Rebuilding Fiscal Buffers: Sustainable Financing of Development

African Fiscal Forum – Fiscal Policy Challenges in Africa

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David Bevan University of Oxford

Background 1

- So far, and on average, Sub-Saharan Africa has weathered the global crisis remarkably well
- Export revenues have recovered, not simply because of rises in commodity prices, but also because of volume increases
- The IMF estimates the region's growth at 5¼% for 2011 and projects 5³/₄% for 2012
 - However, that projection is contingent on global growth of 4%, which clearly has a serious downside potential, given current difficulties
 - Even if these are resolved, many advanced economies face a debt overhang, with likely impacts on both their own growth and aid flows
- There are a number of other actual and potential problems
 - The ongoing drought in the Horn of Africa
 - The rise in food and fuel prices and associated inflation
 - Rapid rises in expenditure, partly triggered by responses to the crisis
 - In consequence, a need for adjustment in fiscal and monetary policies

Background 2

- Given the huge range of countries and issues, this presentation will be very selective. It will not cover a number of important issues
 - Institutional questions, even though these are central to addressing these challenges
 - The specific mechanisms required for doing so
 - The different circumstances faced by different countries
 - The record of fiscal implementation in SSA, or questions of procyclicality, discretionary policy, and automatic stabilizers
- Instead, it will attempt to raise a number of general issues that all countries have to address. These stress the importance of adopting
 - A medium-term perspective, even when the challenges present as short-term ones
 - An integrated fiscal approach, even when the challenges appear to be differentiated and specific
- The focus will be mainly but not exclusively on LICs

Outline

- Public capital
 - The infrastructure deficit
 - Public capital and growth
- Public debt and growth
- Revenue issues
 - Tax effort
 - The marginal cost of funds
- Borrowing
 - Concessional
 - Non-concessional
- The primary budget balance
- Expenditure criteria
 - Recurrent expenditure
 - Capital expenditure

Public capital - The infrastructure deficit

- There are huge infrastructure deficits in LICs, especially in SSA
 - Partly a casualty of earlier (often successful) stabilization efforts
 - Partly because donors had been so focused on social sectors
- Evidence of serious adverse consequences for growth
- Major assessments have been underway (AICD etc)
- Have yielded terrifying estimates for LICs in SSA
 - Expenditures on public investment may be around 7% of GDP
 - Need to be raised to 20% in non-fragile LICs and to 35% in fragile ones, for a decade, simply to rectify shortfall relative to other LICs
- Pose a daunting financing problem

Public capital and growth

- There has been extensive work looking at the productivity of public capital, and its impact on growth, mostly for advanced economies, but more recently for developing ones
- The results have been pretty mixed
- However, recent work has suggested quite a strong contribution to growth, particularly if some estimate is made of public capital actually in place, rather than assuming this is captured by cumulated depreciated investment (which involves much waste)
- This poses two interesting questions
 - How have SSA countries achieved such high recent growth rates, given the very poor state of their infrastructure?
 - Will they be able to continue with this sleight of hand, or will the infrastructure deficit begin to exact a serious growth toll in future?

Public debt and growth 1

- In its analysis of "fiscal exit" from the high public indebtedness caused by the global crisis, the IMF uses two different targets for the debt to GDP ratio
 - For advanced economies, 60%
 - For emerging economies, 40%
- Both these numbers are based on empirical work suggesting that high debt inhibits growth, that the effect is non-linear, and that it sets in at lower debt ratios for less advanced economies
- There is general agreement that things get serious above 90%
 - Unfortunately, this is the region now occupied by most advanced economies

Public debt and growth 2

- Other work on these two groups suggests that a 10 percentage point increase in the ratio lowers growth by 0.2% pa, somewhat less for advanced economies than emerging
- For developing countries as a group, relatively little is known about the consequences of internal debt, reflecting poor data quality
- For external debt in these countries, the evidence is somewhat confused, though generally suggests a negative and non-linear relationship
 - One recent study suggests that there is a real risk of a debt overhang (with investment collapses) if the present value ratio exceeds 40%
- Fund/Bank sustainability analyses use a variety of ratios
 - E.g. 50% for a "strong performer"
 - Basis for these numbers is pretty opaque

