment is essential to fostering growth in Africa, which implies a pragmatic approach to fiscal deficits. If a country's long term average

growth rate is low, as is the case for most sub-Saharan countries, it is appropriate to increase public investment to increase the long term potential. Simultaneously a government would use current expenditure as the counter-cyclical mechanism to generate the additional demand necessary to reach the greater potential created by the public investment. Using current expenditure to compensate when private demand is insufficient to keep growth near its potential implies increasing fiscal deficits or reducing surpluses.

Third, the use of fiscal deficits for counter-cyclical management and to fund public investment need not be inflationary. Inflation in the countries of East and Southern Africa has a strong structural component which can be addressed through growth and development of economic and financial infrastructure rather than deficit reduction. It is frequently alleged that deficits 'crowd-out' private investment, but there is no compelling evidence for this across the East and Southern African countries.

Fourth, increasing public revenue requires several changes in current policy in sub-Saharan countries. Among these are a more economically rational approach to foreign investment based on an explicit assessment of costs and benefits. It is not rational policy to attempt to maximize the inflows of foreign investment, even foreign direct investment. It is rational policy to maximise the benefits of foreign investment, including the revenue benefits.

Fifth, in the sub-Saharan region private saving is constrained by the poverty of households and the underdevelopment of the so-called formal sector. Raising saving rates will be a long-term task, achieved through the development of medium and large scale private enterprise and rising incomes of the employed and self-employed. In this context, some increase in private saving in GDP is possible through policy measures. Development assistance can contribute by supporting the development financial sectors in the region.

Sixth, the enhancement of public revenue performance requires a pragmatic approach to a country's tax structure. Unconstrained enthusiasm for fostering trade resulted in the premature decline in trade taxes, which account of a large proportion of the region's tax revenue because of the underdevelopment of the corporate sector. The shift from trade taxes to taxes on goods and services (VAT) has not substantially increased revenue performance. Available evidence indicates the shift resulted in a

stagnation of revenue shares in GDP. In place of a shift, appropriate policy would be to raise both types of taxes, through increased rates and broader coverage.

Seventh, it is often alleged that development assistance reduces the incentive for governments to tax. While there is no convincing evidence in support of this allegation, development assistance could be much more effective on the macroeconomic level. Research indicates that over more than forty years, 1965-2006, forty percent of development assistance went to domestic consumption, more than a third to capital outflow, and only a quarter to domestic investment. This distribution, contrary to all principles of fostering growth and development, could be changed by flexibility on the part of donors.

Eighth, remittances, from workers temporarily abroad and long-term Diaspora households, represent a potential source of domestic investment, albeit small. Governments should design schemes to bring part of remittances into formal financial channels, while accepting that the high consumption rate of remittances limits the potential to do so.

Ninth, the reversal of capital outflow, 'capital flight', could have a dramatic impact on resource mobilisation. According to the IMF, capital outflows were substantial in the sub-Saharan countries. Independent research suggests these outflows were enormous. Capturing even a small part of capital outflows, for example by use of a capital movement tax, could dramatically increase public revenue.

It has been the role of this study to identify areas of policy action, rather than to specify in operational detail what measure should be taken to exploit the possibilities they present. With the shift in ideology that is resulting from the global contraction, it becomes possible for African governments to consider previously taboo policy measures such as capital account regulation. The next step in policy research would be to identify the specific measures appropriate for the diversity of the African countries.

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