

Policies Options for Reducing Unemployment and Mitigating the Social Impact of the Global Financial Crisis

A Report for the United Nations Economic Commission for Africa,
Economic Report for Africa 2010

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EXECUTIVE SUMMARY

Africa and Global Contraction

What began as a financial crisis concentrated in the United States of America spread through major developed countries and into the middle income countries of Latin America, Asia and North Africa. Initially there was hope that low income countries, because of their underdeveloped financial sectors, might be spared from the crisis. However, emerging evidence suggests that by the end of 2008 the effects had reached the countries of Africa, both in the north and the sub-Saharan.

Statements and recommendations by international agencies suggest that a policy consensus is emerging in favour of countercyclical responses to the world downturn, of the type that for years the UNECA has recommended. It is appropriate that policy makers in Africa take advantage and follow this emerging view. This paper considers how the countries of Africa might design and implement such a policy that focuses on employment generation.

Long term Growth Performance

The average growth rate across African countries for which there were data fell sharply in the 1980s compared to the 1970s and remained almost the same in the 1990s. On average the growth rates for the twenty years were barely above the rate of population increases, implying stagnant per capita income. For the low income countries, all south of the Saharan and all but two on the mainland, growth performance was considerably worse than for the middle incomes countries.

Growth in the thirty-two low income countries for which there are statistics barely match population increase during the 1970s, fell well below in the 1980s, and remained below in the 1990s. For the sub-Saharan countries that did not export petroleum, growth in the 1990s was almost the same as for the 1980s, implying that for most countries per capita income declined for twenty years or more. In retrospect, it is difficult to interpret these persistently low growth rates for the poorest countries of the region as anything other than an indication of the inappropriateness of the orthodox policy framework fostered by multilateral and bilateral development agencies.

The overwhelming role of the world economy in determining the growth in countries of the continent is demonstrated by the similarity of the growth pattern across country groups. For every group the 1980s average is well below that for the

1970s, the 1970s and 1980s are almost the same, and the 2000s bring a substantial improvement. However, there are substantial differences in growth levels, with the almost forty year average for the eight countries of East and Southern Africa considerably higher than for the twenty-three countries of West and Central Africa.

The recovery of the 2000s was brief for the entire continent.. For the first four years of the decade, 2000-2003, growth rates were not significantly above the two decade average. The statistics indicate the recovery was cyclical rather than a sustained improvement, and ended in the second half of 2008. At the height of the recovery in 2007 the improvement for the low-income countries was modest, to an average of just over five percent (the constant plus the coefficient for that year).

For three decades, 1970-1999, growth rates in Africa were unimpressive for the middle income countries and below population increase for the low income countries. Only the oil exporting countries enjoyed extended (but not sustained) periods of rapid growth. The new century brought a few years of increasing per capita income for the low income countries, which ended abruptly in 2008.

Growth and Poverty Projections

By estimating the relationship between the OECD growth rate and the average across all African countries, projections by groups of African countries are made for 2009-2011. This analytical method tends to understate the effect of the global contract because it estimates only the export demand effect, and does not include possible falls in remittances or foreign investment. The results indicate that after a 5.3 percent average across the countries of the region for 2007-2008, the estimated and projected rates are 3.9 (2009), 4.9 (2010), and 4.9 in 2011. For the non-oil exporting countries of the sub-Saharan, almost all low income, the estimates are lower, 3.7, 4.0 and 4.6, respectively.

While these growth rates may not appear a dramatic decline, they represent a substantial reduction from the level of 2008. For all countries, the cumulative difference between the projected growth rates for 2009-2011 and the 2008 growth rate is -2.6 percentage points, or almost -.9 per year. If one makes the conservative assumption of an unchanged distribution of income, one can calculate the poverty consequence of the lower growth rate. The calculation imply that had growth continued at the rate of 2008, poverty in Africa would have been 2.5 percentage

points lower (250 million people), two percentage points lower in the sub-Saharan region, and over three percentage points in Southern Africa and the island countries.

While serious, these growth declines and poverty increases could be prevented by the rapid implementation of countercyclical fiscal policy, supported by accommodating monetary policy and appropriate exchange rate intervention. This package of crisis-response intervention is within the resource means and administrative capacity of almost all governments of the continent.

Employment in Africa

While employment in the usual sense is central to livelihoods in North Africa, with a few exceptions the sub-Saharan countries have quite low shares of the labour force in enumerated employment, at most 15-20 percent at the end of the 2000s. With a few exceptions, the sub-Saharan countries are societies of smallholder agriculturalists, many of whom also work for wages part of the year, traders and small artisans whose work focuses on tailoring and repairs.

Information on enumerated employment for the last twenty years in Africa is almost non-existent. Fragmentary time series statistics on aggregate paid employment are available for twenty-three countries. Few countries have statistics prior to the late 1970s almost all series end in the 1990s. Very few analytical conclusions are possible for aggregate paid employment.

Thirteen of the countries show a positive trend in employment, six have no significant trend, and for four the trend was negative. Except for South Africa, the statistics are of low quality, beset by problems of consistency of coverage and definition over time, which makes drawing conclusions extremely problematical. Generalisations are made more difficult to infer because three of the four largest countries in the region, accounting for forty percent of the sub-Saharan population (Congo DR, Ethiopia and Nigeria), have no reliable data for any year or for only one year.

In the North African countries enumerated wage employment is the major source of livelihood in mining and manufacturing, and of major importance in agriculture. Decent wages are central to poverty reduction in these five countries. Among the sub-Saharan countries wages in enumerated employment are a major source of income in most of the island countries (Seychelles, Mauritius and Cape Verde). For neither the North African nor the island countries are there data for

informed speculation about recent trends in real wage incomes. In three mainland sub-Saharan countries enumerated employment exceeded twenty-five percent of the labour force, South Africa, Botswana and Swaziland. It is likely that in a majority of the sub-Saharan countries the share of the labour force in enumerated employment is less than ten percent.

The probable fall in enumerated employment in sub-Saharan countries during the 1980s and 1990s was part of the long term decline of the region. A central goal of sustained recovery should be the reconstruction of viable, employment intensive non-agricultural sectors throughout the region. This could be the medium term complement to the countercyclical recovery programme to mitigate the growth decline caused by the global contraction.

It is essential to future development policy that government throughout the region should give priority to the collection of data on employment. Into the mid-1990s many governments in Africa carried out annual employment and earnings surveys. By the end of the decade almost none did. The most likely reason for the absence of employment data, even in countries where it had previously been regularly collected, is political. Poverty surveys became more consistent with donor and lender priorities than employment surveys, at the same time when declines in employment made the collection of employment data a possible embarrassment.

Countercyclical Intervention

To counter the effects of the international crisis on the domestic economy, most governments in Africa could initiate a macroeconomic stimulus package that focuses on employment generation through public works. The package would be fiscal expansion complemented by currency depreciation implemented with exchange rate management. Most of the fiscal expansion would be financed by borrowing from the central bank, with bond sales in countries with effective re-sale markets and a component of additional external assistance for low income countries. Exchange rate management, common for petroleum exporters, is a necessary complement in order to 1) to raise the relative price of tradables to prevent the fiscal expansion from generating an unsustainable trade deficit; and 2) to achieve a real exchange rate associated with the fiscal expansion that is sufficiently trade altering but not excessively inflationary.

