Countercyclical Policy for Africa: Institutional and Economic Feasibility

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Abstract:
In August 2009 the Freetown Declaration by the African finance ministers committed their governments to “implement fiscal stimulus measures” to counter the effects of the international financial crisis. This paper analyzes the institutional and economic feasibility of realizing this commitment. It considers the availability of policy instruments and the institutions to support them for countercyclical intervention in the sub-Saharan countries. The paper proposes a fiscal stimulus consistent with those institutions and constrains. In very few countries do there exist the institutions for the implementation of monetary policy. About one third of the countries are members of regional common currency institutions that eliminate the exchange rate and national monetary policy as policy tools. Within these constraints, for a majority of the countries the fiscal expansion could be financed domestically, while other countries governments would require external funding. For about a fifth of the countries would a stimulus not be appropriate. [JEL: E3, E62, O11, O55]
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1. Introduction

While the multilateral and bilateral development agencies urge policy measures on the governments of sub-Saharan countries, this advice is not always linked to whether the institutions exist to implement those measures. For macroeconomic policy attention to institutional development is especially important. It is obvious that exchange rate adjustment is irrelevant when a country lacks a currency; less obvious but equally problematic is attempting monetary intervention in the absence of a bond market. Institutional constraints on macroeconomic policy became centrally important in the sub-Saharan region at the end of the 2000s, as governments sought measures to counter the effect of global financial instability.

In August 2009 the Caucus of African Governors of the IMF, World Bank and African Development Bank (also known as the Caucus of African Finance Ministers) met in Freetown, Sierra Leone. Responding to crisis in the international economy, the ministers unanimously issued the Freetown Declaration, in which they collectively committed themselves to implement a fiscal stimulus and called for the international agencies to support it.

This paper considers the feasibility of a fiscal stimulus for the sub-Saharan countries, which are low-income and exporters of primary products. To a great extent, feasibility depends on three types of institutional constraints: policy limits

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1 This paper benefited from comments by Joseph Stiglitz of Columbia University when an earlier version was presented at the meeting of the African Taskforce in Pretoria in July 2009, and from Samura Kamara, Minister of Finance of Sierra Leone. It based on the author’s keynote address to the Caucus of African Governors of the IMF, World Bank, African Development Bank, Sierra Leone, 12-13 August 2009. An earlier version of this paper appeared as WP 237 of the Political Economy Research Institute, University of Massachusetts, Amherst.

2 This is an annual meeting of finance ministers to discuss the issues which would arise at the subsequent IMF-World Bank meeting, which in October 2009 was held in Istanbul.

associated with loans and grants from the Bretton Woods Institutions, absence of policy instruments resulting from membership in regional institutions, and implementation constraints due to the absence or narrowness of domestic market institutions. Section 2 reviews the policy recommendations in the Freetown Declaration relevant to a fiscal stimulus. Section 3 presents the algebra of a stimulus and uses this to demonstrate the effect of loan and grant conditionalities on policy options. Section 4 considers in detail the policy instruments available to sub-Saharan governments to implement effectively a stimulus program. The final section indicates how donors and lenders could support countercyclical fiscal policy by the governments of the region.

2. Recovery Program in the Freetown Declaration

In late April 2009 at the spring meeting of the development committee of the IMF and the World Bank, the president of the African Development Bank warned that the sub-Saharan countries would be severely affected by the global financial crisis that had begun the previous year. When the African finance ministers met in Freetown in mid-August his warning had been realized by falls in the demand for primary products (Berg et. al. 2010; Brixiová and Ndikumana 2010). In this context the ministers and their representatives issued a declaration unusual for its clarity, forcefulness and break with prevailing policy.

Unlike previous declarations that pledged the governments to orthodox policies of macro stability and institutional reform, after noting the need for sound policy and social "safety nets", the Freetown Declaration issued a bold declaration,

We, the African Governors to the BWIs and AfDB, commit to…
Implement fiscal stimulus measures where appropriate to weather the impact of the global economic downturn;

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5 For example, the declaration of October 2007 referred to “wide array of far-reaching reforms to achieve macroeconomic stability”. The full text of the statement is found at: http://web.worldbank.org/WEBSITE/EXTERNAL/NEWS/0,,contentMDK:21520315~pagePK:34370~piPK:34424~theSitePK:4607,00.html (accessed 29 October 2010).
Expand high-growth yielding public investments…to restore and raise our countries growth and employment potential as well as crowd-in private investment; 
Implement monetary policies that support the short-term fiscal stimulus measures…
Remain prepared to exit from the countercyclical fiscal stimulus policies as soon as the macroeconomic conditions permit. (CAG 2009)

If implemented, these commitments would represent a break with the standard IMF macroeconomic framework that stresses minimizing fiscal deficits and a tight monetary stance to achieve low inflation, usually single digit. The commitment to a fiscal stimulus would imply a lower fiscal surplus for a few countries and for most a larger deficit. More fundamentally, the commitment to a stimulus implies using the deficit as part of an active fiscal policy rather than as a problem to be reduced.