Revenue issues 1

- Taxes are distortionary, and impose deadweight losses, so that the marginal cost of a dollar of public funds (MCF) is typically greater (possibly much greater) than \$1
- Since most tax systems are fairly arbitrary, the MCF may differ markedly between different taxes
- However, on average the MCF will rise as the total revenue share increases
- It is commonly accepted that it is more difficult to raise revenue in LICs. This reflects a number of factors, including among others
 - An informal sector that may account for 40% of GDP on average
 - Weak and often corrupt tax administrations
 - Habits of non-compliance

Revenue issues 2

- This difficulty could have one or both of two consequences
 - Smaller government relative to GDP in poorer countries
 - Higher deadweight losses from tax distortions
- The first consequence certainly holds in practice
- It is quite important to get some idea of whether the second does also
 - If it does, more stringent benefit-cost requirements would be required for tax-financed expenditures in LICs
 - The balance of advantage between borrowing and tax-financing of public investment might shift
- Two pieces of evidence suggest that this second consequence may not hold
 - One comes from efforts to estimate so-called "tax effort"
 - The other from direct attempts to estimate MCFs

Revenue issues 3 - tax effort

- As already noted, on average the ratio of tax revenue to GDP rises with per capita income
- For low-income countries, a figure of 14% would be typical, whereas a comparable high-income figure would be 36% (middle-income countries mainly fall in between)
- In principle, this marked difference in performance could be due either to lower tax capacity in less developed countries, or to lower tax effort
- Empirical attempts to measure these suggest that median tax effort is rather similar in each group, at around 80%, so the difference lies in capacity. Hence, somewhat speculatively
 - Tax capacity in LICs might average something like 17% 18% of GDP
 - A country with a ratio below, say, 15% has scope materially to raise it
 - There is no presumption that the MCF is systematically higher in LICs

Revenue issues 4 - the marginal cost of funds

- Estimating the MCF is complicated
 - Classic second best problem
 - Needs a general equilibrium approach
 - However computable CGEs now widely available for most countries
- Until recently, most estimates have been for advanced economies
- Now more attention being devoted to developing countries
- Recent estimates for SSA countries suggest that the MCF might average about 1.2, which is not out of line with estimates for advanced economies
- The implication is that SSA countries have lived within their means, at least as regards use of the tax system to finance expenditure
- This is in line with the inference from the tax effort studies

Concessional borrowing

- Concessional borrowing
 - is usually sector specific
 - Is constrained in volume
 - Is of finite, and usually unknown, duration
- Given the fiscal and growth problems of the main providers of concessional finance, as well as the higher growth achieved in SSA, it is probable that this facility will taper faster than it otherwise would
- This likelihood might seem to encourage an attitude of "take it while it is on offer"
- However, the reverse might be true it might be wiser to look a gift horse in the mouth if the horse is about to bolt
 - We consider this further below

Non-concessional borrowing 1

Domestic Borrowing

- A country at the IMF's "safe" upper bound of domestic debt/GDP of 15%, with target real growth 7%, target inflation 5%, could cover a domestic deficit of 1.8% plus say 0.7% seigniorage, or 2.5% in all. This could be bigger if the growth rate rose as a result of the investment
- A major concern about domestic non-monetary financing of the deficit is that it may drive up interest rates and crowd out private investment
- There is very little empirical work on this relation for LICs
 - Other work does suggest a fairly weak positive relation, except where financial depth is low, when it becomes much more powerful
 - Hence international evidence provides little guidance, but some cause for caution

Non-concessional borrowing 2

External borrowing

- Non-concessional external borrowing has rapidly shifted onto the agenda for many LICs, as a consequence of several factors
 - Extensive debt relief
 - Improved macroeconomic performance
 - Relaxation of traditional donors' rules on mixed financing
 - The emergence of non-traditional partnerships
- In addition, the infrastructure deficit, and the need and potential feasibility – of financing this from non-concessional sources
- So far, only a few SSA countries have gone down this route, and (excluding RSA) have paid around 9% on average
- One difficulty how to assess the likely cost of borrowing for the first time, when a country does not have a sovereign credit rating
 - Recent empirical work appears to capture existing ratings pretty well, so
 offers a means for making this assessment prior to such a rating