Donor and Lender Flexibility

All governments will need donors and the IMF to grant 'policy space' through 1) elimination of the counter-cyclical conditionalities and 'benchmarks' for deficit limits, inflation rates and foreign exchange holdings; 2) for low income countries greater donor reliability on delivery of assistance because the fiscal stimulus 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 assistance which emphasise policy issues such as tax reform that the external crisis has rendered of less immediate importance.

The combination of a carefully designed stimulus package and donor flexibility offers the firm prospect of overcoming the potentially serious effects of the external shock to the economy. While the stimulus package involves risks, these are minor compared to the certain effect of the global depression on poverty and public welfare.

1. Introduction

This study contributes to the *Economic Report on Africa 2010*, exploring the implications for Africa of the instability in the world economy, focusing on reducing unemployment. The study is organised in the following order: the mechanisms by which the global crisis of 2008-2009 affected Africa are discussed; the impact of the global recession on output and employment is reviewed; 3) the appropriateness of countercyclical macro policy is presented; 4) countercyclical policy is linked to employment generation; and 5) the integrated output stabilisation and employment promotion policy programme is summarised.

Prior to the financial disasters of 2008, the term ‘stabilisation policies’ meant macroeconomic frameworks which were pro-cyclical, placing first priority on attempting to control inflation and managing the balance of payments. As global growth changed to global decline, ‘stabilisation’ regained its common usage after the Second World War, macroeconomic management to keep an economy near its full potential, summarised in the term ‘countercyclical intervention’. This study demonstrates the relevance of that meaning of stabilisation for African countries, both middle income and low income.

Carrying out the empirical elements in the analysis of this study, the impact of the crisis and reducing unemployment, is constrained by lack of relevant information. In the case of the impact of the crisis, the data problem is that the statistics to demonstrate directly changes in key macro variables is not yet available. If one were to wait until these data were available, the moment for policy action would have passed. Therefore, indirect indicators are used to infer the likely magnitude of the impact on as many countries as the data allow.

For unemployment, the problem is more serious. In many of the countries of the continent the social structure is such that ‘unemployment’ is not a relevant analytical category because, 1) the institutions do not exist which would allow people to sustain themselves without work, and 2) a large portion of the labour force, a majority in many countries, works in employment relations not primarily defined by payment of wages. To the extent that statistics allow, enumerated employment is analysed. Most of the discussion of employment addresses measures linked to countercyclical macro intervention, designed to reduce the impact of the global crisis on livelihoods and mitigate the poverty generated by that crisis.

2. The Global Crisis and Africa

2.1 The Pre-Crisis Policy Context

What began as a financial crisis concentrated in the United States of America spread through major developed countries and into the middle income countries of Latin America, Central Europe, Asia and North Africa. Initially there was hope that low income countries, because of their underdeveloped financial sectors, might be spared from the crisis. However, emerging evidence suggests that by the end of 2008 the effects reached the countries of the sub-Saharan region.

Because of their dependence on commodity exports with volatile world prices, growth rates of developing countries tend to fluctuate more than rates for advanced industrial countries. This is particularly true of sub-Saharan countries, which except for South Africa have few manufactured exports. The orthodoxy before the current financial crisis was 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. However, empirical evidence suggests that in the 1990s and 2000s growth rates in the sub-Saharan region were as or more unstable than before the liberalising policies of the 1980s (see Weeks 2008 and 2009a; Weeks and Geda 2007).

Until 2008 the macro policy framework common to most African countries was based on the hope that relative price changes would allow economies to approach their growth potential: a programme generalising deregulation across all markets, combined with a cautious monetary policy and a neutral fiscal policy would enable these relative price changes to be realised in practice. This analysis, known technically as the 'price constrained framework', has as its prerequisite that the world economy is operating near its potential.¹ Since mid-2008 it has been clear that the world economy is quantity constrained: aggregate demand is insufficient to permit the world economy to achieve its potential. For this reason the governments of the major industrial countries have introduced 'stimulus packages' of varying sizes, designed to replace the fall in private sector demand with public sector expenditure.

¹ The theoretical and policy difference between 'price constrained' and 'quantity constrained' economies is discussed in Weeks (1989). The recently revised edition can be found at <http://jweeks.org>.

What is true for the advanced countries can also apply to developing countries. Lower demand from the advanced countries means lower expenditures by households and businesses on internationally traded commodities. World trade in the major export commodities of African countries, from cotton to cocoa, has fallen in the last twelve months. Declining prices of these commodities cannot restore their quantities and values to their pre-2008 level. The fundamental problem is not that the commodities are too expensive, but that there is a deficiency of demand at any price of a specific commodity and at any set of relative prices. Were it the case, for example, that Sierra Leone's exports of cocoa did not decline, this would mean that the cocoa exports of some other country fell.

In the context of a demand constrained world economy, African governments have two general policy options. Governments can pursue a 'business-as-usual' and 'hope-for-the-best' option in which they continue with the policy framework designed for a robust world economy and await international recovery. This would mean continuing to follow advice to place primary emphasis in macro policy on preventing inflation, attempting to reach a target for the fiscal deficit, and maintaining a free-floating exchange rate.²

Choosing this option would represent a triumph of hope over experience. When the world economy is deflating a fiscal policy guided by fears of inflation would result in a contraction of the demand for domestic goods to aggravate the contraction in exports. As the economy contracted due to the world recession and a restrictive fiscal policy, any deficit target would become more difficult to realise. A reduction in expenditure, or an increase in taxes, would further depress private domestic expenditure, which would reduce revenue from sales taxes. For example, an attempt to reduce the fiscal deficit by one percentage point would require a reduction of national income by a multiple of one percent. The nominal depreciation of a floating exchange rate in the context of lower export demand could result in a declining economy aggravated by an inflationary spiral.

The other option, adopted by most governments in rich countries, has been an active fiscal policy, to reduce the impact of the international downturn through

² 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)

purposeful management of the public budget. The policy objective is to compensate for fluctuations in private sector demand by use of ‘countercyclical’ fiscal policy. After it fell out of political fashion for almost three decades, opinion has moved back in favour of countercyclical fiscal intervention.

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.³ In its survey of the impact of the financial crisis, the World Bank also recommended that governments ‘assess their ability to undertake countercyclical policies’.⁴ The African Development Bank as well has recommended countercyclical fiscal intervention.⁵ Without explicitly mentioning countercyclical measures, in 2009 the IMF recommended for Sierra Leone that the country’s fiscal deficit be allowed to increase to respond to the impact of the financial crisis on import prices.⁶

These statements and recommendations by international agencies suggest that a new policy consensus is emerging in favour of countercyclical responses to the world downturn. It is appropriate that policy makers in Africa take advantage and

³ The complete passage 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).

⁴ ‘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)

⁵ The AfDB’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)

⁶ ‘[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).

follow this emerging view. This paper considers how the countries of Africa might design and implement such a policy.