Increasing public investment has three policy implications that are potentially inconsistent with orthodox macro policy. First, it implicitly asserts the public sector actively fosters growth rather than merely establishing the framework for the private sector. Second, the IMF and World Bank view that public borrowing "crowds out" private investment is explicitly reversed: the Declaration asserts that public investment, which would by necessity be financed through borrowing, can "crowd-in" private investment.6 Third, it provides an implicit strategy for an active fiscal policy: countercyclical intervention will be used to stabilize output near potential, and public investment will foster higher growth rates through increased productive capacity.

A further break with Washington Consensus macro policy is made by the commitment to use monetary policy to support the active fiscal policy. While policy consistency requires that fiscal and monetary measures be coordinated, an accommodating monetary policy contradicts one of the basic tenets of most IMF programs, inflation targeting, as well as associated limits on money growth. Even more fundamental, committing monetary policy to support fiscal policy renders it derivative from fiscal policy, a return to so-called Keynesian macro management. Finally, the commitments explicitly emphasize the fiscal stimulus as countercyclical and short term by specifying the need to exit from it as economies recover.

After stating the recovery program, the Freetown Declaration presents a list of "requests" for the multilateral development agencies of which they are governors,

6 A case for public investment as a driver of poverty-reducing growth is found in Roy and Weeks (2004).
To this end [the fiscal stimulus], African IMF/WBG Governors urge the International Monetary Fund to

- Support our policy frameworks [and give] us the needed policy space…to leverage [external] resources…
- Facilitate expeditious access to the newly created financing instruments.
- Mobilize additional resources to allow an increase in concessional lending while ascertaining that these new instruments are fully funded.
- Promptly activate the precautionary component of the SCF [Special Credit Facility].

We ask the World Bank Group to introduce a more flexible and adaptable budget support instrument that is capable of responding quickly to crisis. (MoFED 2009b)

The second, third and fourth requests of the IMF are derivative from the first, allowing governments the flexibility, "policy space", to design and implement their programs. The request of the IMF for “expeditious access” and of the World Bank for “more flexible and adaptable budget support” reflected a general view among the Caucus officials of tardiness by the Fund and the Bank in their response to the impact of the global crisis on African countries.7

The Freetown Declaration represented a clear break from the macro policy framework common to most African countries prior to the international financial crisis of 2008. The prior macroeconomic framework combined with a cautious monetary stance and a neutral fiscal policy, in the context of market deregulation. This policy approach, based on a “price constrained framework”, has as its prerequisite that the world economy operates near its potential.8 From mid-2008 it was clear that aggregate demand was insufficient to permit the world economy to achieve its potential. In response governments of the major industrial countries introduced “stimulus packages” designed to replace the fall in private demand with public expenditure.

In the demand constrained world economy, African governments had two general policy options. They could pursue a “business-as-usual, hope-for-the-best” option in which they continued with the policy framework designed for a robust world

7 The author attended the closed session of the meeting when the governors discussed World Bank and IMF policies.
8 An early use of this terminology is in Liejonhufvud (1968, Section 2). The theoretical and policy difference between “price constrained” and “quantity constrained” economies is discussed in Weeks (1989). The recently revised edition of that book can be found at http://jweeks.org.
economy and await international recovery. This would follow advice to place primary emphasis in macro policy on “stability”, which in IMF terminology means preventing inflation, reaching targets for fiscal deficits, and maintaining a free-floating exchange rate. It does not mean stabilizing output by policy intervention.

However, the crisis may have brought a small degree of change in IMF policy advice. A January 2009 IMF report on the world economy called for a “firm commitment” to a “timely implementation of fiscal stimulus across a broad range of advanced and emerging economies”. In line with this commitment, a May 2009 press release reported that the IMF recommended a fiscal stimulus for a low income country, Mozambique. In its survey of the impact of the financial crisis, the World Bank also recommended that governments “assess their ability to undertake countercyclical policies”. The African Development Bank as well recommended

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9 A clear statement of this approach is found in an IMF report on the global financial crisis, Countries should focus on macroeconomic stability. In some countries with falling inflation there may be scope for monetary easing; others, however, still experience continued or renewed price pressures. Those with flexible exchange rates should allow them to move, so that they function as shock absorbers. (IMF 2009a, viii)

10 The complete IMF statement on fiscal policy reads as follows, In current circumstances, the timely implementation of fiscal stimulus across a broad range of advanced and emerging economies must provide a key support to world growth. Given that the current projections are predicated on strong and coordinated policy actions, any delays will likely worsen growth prospects. Countries that have policy room should make a firm commitment to do more if the situation deteriorates further. Fiscal stimulus packages should rely primarily on temporary measures and be formulated within medium-term fiscal frameworks that ensure that the envisaged build up in fiscal deficits can be reversed as economies recover and that fiscal sustainability can be attained in the face of demographic pressure. (IMF 2009c, 1)

A press release titled “IMF Mission Calls for Fiscal Stimulus in Mozambique” states, “In the short term, given Mozambique’s low level of public debt, the [IMF] mission sees scope to at least partly offset the impact of the global economic crisis on Mozambique with somewhat more expansionary fiscal and monetary policies.” (IMF 2009d). The IMF also approved higher deficit limits for El Salvador and Ethiopia.