The primary budget balance 1

- Revenues, expenditures, deficits, and debt are tied together by the primary budget balance - revenue minus expenditure exclusive of interest payments
- In the absence of debt repudiation or debt forgiveness, all government budgets must satisfy the inter-temporal budget constraint
 - PDV of primary surpluses ≥ initial value of debt
- Simplest story. Suppose growth rate (g) and interest rate (r) are constant, and that initial debt to GDP ratio is d. Let ratio of primary surplus to GDP be s
- To stabilize the debt ratio, need to maintain surplus ratio at

$$s=(r-g)\,d$$

• To lower it at 100x% per annum, need to set it at

$$s=(r+x-g)\,d$$

The primary budget balance 2

If government

- Wishes to maintain the existing debt ratio, or has a target path for it
- Has a (realistic) target for growth
- and is constrained in its revenue capability, and in the interest rates it is likely to face
- Then the path of government expenditure is determined
- Of course, these values are jointly determined, so if this path was not acceptable something else (the debt target?) would have to give
 - This might be chosen as a temporary deviation to accommodate shocks
 - It should not routinely happen in the absence of shocks

- Technical criteria for public expenditure are quite complex enough even for advanced economies
- Substantially more so for low-income countries, for whom
- Government faces a wide variety of different interest rates
 - concessional borrowing
 - Non-concessional domestic borrowing
 - Non-concessional external borrowing
- Circumstances are much more prone to change
 - Structural change due to successful development
 - Potential but uncertain withdrawal of concessional finance
 - Higher volatility
- Makes rational inter-temporal choice much more difficult
- Here focus on two complications arising from
 - Concessional financing of current expenditures
 - Limited appropriability of returns to public capital

Concessional financing of current expenditures

- Concessional aid will be withdrawn at some point in the future, partly contingent on a country's growth
- To accommodate this, some combination of three changes will be required
 - 1. Increases in the domestic revenue ratio
 - 2. Reductions in the government expenditure ratio
 - 3. A shift between low-cost concessional borrowing and higher cost external or domestic borrowing
- However, the last type of substitution may not be possible
 - a reduction in concessional finance may require a complementary reduction in non-concessional finance to be compatible with a given primary surplus ratio
- Consider a grant-financed recurrent expenditure increase

- The concern about this expansion in recurrent spending, even when grant financed, is that the grant will diminish or disappear
- This requires an "exit option" from the increased aid
- Suppose that the additional expenditure is *e* and will produce benefits of *b*
 - If the arrangement were indefinite, the recipient should accept provided b > 0, even if b < e
- Now suppose that the grant is expected to disappear in year T, that the expenditure will have to be maintained thereafter, and financed by domestic tax with an MCF of (1 + e)
- Then it may be appropriate to "look a gift horse in the mouth"; the government should only accept the initial grant if

 $b > e(1+\theta)e^{-rT}$

• Similar (worse) problems if expenditure is debt financed

Public investment criteria

- A large and rapid expansion of public investment is very risky
 - Some estimates suggest that in developing countries it takes well over \$2 of investment to install \$1 of public capital
 - Much more coherent procedures for appraisal, selection, implementation, and evaluation will be needed
 - However, these skills have atrophied even within the World Bank
- It also needs consistent treatment of different sorts of payoff
 - 1. Benefits appropriable by government
 - 2. Benefits that accrue as monetary income to the private sector
 - 3. Benefits that accrue as non-monetary income to the private sector
- For plausible scenarios, the key distinction is between 1 and the other two, which require a more stringent test
- So the distinction between "developmental" and "financial" returns (UNDP) is second order; appropriability is the issue

Conclusions

- During volatile times, temptation is to focus on the short-term
 - However, then even more important to maintain a longish perspective
- Many SSA countries have a profound infrastructure deficit
 - Likely to be deleterious to growth if they do not begin to address it soon
 - But if they do, it poses severe financing problems
- Revenue expansion
 - There is scope for this if tax effort is currently low
 - Otherwise, probably have to accept that rise in revenue share will be a function of GDP growth. A mistake to try to "force the pace"
- Increased borrowing
 - Very country specific, depending on initial GDP ratios for all types of debt
- Expenditure criteria need to reflect a menu of costs and pattern of returns, given the financing options
- While growth is not the only criterion, the likely growth trade-offs from higher taxes, increased debt, and deficient infrastructure is a good place to start