2.2 Diversity of the Region

There are very few substantive generalisations relevant to Africa because of the great social and economic diversity of the continent. The first generalisation, which will be the basis of our estimate of the impact of the global contraction, is that all of the African countries are to some degree affected by growth in the advanced developed countries, which we identify empirically as the high-income OECD countries. A second generalisation is that while employment in the usual sense is central to livelihoods in North Africa, with a few exceptions the sub-Saharan countries have quite low shares of the labour force in enumerated employment.⁷

Various forms of wage labour may make for a substantial contribution to total employment in the sub-Saharan countries, but what is generally and loosely called 'formal' sector employment was at most 15-20 percent of the regional labour force at the end of the 2000s. No mainland country south of the Sahara, not even South Africa, had the majority of its labour force in enumerated employment, as discussed in more detail in the next section. With a few exceptions, the sub-Saharan countries are societies of smallholder agriculturalists, many of whom also work for wages part of the year, traders and small artisans whose work focuses on tailoring and repairs.

Third, one reason that few generalisations are valid is the great diversity in economic and social characteristics among the more than fifty countries of the continent, among the most important being level of development, population size, export structure, and degree of social conflict. As discussed in the next section, some of these have a substantial impact on growth. The extreme ends of the Africa continent have the most advanced economies: the five petroleum and manufacturing exports along the Mediterranean coast, and in the south, Angola, Namibia, South Africa and two Rand zone countries (Botswana and Swaziland). These countries account for ten of the thirteen mainland economies with per capita incomes in excess of US\$ 1000 in 2005.⁸ The only other continental countries with per capita incomes above this were the Central African Republic, Equatorial Guinea and Gabon.

⁷ Labour force surveys typically cover establishments hiring ten or more, though the lower limit is twenty and higher in some cases.

⁸ The measure is constant US dollars of 2000.

Differences in levels of development correspond to export structure. Almost without exception, the countries with per capita incomes over US\$1000 export petroleum or manufactures (or both in the case of Egypt), while the other countries export agricultural products or non-precious metals and minerals. This difference in export composition had a substantial impact on the transmission of the global contraction. An analysis of commodity price movements is beyond the terms of this study. However, we can note that while the fall in the price of petroleum was dramatic in the second half of 2008, in 2009 recovery came quickly. For most agricultural commodities the price fall has been less and the recovery sluggish.

Preliminary statistics for 2009 suggest that no African country was unaffected by the global contraction. The availability of data limits the extent to which the impact can be estimated, particularly with regard to employment and livelihoods. It must be admitted at the outset that estimates of the economic and social impact on the poor and vulnerable of Africa by the global contraction are weak. While there are dangers in basing policy on weak evidence, greater is the danger of inaction, because the likely consequence of inaction will be deepening poverty and increased human suffering..

3 Impact of the Global Contraction on African Countries

3.1 Regional growth 1970-2007

The great global contraction at the end of the 2000s should be placed in its long term context. While in Asia growth rates were high for most countries during the decades prior to the crisis, in Africa they remained consistently low with very few exceptions. The period with the most rapid growth for the continent was the second half of the 1960s, immediately after independence for most countries, slightly lower rates in the 1970s, and twenty years of slow growth and stagnation through the 1980s and 1990s, before growth achieved a modest recovery in the mid-2000s.

The growth record of the continent is summarised in Table 1, with countries organised into analytical and geographic groups. The average growth rate across all countries for which there were data fell sharply in the 1980s compared to the 1970s and remained almost the same in the 1990s. On average the growth rates for the twenty years were barely above the rate of population increases, implying stagnant per

capita income. For the low income countries, all south of the Saharan and all but two on the mainland, growth performance was considerably worse than for the middle incomes countries.

Growth in the thirty-two low income countries for which there are statistics barely match population increase during the 1970s, fell well below in the 1980s, and remained below in the 1990s. For the sub-Saharan countries that did not export petroleum, growth in the 1990s was almost the same as for the 1980s, implying that for most countries per capita income declined for twenty years or more. In retrospect, it is difficult to interpret these persistently low growth rates for the poorest countries of the region as anything other than an indication of the inappropriateness of the orthodox policy framework fostered by multilateral and bilateral development agencies.

The overwhelming role of the world economy in determining the growth in countries of the continent is demonstrated by the similarity of the growth pattern across country groups. For every group the 1980s average is well below that for the 1970s, the 1970s and 1980s are almost the same, and the 2000s bring a substantial improvement. However, there are substantial differences in growth levels, with the almost forty year average for the eight countries of East and Southern Africa considerably higher than for the twenty-three countries of West and Central Africa.

Table 2 provides a statistical analysis of cross-country growth rates for the nineteen years, 1990-2008.⁹ The results show a significant constant term which is approximately equal to the rate of growth of population. Countries affected by conflict grew consistently lower even though the time period includes years of rapid post-conflict recovery.¹⁰ Because of the high petroleum prices for much of the two decades, petroleum exporters grew significantly faster than other countries. As Table 1 suggested, middle income of all categories had higher growth rates than for all low income countries.

⁹ The statistical analysis was a cross-section time series regression for fifty-one countries over nineteen years using binary variables. Two countries with short time series are included in this analysis that are not in Table 1 (Liberia and Libya). Binary variables not significant were: all years 1990-2003, all geographic groups (including that for the sub-Saharan countries), population size groups, islands and 'landlocked', and major commodity types other than petroleum.

¹⁰ The conflict countries were: Angola, Burundi, Chad, Democratic Republic of Congo, Eritrea, Ethiopia, Liberia, Rwanda, Sierra Leone and Zimbabwe (with no data for the last after 2004).

Finally, Table 2 indicates the brevity of the recovery of growth rates in the 2000s. For the first four years of the decade, 2000-2003, growth rates were not significantly above the two decade average. The statistics indicate the recovery was cyclical rather than a sustained improvement, and ended in the second half of 2008. At the height of the recovery in 2007 the improvement for the low-income countries was modest, to an average of just over five percent (the constant plus the coefficient for that year).

The statistical evidence supports clear conclusions. For three decades, 1970-1999, growth rates in Africa were unimpressive for the middle income countries and below population increase for the low income countries. Only the oil exporting countries enjoyed extended (but not sustained) periods of rapid growth. The new century brought a few years of increasing per capita income for the low income countries, which ended abruptly in 2008. The next section estimates the likely impact of the global contraction which began as severe financial instability in the United States in mid-2008.

3.2 Impact by Groups of Countries

Evidence from almost fifty years indicates a close correlation between the growth of the developed countries and the sub-Saharan countries, shown in Figure 1. When one adjusts for the very low growth rates of the sub-Saharan region in the 1980s and 1990s, and debt burden, statistics reveal that a one percentage point change in the average growth rate across the OECD countries was associated with a change in the sub-Saharan average of approximately .6 percentage points with a one year lag.¹¹

Applying this simple relationship, the OECD growth rate for 2008 and projected rates for 2009-2011 can be used to estimate the rates for the African

¹¹ The following regression was estimated for 1990-2007, using the average growth rate for all African countries, the average for the OECD countries lagged one year, and the average external debt to GDP ratio.

$$\ln(gAfrica)_t = .179 + .552\ln(gOECD)_{t-1} -.025\ln(Db/GDP)_t$$

Significance:

constant = .00

(OECD)_{t-1} = .00

(Dbt/GDP)_t = .01

Adjusted R-square = .598, F-statistic = 16.45, DF = 28

For each country, the OECD growth coefficient was multiplied by the 'openness' of each country relatively to the average openness across all countries. Openness was calculated as the average of the export and import shares, or $[(X+M)/GPD]$.

countries. This method understates the effect of the global contract because it estimates only the export demand effect, and does not include possible falls in remittances or foreign investment. The results are reported in Table 3a, which provides other statistics that will be used to estimate the impact of the global contraction, Gini coefficients and per capita income. After a 5.5 percent average across the countries of the region in 2007, the estimated and projected rates are 3.9 (2009), 4.9 (2010), and 4.9 in 2011. For the non-oil exporting countries of the sub-Saharan, almost all low income, the estimates are lower, 3.7, 4.0 and 4.6, respectively.