11 “The challenge for policymakers in this environment is to assess their ability to undertake countercyclical policies given the resources available to them as well as their institutional and administrative capacity to rapidly expand and adapt existing programs.” (WB 2009, 10)
countercyclical fiscal intervention. Without explicitly mentioning countercyclical measures, in 2009 the IMF allowed the government of Sierra Leone to increase the fiscal deficit to respond to the impact of the financial crisis on import prices. None the less, a commitment to the pre-crisis orthodoxy remained among professionals in the Bretton Woods institutions.

3. Countercyclical Fiscal Policy: Analytical framework

3.1 Countercyclical Algebra

For success a countercyclical policy package must be consistent with a sustainable balance of payments, manageable inflation, and a stable public debt position. Achieving the appropriate balance requires careful use of available policy instruments. As shown in the next section, in most sub-Saharan countries monetary policy is not effective except to accommodate fiscal policy. This reduces the stimulus tools to fiscal policy and exchange rate management. With underutilized resources both measures should stimulate output. This section considers the algebra of a stimulus package for countries that can use both instruments. The next section considers a strictly fiscal stimulus for countries locked into fixed exchange rate arrangements.

Both exchange rate adjustments and fiscal expansion have potentially negative effects that require careful management. Because the income elasticity of taxes is typically less than unity in sub-Saharan countries, increasing government expenditure

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12 The African Development Bank’s 2009 report calls on donors and lenders to “[Focus] on results, rather than prescribing rigid policies and actions, allowing countries space to respond according to their particular needs and circumstances”. More specific, it recommends that donors and governments “[i]ncrease flexibility in macroeconomic frameworks to allow more scope to balance macroeconomic stability and the need to stimulate domestic demand”. (ADB 2009, 2)

13 “[IMF] Staff is proposing that the primary fiscal deficit be revised upward by 0.4 percentage points of GDP to accommodate the unanticipated budget impact of the rise in world oil prices.” (IMF 2009b, 5).

14 In his personal blog in early 2010 the World Bank chief economist for Africa, Shanta Devarajan, argued against a fiscal stimulus “for Africa” on the grounds that increasing a fiscal deficit would result in inflation or a reduction in private investment (“crowding out”) or both. http://blogs.worldbank.org/africacan/a-fiscal-stimulus-for-africa. (accessed 29 October 2010).
will always increase the fiscal deficit relatively to national income. Simultaneously there would be an increased and possibility unsustainable trade deficit. The policy goal is to prevent the latter through devaluation, which has its own problem, the inflation it generates.

Identifying the appropriate balance between increased expenditure and changes in the exchange rate is facilitated by use of algebra. For simplicity I consider the case of devaluation. The rate of growth of the real demand for output (y) for a time period can be specified as the weighted sum of the growth of autonomous expenditures times the multiplier:

\[ y = \beta [a_1 i + a_2 g + a_3 x - a_4 z], \quad \sum a_i = 1 \]

The lower case letters i, g, x and z are the rates of change of expenditures that are exogenous with respect to national income, including the exchange-rate-induced components of trade (private investment, government expenditure, exports, and imports, respectively). The \( a_i \) terms are the shares in national income of each variable and \( \beta \) is the multiplier. Exports have an autonomous component whose rate of change is \( x^0 \), and a component determined by the real exchange rate. Imports are a function of national income and the real exchange rate. Define \( \varepsilon_x \) and \( \varepsilon_z \) as the elasticities of exports and imports with respect to the real exchange rate, and p as the price level. As above, \( a_4 \) is the average propensity to import that I assume equal to the marginal:

\[ x = x^0 + \varepsilon_x e^* \]
\[ z = a_4 y - \varepsilon_z e^* \]

The change in the real exchange rate (\( e^* \)) is the change in the nominal rate (\( e \)) minus the rate of inflation (p). The *ceterius paribus* rate of inflation is the pass-through rate of a devaluation, determined by the marginal propensity to import, \( a_4 \).

\[ e^* = e - p = e - a_4 e = (1 - a_4) e \]
\[ x = x^0 + \varepsilon_x (1 - a_4) e \]
\[ z = a_4 y - \varepsilon_z (1 - a_4) e \]