While these growth rates may not appear a dramatic decline, they represent a substantial reduction from the level of 2008. For all countries, the cumulative difference between the projected growth rates for 2009-2011 and the 2008 growth rate is -2.6 percentage points, or almost -.9 per year. If one makes the unlikely assumption of an unchanged distribution of income, one can calculate the poverty consequence of the lower growth rate.¹² The calculation imply that had growth continued at the rate of 2008, poverty in Africa would have been 2.5 percentage points lower (250 million people), two percentage points lower in the sub-Saharan region, and over three percentage points in Southern Africa and the island countries.

While serious, these growth declines and poverty increases could be prevented by the rapid implementation of countercyclical fiscal policy, supported by accommodating monetary policy and appropriate exchange rate intervention. This package of crisis-response intervention is within the resource means and administrative capacity of almost all governments of the continent.

¹² This calculation derives from the following cross-country regression, in which the measured US\$ 1.25 headcount poverty rate (PHC) is a function of per capita income (PCY) and the Gini coefficient (Gini):

$$\ln(\text{PHC}) = -.827 + 2.512\ln(\text{Gini}) - .821\ln(\text{PCY})$$

Significance:

constant = nsgn

Gini = .00

PCY = .00

Adjusted R-square = .630, F-statistic = 30.63, DF = 36

Table 1: GDP Growth rates in Africa, 1970-2007

<u>Country groups</u>	<u>1970s</u>	<u>1980s</u>	<u>1990s</u>	<u>2000-07</u>
All Africa 49	4.5	2.9	3.0	4.8
Middle Y 17	7.3	4.3	3.4	4.8
Low Y 32	3.1	2.1	2.8	4.8
Oil exporters 11	5.8	3.9	4.1	7.2
Non-oil 38	4.3	2.7	2.7	3.9
North Africa 2	4.7	3.3	3.0	3.4
Sub-Sahara 36	4.3	2.6	2.7	4.0
West 14	3.2	1.6	2.0	3.7
Central 9	4.7	2.6	1.7	3.2
East 3	7.2	3.7	4.1	5.8
Southern 5	5.2	4.3	4.2	4.8
Islands 5	na	3.4	4.3	4.0

Notes:

Country Groups:

Middle income: Algeria, Angola, Botswana, Cape Verde, Cameroon, Cote d'Ivoire, Egypt, Gabon, Lesotho, Libya, Mauritius, Morocco, Namibia, Seychelles, South Africa, Sudan, Tunisia.

Oil exporters: Algeria, Angola, Cameroon, Chad, Congo Rep, Equatorial Guinea, Egypt, Gabon, Libya, Nigeria, Sudan

North Africa: Morocco, Tunisia

West: Benin, Burkina Faso, Cape Verde, Cote d'Ivoire, Gambia, Ghana, Guinea, Guinea-Bissau, Mali, Mauritania, Niger, Senegal, Sierra Leone, Togo

Central: Central African Republic, Congo DR, Ethiopia, Eritrea, Malawi, Burundi, Rwanda, Zambia, Zimbabwe

Southern: Botswana, Lesotho, Mozambique, South Africa, Swaziland

Islands: Cape Verde, Comoros, Madagascar, Mauritius, Seychelles

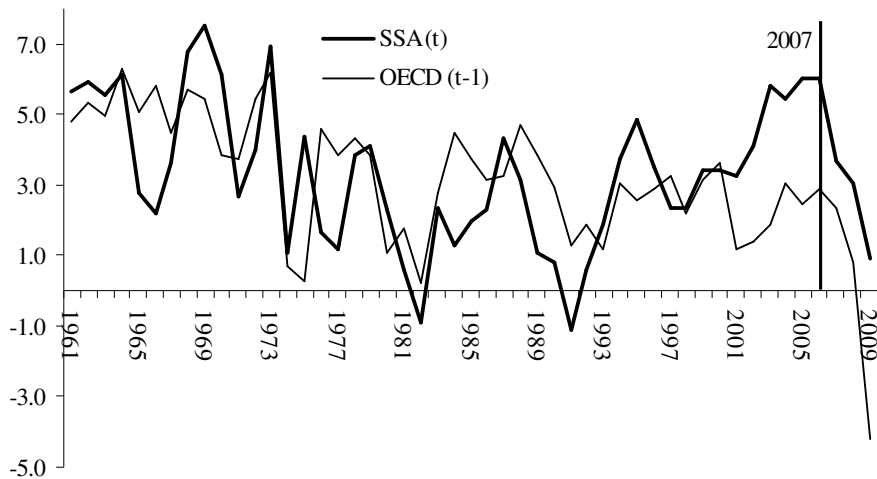
Source:

World Development Indicators 2009.

Table 2: Differences in growth rates by country characteristic and year, 1990-2008

Variable	Coefficient	T-statistic	sign @
Constant	+ 2.5	7.27	.00
Conflict	- 1.7	-2.74	.01
Oil exporter	+ 1.5	2.51	.01
Middle Income	+ 2.0	3.23	.00
2004	+ 2.0	2.29	.02
2005	+ 2.5	1.91	.06
2006	+2.0	2.41	.02
2007	+ 2.6	2.24	.03
2008	+ 2.2	2.06	.04
Adj R-square =	.050	DF = 942	
F-statistic =	6.04		

Figure 1: Growth of the OECD Countries and the Sub-Saharan Countries, annual values 1961-2007, estimates 2008-2010



Notes:

See text for estimating model.

Sources:

World Bank: <http://web.worldbank.org/WBSITE/EXTERNAL/DATASTATISTICS/>

OECD: http://www.oecd.org/document/61/0,3343,en_2649_34573_2483901_1_1_1_1,00.html

3.3 Employment and Livelihoods

A major impact of the global contraction will be its impact on employment throughout the region. As explained in Section 2, for the majority of the countries of the region enumerated employment accounts for a relatively small proportion of the labour force. Even in those countries in which enumerated employment is relatively small, it can and does make a substantial contribution to aggregate demand at the margin.

It is unfortunately the case that information on enumerated employment for the last twenty years in Africa is almost non-existent.¹³ The statistics on aggregate paid employment that are available, for twenty-three countries of the continent, are presented in the Annex. Few countries have statistics prior to the late 1970s almost all series end in the 1990s: two countries have statistics into the mid-2000s (Botswana and South Africa); six end in the early 2000s (Morocco, Kenya, Malawi, Seychelles, Swaziland and Zimbabwe); and the remaining fifteen stop sometime in the 1990s and several of these have missing years.

¹³ The data available is considerably less than when Jamal and Weeks (1993) attempted to compare rural and urban incomes in several countries for the 1980s.

Table 4 summarises what analytical results are possible for aggregate paid employment.¹⁴ Thirteen of the countries show a positive trend in employment, six have no significant trend, and for four the trend was negative. Except for South Africa, the statistics are of low quality, beset by problems of consistency of coverage and definition over time, which makes drawing conclusions extremely problematical. Generalisations are made more difficult to infer because three of the four largest countries in the region, accounting for forty percent of the sub-Saharan population (Congo DR, Ethiopia and Nigeria), have no reliable data for any year or for only one year.

On the basis of this extreme paucity of statistics, a few observations are possible. First, in the North African countries enumerated wage employment is the major source of livelihood in mining and manufacturing, and of major importance in agriculture. Decent wages are central to poverty reduction in these five countries. Among the sub-Saharan countries wages in enumerated employment are a major source of income in most of the island countries (Seychelles, Mauritius and Cape Verde). For neither the North African nor the island countries are there data for informed speculation about recent trends in real wage incomes.¹⁵ In three mainland sub-Saharan countries enumerated employment exceeded twenty-five percent of the labour force, South Africa, Botswana and Swaziland. It is likely that in a majority of the sub-Saharan countries the share of the labour force in enumerated employment is less than ten percent. This inference is supported by Figure 2 which gives the scatter diagram for per capita income and the share in the labour force of enumerated employment for the thirty-eight countries in Table 4. The statistics show a clear and strongly significant relationship, as one would expect.

Second, though the available statistics cannot verify it, enumerated employment probably declined in most sub-Saharan countries in the 1980s and 1990s, and showed a mild recovery in the 2000s. The long decline was associated with externally supported adjustment programmes that directly reduced both private and public enumerated employment. The private employment decline resulted from reduction in protection, privatisation and contractionary macroeconomic policies. In

¹⁴ For an analysis of employment trends up to the early 1990s, see Weeks (1997). Since that study was written very little new information has appeared.

¹⁵ A thorough analysis of wages in the 1980s and early 1990s for some of the North African countries is found in Karshenas (1997).

several countries lending conditionality specified reductions in public employment, even providing funding for redundancies.¹⁶ The increase in growth rates during 2004-2007 almost certainly led to rising enumerated employment, though there are no statistics to verify this except in South Africa.¹⁷

The probable fall in enumerated employment in sub-Saharan countries during the 1980s and 1990s was part of the long term decline of the region. A central goal of sustained recovery should be the reconstruction of viable, employment intensive non-agricultural sectors throughout the region. This could be the medium term complement to the countercyclical recovery programme to mitigate the growth decline caused by the global contraction.

Third, and essential to future development policy, government throughout the region should give priority to the collection of data on employment. As the annex shows, into the mid-1990s many governments in Africa carried out annual employment and earnings surveys. By the end of the decade almost none did. The absence of such surveys cannot be explained either by their expense or difficulty, because almost all the governments, with the support of donors and lenders, implemented much more difficult and expensive household surveys, usually linked to Poverty Reduction Strategy Programmes. The most likely reason for the absence of employment data, even in countries where it had previously been regularly collected, is political. Poverty surveys became more consistent with donor and lender priorities than employment surveys, at the same time when declines in employment made the collection of employment data a possible embarrassment.

¹⁶ See the case study of Zambia in Weeks *et. al.* (2006).

¹⁷ The fragmentary information for Botswana indicates a fall in enumerated employment (see table in Annex). Botswana is not typical of the region. Its growth rate was lower during 2005-2008 than in the previous years, the reverse of the experience of most African countries.

Table 4: Paid employment shares and trends, 1997-2008

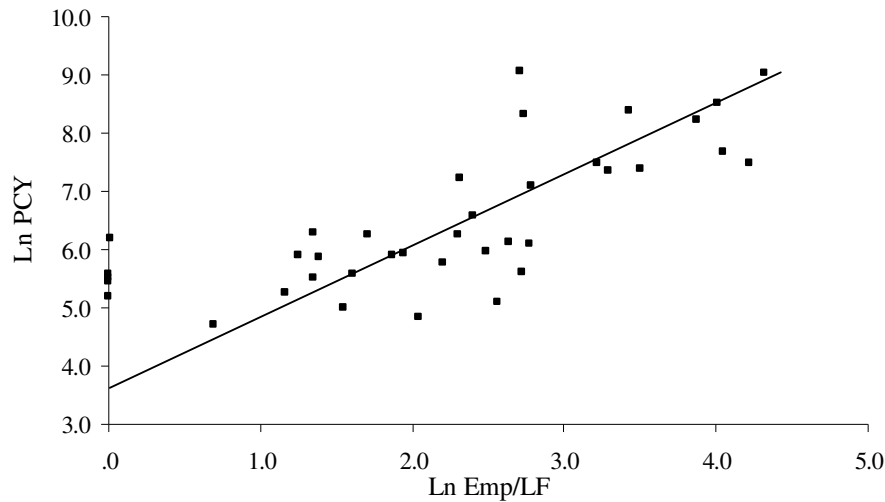
	<u>Year</u>	<u>% LF</u>	<u>Emp trend</u>	<u>Trend country count:</u>	
Seychelles	2003	75	nsgn	Positive	13
Egypt	1995	68	+3.2	Negative	4
Algeria	1995	57	+3.0	Nnsgn	6
Mauritius	2000	55	-2.0	No data	28
South Africa	2007	48	+1.2		
Cape Verde	2000	33	no data		
Botswana	2006	31	+8.5		
Swaziland	2000	27	nsgn		
Morocco	2001	25	+2.8		
Congo Rep	1990	16	no data		
Zimbabwe	2002	16	+0.6		
Eq Guinea	1983	15	no data		
Gabon	1996	15	no data		
Madagascar	2005	15	no data		
Kenya	2000	14	+3.9		
Malawi	1995	13	+2.4		
Zambia	1990	12	+1.0		
Cameroon	1985	11	no data		
Angola	1992	10	no data		
Cote d'Ivoire	1990	10	-1.3		
Ghana	1991	9	nsgn		
Guinea-B	1983	8	no data		
Gambia	1990	7	nsgn		
Tanzania	2001	7	no data		
Senegal	1991	6	+3.2		
Eritrea	1998	5	no data		
Sierra Leone	2004	5	no data		
Benin	1992	4	nsgn		
Sudan	1992	4	no data		
Togo	1997	4	-0.3		
Ethiopia	2004	3	no data		
Mozambique	1988	3	no data		
Burundi	1991	2	+2.0		
CAR	1992	1	-3.1		
Chad	1997	1	+4.4		
Niger	1991	1	nsgn		
Nigeria	1980	1	no data		

% LF is percentage of labour force, with the latter as estimated by ILO.

No data for any employment variables: Comoros, Congo DR, Djibouti, Guinea, Lesotho, Liberia, Libya, Mali, Mayotte, Mauritania, Namibia, Rwanda, Sao Tome and Principe and Tunisia.

Source: <http://laborsta.ilo.org/>

Figure 2: Relationship between paid employment share in labour force and per capita income, 38 African countries, various years (natural logs)



Note: The T-statistic for the simple regression is significant at .00 level of probability.

4 Countercyclical Macro Policy

4.1 Countercyclical Policy Intervention

In the previous section we demonstrated that the global contraction had and will have a substantially depressing effect on Africa's economic growth. The obvious policy response by African governments, as in the developed countries, would be countercyclical intervention. Countercyclical intervention increases demand when the economy grows below its long run potential, and decreases it when output rises towards its potential, when resource scarcities and inflationary pressure manifest themselves.