These can be substituted into the equation for the growth of demand. I interpret \( x^0 \) as a negative external shock to export demand, and assume that it causes
depressed expectations that render the growth of private investment zero. I also assume that the government seeks to prevent national income from falling ($y = 0$). To simplify, I write $a_3/a_2$ as $\alpha$ and define $(\varepsilon_x + \varepsilon_y) = \varepsilon_T$, the "trade elasticities". If the trade elasticities are positive, $(\varepsilon_T > 0)$, a real devaluation improves the trade balance (Marshall-Lerner condition). For zero growth, the real demand equation is:

$$0 = a_2g + a_3x^0 + a_3\varepsilon_T(1 - a_4)e$$

$$0 = g + \alpha x^0 + \alpha \varepsilon_T(1 - a_4)e$$

For any shock to exports ($x^0$) the relationship between the change in expenditure and the devaluation is determined by three parameters, the ratio of exports to government expenditure, the real exchange rate elasticity of trade, and the propensity to import. If the exchange rate is fixed, the government expenditure that stabilizes output is:

$$g = - \alpha x^0$$

For no increase in government expenditure, stabilizing output requires the nominal devaluation to be:

$$e = - x^0/[\varepsilon_T(1 - a_4)]$$

The relationship between $e$ and $g$ for zero growth is shown in the upper right quadrant of Figure 1. The upper left quadrant relates the change in the nominal exchange rate to its inflationary effect ($e$ and $p$), and the lower left quadrant links the change in the real exchange rate to the trade deficit ($e^*$ and $X-Z$). An export shock decreases national income and increases the trade deficit. I assume that the government must return to the initial trade deficit within one time period or suffer an unsustainable loss of reserves. Regaining the initial trade deficit requires a real devaluation of $e^*_1$, or a nominal devaluation of $e_1$, which limits the feasibility range in the upper right quadrant.

Two other goals of the government might constrain policy, inflation and deficit limits. In the upper right quadrant in Figure 1 two constraints are indicates, an "inflation limit" determined by the nominal devaluation, and a “deficit limit” that results from the initial position and the new fiscal expansion. If the acceptable

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15 The more familiar condition of greater than unity refers to the nominal exchange rate and export and import values.
inflation rate is below $p_1$, then no combination of devaluation and increased expenditure is consistent with restoring the trade balance and stabilizing output in the short run, though it would be possible with a series of devaluations in the medium term.

The interaction of devaluation and fiscal expansion demonstrates the need for exchange rate management. Leaving the currency to float when expenditure increases can result in excessive inflation as the depreciation seeks balance of trade sustainability. If the limit for the fiscal deficit were below what would be generated by expenditure increase $g_1$, there might remain a feasible short-term region involving a low expenditure increase and a large devaluation.

If at the initial conditions the fiscal deficit is close to that set by donor and lender conditionality and/or the inflation rate is near an externally-imposed conditionality limit, the government has no space for a policy response to the export shock. It is this policy constrained situation that the Freetown Declaration sought to avoid by requesting more policy space from the IMF and other donors and lenders.

**Figure 1 goes here**

### 3.2 Countercyclical Deficit Finance

To be relevant for the low income countries of sub-Saharan Africa, countercyclical intervention requires concrete specification of the institutional context in which it would be implemented. Reducing taxes would be relatively ineffective because of the nature of the revenue generation. Direct taxes can be collected from employees or corporations, not from the self employed or micro enterprises because of the technical difficulty and expense of estimating income and profits. Almost by definition underdevelopment is characterized by a low level of wage employment. The exceptions are countries with natural resource wealth, which derive substantial income from levies on corporations.\(^{16}\) In very few cases does the corporate extraction

\(^{16}\) The World Bank data base *World Development Indicators* gives disaggregated tax statistics for twenty sub-Saharan countries in the 2000s. For all but two trade taxes were at least twenty percent of revenue. The exceptions were South Africa and the Republic of Congo. Sales taxes accounted for thirty percent or more for eleven of the twenty countries. Personal and company taxes brought in twenty percent or more of revenue in only four of the countries.
of natural resources generate substantial numbers of employees to tax, Zambia before copper privatization being a rare exception. For governments that do receive substantial revenue from corporate levies, reducing these would have no impact on domestic demand. It would be unlikely to stimulate investment that occurs in response to external demand, and have the primary effect of increasing profit outflows. The absence of substantial direct taxes leaves adjustment of indirect tax rates, whose income elasticity would be low.

The alternative to tax reduction, enhancing demand by public expenditure, requires that there be sufficient expenditure flexibility to initiate programs quickly when a demand shock occurs, and to terminated them with similar dispatch as the economy approaches its potential. Public investments do not meet the flexibility requirement because of their relatively long and inflexible construction time. For different reasons much of current expenditure is also inflexible. First, with rare exceptions, low income countries lack the automatic stabilizers on the expenditure side that typically characterize developed countries, the most important being unemployment compensation. Second, most of current expenditure in any country, developed or underdeveloped, is not linked to short term economic fluctuations. For example, it might be possible to increase the number of school teachers if trained people were available, but it might not be rational education policy to terminate them when the economy approached its potential.

In response to the inflexibility of capital expenditure and much of current expenditure, governments could base stimulus programs in the sub-Saharan countries on temporary employment schemes, "cash for work". Appropriate projects would be rapidly-completed activities using employment intensive techniques that have a large component of repair and maintenance. Examples of such programs are digging sanitation ditches, repair of public buildings, environmental improvement through

(Ghana, Kenya, South Africa and Zambia). The source provides no information for the major petroleum exporters, Angola, Cameroon, Chad, Equatorial Guinea, Gabon and Sudan. http://ddp-ext.worldbank.org/ext/DDPQQQ/

erosion reduction, and clearing of rural footpaths. These activities were implemented in 2009 throughout Sierra Leone by the National Commission for Social Action as part of a countercyclical policy (Weeks 2009d). The projects would make a contribution to community welfare, though their primary purpose is to increase aggregate demand through the expenditures of those directly and indirectly employed.

To be effective, the employment schemes would have the following characteristics:

1) identified and “stock-piled” by the appropriate government departments prior to the need for them, with accounting procedures in place to minimize misuse of funds;
2) easily initiated and quickly terminated, implying 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 would be the major element of expenditure, with a low component of capital equipment.

The ministry of finance of Sierra Leone recommended this type of employment program to the counter export-depressing effects of the financial crisis. Wage payments, at the domestic currency equivalent of the one dollar a day poverty line, represented sixty percent of program expenditure. A majority of beneficiaries worked in small towns or villages, with specific focus on the diamond mining districts where wage employment had substantially declined (MoFED-EPRU 2009).

As implied by the Freetown Declaration, clear rules should be established for the initiation and termination of countercyclical projects. A “countercyclical” expenditure that becomes permanent negates its purpose. Initiation and termination could be triggered by a policy rule based on appropriate macroeconomic indicators. The specific indicator will vary by country, determined by the development and structure of the economy. Among sub-Saharan countries, only in South Africa are employment statistics sufficiently current and reliable to serve as a triggering indicator. In other countries, almost all of which lack quarterly data on aggregate output, a proxy based on trade statistics could be constructed (Weeks 2009d).

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18 In Sierra Leone the most important cash for work project in 2009 was supported by US$ 4 million from the World Bank. It employed about 14,000 people in infrastructure maintenance.
As shown in the next section, external support in addition to prevailing aid levels would be required to support a stimulus in some countries. It is unfortunate but the case that donor funding does not lend itself to countercyclical programs because of the fixed, but often unreliable, schedule of allocation and disbursement. To make their funding more appropriate for countercyclical programs, donors could accelerate disbursement and adjust their allocation procedures to allow for an “aid fund” analogous to national mechanisms created for resource booms. Money could be drawn from such a fund when the economy is below potential, and “hoarded” when near full potential. Donor grants ear-marked for investment could not be used for countercyclical expenditures, for reasons explained above.

Because of the political and institutional inflexibility of donor grants and loans, domestic public borrowing would be necessary in many countries to fund a stimulus. As for the developed countries, two technical arguments are frequently in opposition to use fiscal policy for short-term economic management in low income countries: the possible inflationary effect of deficits, and the putative tendency for public borrowing to “crowd out” private by causing interest rates to rise. In theory if an economy is at full potential an increase in spending from any source results in a reduction of expenditure of another type. If the expenditure is by the public sector, its inflationary impact will depend on how it is financed. The expenditure can be financed through borrowing, by sales of government securities to the private sector (“open market operations”), or by the ministry of finance borrowing directly from the central bank (“monetizing the deficit”).

Even at full capacity, an increase in a public deficit is not inflationary if financed by bond sales to the private sector, because the net change in the money supply is zero. The government takes money out of circulation by the bond sale, and returns the same amount to circulation through its increased expenditure. If the private sector holds its desired amount of bonds before the additional public

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19 During the annual Caucus of African governors in Freetown in August 2009, a frequent criticism of IMF and World Bank practice by ministers was the slow-disbursing nature of lending and grant programs. This criticism was directed specifically at three programs of the IMF, the Extended Credit Facility (ECF), the Stand-by Credit Facility (SCF) and the Rapid Credit Facility (RCF). The ECF replaced the Poverty Reduction and Growth Facility (PRGF).
borrowing, the government must offer the bonds above the prevailing interest rate. If the increased bond rate transmits to private financial markets and investment is sensitive to interest rates, “crowding out” results. In contrast, if the government borrows directly from the central bank, the money supply increases and inflation results, with an important exception. In an open economy at full capacity, part of the increased money in circulation will be spent on imports, reducing the inflationary impact, but creating or increasing a trade deficit.

If the economy is operating at less than full potential, neither type of deficit financing should generate more than minor and transitory inflation, though “crowding out” could occur. Therefore, government expenditure financed by bond sales to the private sector would unambiguously bring a net increase in aggregate demand. As before, no change in the money supply occurs. Also as before, if the public held their desired amount of government debt prior to the bond sale, the new issues must be at a higher interest rate, creating upward pressure on private interest rates, depressing private investment expenditure. The net change in aggregate demand would be positive and less than the increase in public expenditure unless private investment is extremely interest rate elastic. Financing the expenditure by direct borrowing from the central bank would not require a higher bond rate. The increase in aggregate demand would equal the increase in public expenditure, and monetizing the deficit expands the money supply sufficient to circulate the increased output that results from more public expenditure.