Taxes can be used for countercyclical intervention, 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 rates. In most countries both require legislative action, followed by changes in administrative procedures. This can be a lengthy process that fails to achieve demand changes with the speed necessary to respond to changes in private demand. In addition, direct taxes, the most effective type for stimulating demand, generate little revenue in the sub-Saharan countries. Public expenditure offers the more effective mechanism for compensating for private demand fluctuations.

Public expenditure policy should be placed in the context of a government's development strategy prior to considering its role as a countercyclical instrument. A country's medium and long term growth rates are determined by the development of capacity, skills and technical change, with technical change embodied in capital investment. Since public investment increases productive capacity, it is unwise to use it as a countercyclical instrument. Most public investments are carried out over several years, so using them as a countercyclical instrument would imply abandoning or suspending projects, resulting in waste of resources. The flexibility necessary for an effective countercyclical policy must be found in current public expenditure.

The general guideline for expenditure policy would be that if a country's potential growth rate is low, increasing public investment would be the appropriate response. Simultaneously a government would use current expenditure to generate the demand necessary to reach the greater potential created by the public investment if private demand is inadequate. Public expenditure is a more effective instrument for countercyclical intervention than taxation, because of the relative 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 countercyclical expenditure would be based on what might be called 'semi-capital' programmes, defined as programmes that use relatively employment intensive techniques 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'.¹⁸ Examples of such programmes are digging sanitation ditches, repair of public buildings, environmental improvement through erosion reduction, and clearing of rural footpaths. These activities are currently being implemented in several African countries, as discussed below.

These projects would make a contribution to community welfare, and their primary purpose is to increase expenditure through the consumption outlays of those employed directly and indirectly. These programmes would be:

¹⁸ See, for example, the ILO website on this type of project, <http://www.ilo.org/public/english/employment/recon/eiip/index.htm>

- 1) identified and ‘stock-piled’ prior to the need for them, with accounting procedures in place to reduce the likelihood of 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) designed so that wages and salaries are the major element of expenditure, with a low capital component.

Some issues that plague public works projects with controversy need not be relevant for ones whose purpose is primarily countercyclical. For example, the wage at which workers are paid is a secondary consideration because these are not long term or even medium term employment schemes. While projects for a countercyclical demand impact should not pay wages that disrupt local labour markets, their impact on internal migration will be limited because of their short term nature. Further, these programmes would be introduced when the labour is in excess supply, and would be unlikely to affect prevailing wage rates.¹⁹ Finally, and of great practical importance, 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.²⁰

If the size of the stimulus required to prevent an economy from declining is large, some donor support in addition to current commitments might be required. However, donor funding does not lend itself to countercyclical expenditure because of its fixed schedule of allocation and disbursement. To make their funding more appropriate for countercyclical programmes, donors could adjust their allocation procedures to allow for an ‘aid fund’ analogous to funds created for resource booms. Money could be drawn from such a fund when the economy was below potential, and ‘hoarded’ when the economy approach full potential. If donor grants are primarily

¹⁹ A recent study in Sierra Leone by MoFED experts recommended this type of employment programme, ‘cash for work’, as a possible policy measure to counter the effects of the financial crisis (MoFED-EPRU 2009).

²⁰ An effective countercyclical programme was implemented in Sierra Leone, administered by the National Commission for Social Action (NCSA) and the Youth Employment Scheme (YES). Both were relatively small and their primary function is not to have an impact on the macro economy but to generate employment.

used to fund public investment, they would not be used for countercyclical expenditures for reasons explained above.

The countercyclical fiscal stimulus in middle income African countries must be largely funded by public sector borrowing, and this may be the case in the low income countries if increased development assistance is not provided in a timely manner. If the implied increase in the deficit exceeds a level consistent with achieving other policy goals, such as inflation target or size of the domestic public debt, increased grants should be sought to fill the funding shortfall. Inflationary pressures and domestic debt accumulation are discussed in the next section.

4.2 Fiscal Deficits and Monetary Policy

A central principle of sound fiscal policy is that the public deficit is not in itself a problem. It is a policy variable whose outcome is derivative from demand management. The use of the public sector balance between revenue and expenditure as a tool to stabilise economies near full potential was generally accepted as sound macro management prior to the 1980s. Active fiscal policy passed out of fashion due to political changes in advanced countries. Abandoning an active fiscal policy was justified on technical grounds by two arguments: the possible inflationary effect of deficits, and the putative tendency for public borrowing to ‘crowd out’ private borrowing by causing interest rates to rise.

The analysis of the relationship between public deficits and inflationary pressures is straight-forward. *If the economy is operating at full potential*, increased spending from any source, public or private, must result 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. If the expenditure is financed through borrowing, creating or increasing the fiscal deficit, the borrowing can be through sales of government securities to the private sector (‘open market operations’) or by the ministry of finance borrowing from the central bank (‘monetising the deficit’).

Bonds sales to the private sector ensure that the expansion of the deficit is not inflationary, 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 increased public spending, it would be necessary for the

government to offer the bonds above the prevailing interest rate in order to sell them successfully. If the increased bond rate transmits to private financial markets, 'crowding out' of private sector borrowing would occur if private investment is sensitive to formal sector interest rates. If the government borrows directly from the central bank, the money supply increases and, with the economy at full potential, inflation results. There is an important exception to this. If the economy is open, the increased money in circulation will in part or whole 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. An increase in government expenditure financed by bond sales to the private sector would increase aggregate demand. With no change in the money supply, as implied by open market operations, the increased output would generate upward pressure on interest rates, depressing private investment expenditure. As a result the net change in aggregate demand would be less than the increase in public expenditure, though still positive. Financing the expenditure by direct borrowing from the central bank would imply that the increase in aggregate demand would equal the increase in public expenditure. Monetising the deficit generates an increase in the money supply sufficient to circulate the increased output that results from more public expenditure.

It should be clear that this theoretical discussion of deficit finance assumes developed financial institutions that exist only in the North African countries and South Africa. Few sub-Saharan countries other than South Africa have sufficiently developed bond markets to allow for fully effective open market operations. In the absence of an effective secondary bond market (re-sale market), the major motivation of commercial banks to hold public bonds is statutory requirements on the composition of bank reserves.

As a result, high interest rates are required to induce banks to purchase bonds beyond legal requirements. In addition, commercial banks play a limited role in financing productive investment in most sub-Saharan countries. The combination of the absence of a secondary market and high yields on public bonds implies that financing deficits by bond sales has the perverse effect of further discouraging commercial banks from funding productive investment, which are riskier than holding government securities. As a private bank official in Zambia observed, holding

government bonds is in effect a license for banks to print money.²¹ The major economic effect of higher interest rates is to increase the cost of servicing the domestic public debt.

With the economy well below its potential with idle land and labour, monetising the deficit is an effective tool for the expansion of aggregate demand, generating neither inflation nor ‘crowding out’ of private expenditure. The government’s expenditures on infrastructure could be consciously designed to ‘crowd in’ private investment by lowering costs of transport, electricity and water supply. In the context of some African countries, the cost of servicing the public debt is a greater concern than inflation or ‘crowding out’.