The practical options for governments of sub-Saharan countries are considerably more narrow than standard monetary theory would suggest. Few of the countries have sufficiently developed bond markets to allow for effective open market operations, shown in the next section. The absence of an effective secondary bond market and other institutions of financial intermediation result in a very limited role for the formal banking system. As a result, the major motivation of domestically-based commercial banks to hold public bonds is statutory requirements on the composition of reserves. High interest rates are required to induce banks to purchase bonds beyond their legal obligation.

The absence of a secondary market and high yields on public bonds means that financing deficits by bond sales has the perverse effect of discouraging commercial banks from lending for productive investments, which are riskier than holding government securities. This process is discussed in detail for Zambia in
Weeks, et. al. (2006), and represents what might be called “bank squeezing out”. This process is considerably more relevant in sub-Saharan countries than what is usually meant by crowding out. The decision by private banks results because the risk-adjusted return on public bonds is greater than that for lending to private non-financial borrowers, even for short-term commercial purposes such as financing imports and exports. A second and obvious major effect of high interest rates is to increase the cost of servicing the domestic public debt.

With a low income economy below its potential and the institutions absent for bond sales, monetizing the deficit is the obvious tool for funding an expansion of public expenditure. Despite its obvious advantages, the IMF has strongly discouraged monetization for African countries. The objection seems to be that monetization generates inflation (Masson and Pattillo 2004), though this would not be a invariant outcome. Even for a low income country with underdeveloped domestic markets, no inflation should result if the economy is below full capacity and there are no resource bottlenecks. Even with bottlenecks, almost all sub-Saharan countries have liberal trade regimes, implying that excess demand resulting from monetization would be eliminated by imports. If the pre-stimulus economy has a trade surplus or the government holds sufficient reserves, the expansion of output would be sustainable.

There is an inconsistency in arguments against monetization by international donor and lending agencies. Because of the reduction of regulation of domestic financial markets, foreign exchange inflows enter the money base directly. The absence of a secondary market in government paper means that bond sales can not sanitize these inflows. Therefore, the result of the grant or loan inflows is functionally equivalent to monetization. The major difference is that the former increases the capacity to import and the latter does not. If a government initiates its central bank funded fiscal stimulus from a strong balance of payments position, the expansion should be sustainable, based on analytically sound policy.

The analysis of this section leads to the conclusion that in low income sub-Saharan countries the practical design of fiscal expansion requires increased expenditure rather than reduced taxation, and that the expansion is most rationally funded through monetization. An major constraint to this fiscal policy would the impact on the balance of payments, considered next.
3.4. Exchange Rate Management

By increasing output and private demand fiscal expansion will raise imports, generating a trade deficit or making an existing deficit larger. This problem undermined the use of active fiscal policy in developing countries in the past, especially in Latin America in the 1970s. Exchange rate depreciation or devaluation can be used to counter the tendency of fiscal expansion to create an unsustainable trade balance.

A necessary consequence of depreciation or devaluation is a rise in the domestic price level, approximately equal to the “pass-through rate” (marginal propensity to import) times the change in the nominal exchange rate. While necessary and intended, this exchange rate induced increase in the domestic price level creates the risk of destabilizing inflation if the nominal devaluation is large. Managing this risk is an essential part of a successful active fiscal policy.

As fashion moved against active fiscal policy over the last three decades, there was simultaneously a shift to the view that “flexible” exchange rates were the only practical policy choice for governments. Therefore, it is necessary to explain why exchange rate management by African governments would be both feasible and possible as part of policy to counter external demand shocks such as occurred in 2008-2009. In practice almost all governments intervene in foreign exchange markets. The policy choice is not between “fixed” and “flexible” exchange rate regimes, but selection of the most appropriate point on a range of forms and degrees of intervention, determined by the characteristics of the economy (Fischer 2001). In practice, governments and central banks repeatedly shift between “flexible” and

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20 An argument in favor of a return to managed exchange rates is found in Rolnick and Webber (1989), who wrote, “[W]e maintain there is a convincing case that a fixed exchange rate system is feasible and should be established. Theory shows it feasible, and overlooked empirical evidence shows it possible.”

21 The IMF categorizes countries by exchange rate regime, and the Annual Report for 2007 lists only thirty-five out of over 150 as having an “independently floating” exchange rate. Only two were in the sub-Saharan region, Democratic Republic of Congo and Somalia. The listing of the latter seems an anomaly because Somalia has no government and no currency. Another anomaly is the absence of Sierra Leone from the table.
“fixed” exchange rates. Any time a central bank intervenes to moderate the rise or fall of the national currency it is “fixing” the exchange rate, however briefly.

A very concrete reality affects exchange rate policy in the sub-Saharan countries. The absence of the institutional development for open market operations means in practice that a serious application of a flexible exchange regime means leaving the economy vulnerable to external shocks. If trade elasticities are low and the foreign exchange market inefficient, there is little a government can do to reduce the impact of the external shocks. Both conditions are likely to characterize sub-Saharan countries. Both agricultural and natural resource exports tend by their nature to have low supply elasticities, and a low manufacturing development implies quite limited substitutability between imports and domestic substitutes. As discussed above, commercial banks and large exporting companies exert considerable power in foreign exchange markets.