In summary, a countercyclical increase in the fiscal deficit would be unlikely to generate inflationary pressures, and even less likely to provoke a ‘crowding out’ of private expenditure. The net increase in the public debt would be minor. There is no important technical argument against a stimulus package that relies on financing increased expenditure by monetising the deficit. It follows that ‘sound’ monetary policy implies monetising deficits, a conclusion would seem perverse to the less pragmatic and more ideological neoclassicals. However, monetisation is ‘sound’ because it avoids misallocating public bonds into discouraging lending by private banks, prevents distortion of domestic invest rates, and is non-inflationary when an economy is at less than full potential.

4.3 Exchange rate management

In many cases, fiscal expansion will need to be accompanied by a rise in the exchange rate, either as an automatic response (depreciation) or by conscious management (devaluation). To achieve the desired outcome of countercyclical policy, to prevent a decline in the economy and achieve a sustained recovery, the exchange rate adjustment accompanying the fiscal stimulus would in many cases need to be managed by the central bank in coordination with the ministry of finance. Management is necessary in order to prevent a deterioration of the trade balance and excessive exchange rate induced inflation.

The fiscal expansion, by increasing output and private demand, would increase imports and generate a trade deficit or make an existing deficit larger. This is the

²¹ This process is discussed in detail for Zambia in Weeks, et. al. (2006).

problem that tended to undermine the use of active fiscal policy in developing countries in the past and to discredit it as an instrument of macro management. Exchange rate depreciation or devaluation can be used to counter the tendency of fiscal expansion to create a recovery undermining unsustainable trade balance.

To be effective, the depreciation or devaluation must increase the price of traded commodities compared to non-traded commodities. A necessary and intended result of the depreciation or devaluation is a rise in the domestic price level equal to at least 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 price level creates the risk of destabilising inflation if the nominal devaluation is large. Managing this risk is an essential part of a successful active fiscal policy in every country.

As fashion moved against active fiscal policy over the last three decades, there was an associated shift to a view that 'flexible' exchange rates are 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 the global crisis.²² Because in practice almost all governments intervene in foreign exchange markets,²³ 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 in the context of the characteristics of the economy (Fischer 2001). From a practical policy perspective, governments and central banks repeatedly shift between 'flexible' and '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.

The exchange rate management that would be part of a countercyclical stimulus package would not seek to maintain a 'fixed' rate for the domestic currency against any foreign currency. The purpose of the intervention would be to control the

²² An argument in favour of a global return to managed exchange rates is found in Rolnick and Webber (1989), who write, 'we 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.'

²³ The IMF categorises countries by exchange rate regime, and the Annual Report for 2007 lists only thirty-five countries 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 in light of the political turmoil in the country. Another anomaly is the absence of Sierra Leone from the table of exchange rate regimes.

rate of depreciation of the national currency against the currencies of major trading partners in order to prevent a widening of the trade gap as the economy expanded. The exchange rate managers would face two possible contexts, one in which the fiscal expansion was accompanied by no ‘weakening’ of their currency and another in which fiscal expansion automatically provokes depreciation.²⁴

The *devaluation case* occurs if there is no market pressure to weaken the national currency as public expenditure increases. In this case the government must act directly on the exchange rate. The purpose is to raise the price of tradables, which will reduce private import demand and raise the return to exporters. How devaluing the currency would be achieved would be determined by the characteristics of financial and foreign exchange markets in each country. In countries with underdeveloped financial markets, it could be done by the government setting a higher Leone price for major currencies the foreign exchange auctions that are typical of the region. In the absence of market pressure to weaken the national currency there would be no private speculation to undermine the devaluation. In effect, the government would be implementing temporarily a ‘crawling peg’ exchange rate regime. In this case exchange rate management is necessary to achieve a real devaluation in the absence of market pressure for depreciation.

The *depreciation case* occurs if the fiscal expansion is accompanied by market pressure to weaken the national currency. Exchange rate management becomes more complicated, but is still required and remains manageable. While the market pressure to weaken the exchange rate serves the government’s purpose, intervention is potentially necessary in order to prevent the currency from depreciating at a rate that generates unmanageable inflation pressures.²⁵ Because the intervention seeks to slow the depreciation rather than stop it, the likelihood of speculative attack is greatly reduced. In summary, even in the depreciation case, the exchange rate authority should implement *depreciation* in order to prevent excessive nominal exchange rate weakening.

Exchange rate management is more feasible at the end of the 2000s and into the new decade because of the increased stability of the currencies in the region.

²⁴ The well-known Fleming-Mundell model predicts that a fiscal expansion would result in exchange rate appreciation. That analysis is not relevant to most African countries because they have no significant portfolio capital flows due to lack of the necessary financial institutions.

²⁵ Exchange rate management in Zambia is discussed in detail in Weeks, et. al. (2007).

While the 1980s and 1990s were characterised by a high degree of exchange rate instability in the non-oil exporting countries of the sub-Saharan, since the turn of the century currencies have been notably stable in both nominal and real terms (Weeks 2008).

4.5 Algebra of Countercyclical Policy

For success an employment focused countercyclical policy package must achieve the appropriate balance between fiscal expansion and exchange rate depreciation. With underutilized resources both measures should stimulate output. If a nominal devaluation results in a real devaluation, exports may not increase if their exchange rate elasticity is low. This would be the case for the eleven petroleum exporters of Africa and some of the other major mineral exporters, because these prices are denominated in international currencies. For these countries, the main impact of the devaluation would be through reduction in import demand.

Both devaluation and fiscal expansion have potentially negative effects that require careful management. Since the income elasticity of taxes is typically less than unity in sub-Saharan countries, increasing government expenditure will always increase the fiscal deficit relatively to national income. Simultaneously there would be an increased and possibly 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 devaluation is facilitated by use of algebra. The rate of growth of the real demand for output (y) can be specified as the weighted sum of the growth of autonomous expenditures times the multiplier:

$$y = \beta[a_1i + a_2g + a_3x - a_4z]$$

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 β 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 ϵ_X and ϵ_Z as the elasticities of exports and imports with respect to the real exchange rate, p as the price level and δ the marginal propensity to import:

$$x = x^0 + \epsilon_X e^*$$

$$z = \delta y - \epsilon_Z e^*$$

The change in the real exchange rate (e) is the change in the real rate (e^*) minus the rate of inflation (p), and *ceterius paribus* the rate of inflation is the pass-through rate of a devaluation of the currency (the marginal propensity to import, δ).

$$e^* = e - p = e - \delta e = (1 - \delta)e$$

$$x = x^0 + \epsilon_X (1 - \delta)e$$

$$z = \delta y - \epsilon_Z (1 - \delta)e$$

These can be substituted into the growth of demand equation. We interpret x^0 as an external shock to export demand, and it causes depressed expectations that render the growth of private investment zero. The government seeks to prevent national income from falling in the current year ($y = 0$). To simplify, we write a_3/a_2 as α and define $(\epsilon_X + \epsilon_Z) = \epsilon_T$. If the trade elasticities are positive, ($\epsilon_T > 0$), a real devaluation improves the trade balance (Marshall-Lerner condition).²⁶ For zero growth, the real demand equation is:

$$0 = a_2 g + a_3 x^0 + a_3 \epsilon_T (1 - \delta)e$$

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 constant, 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:

$$e = x^0 / [\epsilon_T (1 - \delta)]$$

²⁶ The more familiar condition of greater than unity refers to the nominal exchange rate and export and import values.