These institutional and developmental characteristics suggest that active exchange rate management is a rational policy for sub-Saharan countries. In the context of a stimulus package, exchange rate management would not seek to maintain a fixed rate for the domestic currency. The purpose of the intervention would be to control the rate of depreciation of the currency against those of the major trading partners and competitors. This would prevent a widening of the trade gap as the economy expanded, and also prevent excessive currency weakening that would stimulate unmanageable inflation.

In summary, exchange rate management can be an effective policy for supporting a fiscal stimulus, especially important when monetary policy is ineffective. This effectiveness is limited by potential inflationary effects. However, for many governments in the sub-Saharan region exchange rate policy is precluded by currency arrangements, discussed in the next section.

4. Feasibility of a Fiscal Stimulus

If markets and other institutions were sufficiently developed, a government could use all its macro policy instruments, and the design of the stimulus package

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22 Exchange rate management is treated in Rolnick and Webber (1989) and Bartolini and Prati (1997). An IMF Staff Paper from the 1970s shows how much the conventional wisdom has moved against exchange rate management (Lipschitz 1978).
would follow the a standard prescription. A increase in expenditure or a reduction in taxes would provide the major demand stimulus. The exchange rate would be managed to prevent deterioration in the external current account. The fiscal deficit would be financed in part or entirely by public bond sales to the private sector to prevent excessive money growth. For countries that export exchange rate inelastic commodities, such as petroleum, currency adjustment would affect only imports.

However, the policy options facing the governments of the sub-Saharan countries are considerably more restricted, as Table 1 shows. The first three columns after the country's name provide information on institutional arrangements for monetary, fiscal and exchange rate policy. The next five columns report the latest available annual statistics on key macro indicators, the fiscal balance, the current account, foreign exchange reserves, development assistance and inflation. Details are provided in notes to the table.

The first column of Table 1 shows that very few countries in the region have the basic institutions to implement monetary policy. Seventeen countries were part of a common currency zone (fourteen) or operated with an inflexible link to the South African rand (three). Of the twenty-nine countries with national currencies, in eighteen governments did not issue bonds, or issued bonds but no formal bond market existed. For the region as a whole, only eleven of over forty countries had secondary bond markets, and only in South Africa were they deep and broad enough to be effective. This supports the earlier assertion that for practical purposes, monetary instruments are of little use in the sub-Saharan region except for a few countries. If this seems a harshly negative judgment, the example of Zambia is instructive. While a secondary market exists in which government paper is regularly bought and sold, trading is among a small group of expatriate banks and copper companies, and the average monthly turnover of treasury bills was about US$ 100 million (Weeks, et. al. 2006).

With regard to fiscal policy, the countries of the West African Economic and Monetary Union and the Central African Economic and Monetary Community (so-

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23 The most accessible source for information on monetary institutions and financial markets in Africa is the Wharton Financial Institutions Center of the University of Pennsylvania, which provides recent reports on almost all countries. See http://fic.wharton.upenn.edu. For countries in Africa not covered in Wharton studies, websites of central banks were used.
called CFA zone) had restrictions derivative from agreements with the government of France on fiscal operations that required the annual current budget to be balanced. The capital budget could be in deficit if the method of finance were specified. In effect this meant that a capital deficit must be covered by a current surplus or development assistance. While this arrangement would not exclude a fiscal stimulus, in practice it greatly restricts it. The *sin qua non* of countercyclical intervention is that it can be initiated and terminated quickly in response to demand shocks. Capital expenditures lack this flexibility even if funding is available.

Though less limited than monetary policy, exchange rate adjustment is not available to a substantial number of sub-Saharan government, because, as noted above, fourteen have a common currency. Three more have chosen to maintain a strict link to the rand within the Common Monetary Area. Of the remaining twenty-seven, eight operated with adjustable fixed exchange rates, and nineteen with managed or “flexible” rates. The majority of these twenty-seven had no bond markets in which sterilization operations could be implemented. For several of the twenty-seven, exports would be exchange rate insensitive (e.g., Angola and Nigeria, petroleum exporters).

In addition to these institutional constraints on policy tools, there are the ones set by the IMF, sometimes called performance indicators. Policy action is further limited in those countries with initial conditions so unfavorable as to render a stimulus package unwise because it would generate macro instability rather than recovery. In general, a stimulus policy should be consistent with a sustainable fiscal balance, manageable external current account, and inflation which is not destabilizing. The initial values of these variables that are consistent with macroeconomic stability will depend on the structural and behavioral characteristics of each economy and the size of the planned stimulus. As shown in Section 3, the most important behavioral parameters are the exchange rate elasticity of trade and the propensity to import, and the most import initial conditions are deficit, current account and the level of structural inflation.

Any set of initial conditions is arbitrary if applied to all the countries. For example, the initial deficit that would preclude a fiscal expansion will vary by country depending on the ratio of debt to national, time structure of than debt and interest rates. However, it is necessary to risk arbitrariness to indicate the extent to which sub-Saharan governments could go beyond institutional feasibility to policy
implementation. For this purpose, the following guidelines are applied to the countries in Table 1:

1. the fiscal balance (column 5) after concessional finance (ODA) should not exceed five percent of GDP (column 7);
2. the external current account deficit (column 6) should be covered by ODA (column 8), and foreign exchange reserves should be at least three months of imports (column 7); and
3. inflation should not exceed fifteen percent per annum except in the case of a fiscal surplus (column 9).

The first derives from the argument that pushing the fiscal deficit towards ten percent increases the probability of an unsustainable debt overhang. The second conforms to a reasonable guideline for reserve holdings (Rodrik 2006), and the third is in keeping with research on the impact of inflation on growth.24

Table 2 combines these initial constraints with the previously discussed institutional limits on policy implementation to identify the stimulus packages that would be feasible in the sub-Saharan region at the end of the 2000s. Whether it would be appropriate in a specific case requires detailed individual country analysis (Weeks 2009d). For eighteen countries it would be feasible to implement a combined fiscal expansion and exchange rate management package. Despite its high inflation rate of eighteen percent, Angola is included in this group on the basis of large fiscal and current account surpluses. The country's high inflation is primarily a legacy of decades of conflict that created severe constrains to transport and communication.

In some of these eighteen countries it would be possible to finance the increased expenditure by bond sales because of functioning if not efficient financial markets. For some, Angola, Comoros, Gambia and Tanzania are examples, governments would need to monetize the fiscal stimulus. With the exception of South Africa, in none of the countries is it likely that foreign exchange operations by the central bank would be a safe method of exchange rate management, implying closely managed currencies.

The practicality of implementing a stimulus is supported by three of these countries initiating such packages in 2009 or 2010.\textsuperscript{25} The IMF recommended the countercyclical intervention in Mozambique, even though the government’s fiscal deficit was over the unusual guideline of three percent of GDP, and the external current account balance was almost minus nine percent of GDP. All but a few of the countries in Table 1 that could use both fiscal and exchange rate instruments had smaller negative trade balances after ODA inflows than Mozambique.

For six countries exchange rate management would not possible due to currency arrangements, but their fiscal and current account balances allow for fiscal expansion alone (see Table 2). Fiscal expansion would threaten neither internal nor external stability. In ten countries a fiscal expansion would require external concessionary finance because of institutional limits on deficit financing. In ten other countries the performance indicators do not justify a stimulus policy.

To summarize, in the late 2000s, for twenty-four of the forty-four sub-Saharan countries, just over half, a domestically financed fiscal stimulus would be feasible and justified by the most recent performance indicators. The performance indicators for ten more countries do not preclude a stimulus, but it would require external assistance because of the current account impact in the context of exchange rate inflexibility. Ten countries require stabilization programs to move towards internal and external balance before a stimulus would be sustainable.

\textbf{Tables 1-2 go here}

5. Constraints on Macro Policy

The low level of development of financial institutions renders monetary policy ineffective in the vast majority of the sub-Saharan countries. Common currency arrangements further limit the policy options of many governments. In some countries policy options are also limited by size of the fiscal deficit, current account imbalance, foreign exchange reserves and inflation.

However, as the Freetown Declaration of African finance ministers stated, these constraints limit but do not preclude purposeful policy if governments of the

\textsuperscript{25} These are Sierra Leone (Weeks 2009d), Mozambique (IMF 2009c) and Nigeria (Alabi and Adams 2010).
region assert themselves as agents of short term recovery and long term development. For a few governments active policy intervention can be done using all the standard instruments, fiscal, monetary and exchange rate. For a majority fiscal policy with domestic deficit financing can be used to re-commission the public sector as an agent of change. In three-quarters of the countries purposeful action is consistent with macro stability.

However, the governments need donors and the IMF to grant “policy space” through the following measures, specified in the Freetown Declaration:

1) elimination of the pro-cyclical conditionalities and “benchmarks” for deficit limits, inflation rates, external borrowing and foreign exchange holdings (all explicit in the Declaration);

2) donor reliability on delivery of development assistance because countercyclical policies will be “finely tuned”, and late or non-delivery of assistance could provoke macroeconomic instability; and, more generally,

3) a suspension of the “business as usual” approach to negotiations over development assistance which emphasizes “reform” issues that the external crisis has rendered of less immediate importance.

The combination of a carefully calibrated stimulus policy and donor flexibility offers the firm prospect of overcoming the potentially serious effects of the external shocks from the international financial crisis. While a stimulus package involves risks, they are minor compared to the certain effect of external shocks on poverty and public welfare. At the 2009 meeting of the African Caucus, the region's senior finance minister summarized the message of the gathering to the international agencies as follows, "we do not need policy advice because we know what to do - give us the space to do it".
References


Caucus of African Governors to the Bretton Woods Institutions, Freetown Declaration, Freetown, Sierra Leone. 2009.  