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 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. We assume that the government must return to the initial trade deficit or suffer an unsustainable loss of reserves. The initial deficit requires a real devaluation of e^*_1 , which implies a nominal devaluation of e_1 . This sets the lower limit of the devaluation, which defines a feasible range for the increase of government expenditure to prevent a fall in output ($g > g_1$).

Two other goals of the government constrain policy, inflation and deficit limits. In Figure 2 there is a feasible policy range, below the 'inflation limit' and above the 'deficit limit' in the upper right quadrant. If the acceptable 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. This demonstrates the necessity 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 g_1 , there might remain a feasible short term region involving a low expenditure increase and a large devaluation.

With these analytical points in mind, one can consider the empirical evidence on deficits and inflation. Table 5 provides statistics on the cash flow fiscal deficit as a proportion of GDP for twenty-three Africa countries. If the stimulus to restore the growth rate to the 2008 increased the fiscal deficit by one percentage point of GDP, then fourteen of the eighteen countries with data for 2000-2003 would have met a minus five percent or lower criterion for a deficit limit. For the 2003-2007 average deficits, nineteen countries would have met a five percent limit and only three would have failed to do so, all by a small amount (Burkina Faso, Ghana and Egypt). One can draw no conclusion about the thirty countries for which there are no statistics in the table, but for the one listed, a moderate fiscal stimulus would have been consistent with a sustainable deficit near five percent of GDP.

The situation with inflation is less clear, as Table 6 shows. Of fifty countries, forty had inflation rates less than fifteen percent per annum during 2000-2003, with

thirty-eight below ten percent. During 2004-2008 the number of countries with inflation rates below fifteen percent rose slightly (from forty to forty-two), but the number with rates less than ten percent declined substantially, from thirty-eight to twenty-three. The statistics indicate that for a substantial majority of African countries, inflation is a binding constraint on countercyclical policy. This emphasises the importance of exchange rate management in the majority countries in which inflation would not be a constraint on countercyclical intervention, but could become one if depreciation were uncontrolled.

Table 5: Fiscal Deficit as Percentage of GDP,
23 African countries, 2000-2007

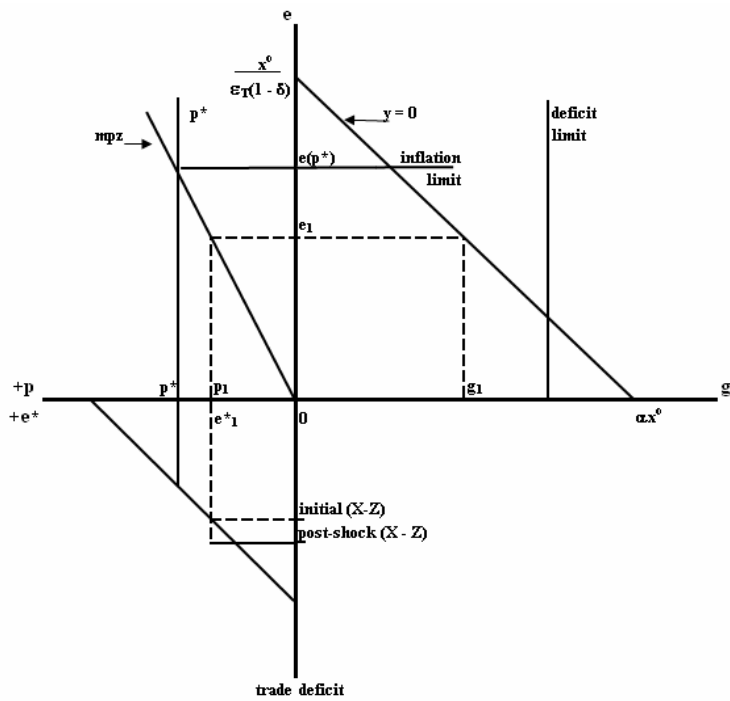
	<u>2000-03</u>	<u>2004-07</u>
Benin	-4	.2
Burkina Faso	na	-4.8
Cape Verde	na	-2.3
CAR	na	-5
Congo, Rep.	.0	3.1
Cote d'Ivoire	.6	-1.3
Ghana	-5.0	-4.3
Kenya	.9	-1.3
Lesotho	-2.0	8.5
Madagascar	-3.5	-3.1
Mali	-3.3	-2.0
Mauritius	-3.1	-2.6
Namibia	-3.1	na
Niger	na	.4
Seychelles	-6.6	.4
Sierra Leone	-8.1	-2.5
South Africa	-1.8	.2
Togo	na	-2.6
Uganda	-2.5	-1.1
Zambia	.4	-.3
Algeria	5.2	9.7
Egypt	-6.3	-5.9
Tunisia	<u>-2.4</u>	<u>-2.7</u>
Greater than -4%	14/18	19/22

Source: For this and Table 6, *World Development Indicators 2009*.

Table 6: Inflation (GDP deflator), 50 African countries, 2000-2008

<u>Country Name</u>	<u>2000-03</u>	<u>2004-08</u>
Angola	187.4	23.1
Benin	3.9	3.7
Botswana	6.0	12.6
Burkina Faso	2.2	2.5
Burundi	8.0	12.4
Cameroon	2.2	2.4
Cape Verde	1.2	4.7
CAR	2.1	3.0
Chad	5.3	10.5
Comoros	5.4	3.4
Congo, Dem. Rep.	236.2	15.8
Congo, Rep.	7.0	14.3
Cote d'Ivoire	2.6	4.0
Equatorial Guinea	8.4	19.3
Eritrea	19.1	17.8
Ethiopia	2.6	14.3
Gabon	5.4	10.1
Gambia	15.6	5.9
Ghana	28.4	14.8
Guinea	7.4	28.6
Guinea-Bissau	1.7	6.7
Kenya	3.7	10.3
Lesotho	7.7	7.5
Madagascar	8.1	12.7
Malawi	34.4	12.8
Mali	5.7	4.7
Mauritania	4.9	14.2
Mauritius	5.1	5.8
Mozambique	10.1	7.9
Namibia	12.4	7.6
Niger	2.8	3.7
Nigeria	22.9	15.9
Rwanda	3.7	12.0
Senegal	2.1	4.0
Seychelles	4.2	11.0
Sierra Leone	3.2	12.5
South Africa	7.9	7.6
Sudan	7.3	11.2
Swaziland	5.4	6.8
Tanzania	7.0	10.4
Togo	-.1	2.1
Uganda	5.0	5.9
Zambia	23.8	14.4
Zimbabwe	158.5	309.6
Algeria	8.9	12.3
Egypt	4.2	10.0
Djibouti	1.7	3.1
Libya	20.5	25.3
Morocco	.5	2.2
Tunisia	<u>2.6</u>	<u>3.4</u>
Less than 15%	40/50	42/50
Less than 10%	38/50	23/50

Figure 2: Policy Options for countercyclical intervention



5 Countercyclical Employment Generation

Table x: Fiscal deficits as a percentage of GDP in 36 sub-Saharan countries, by structural categories, 1994-2006

6 Constraints on Sound Macro Policy

Policy Action in Africa to Counter the Global Crisis

To counter the effects of the international crisis on the domestic economy, most governments in Africa could initiate a macroeconomic stimulus package. The package would be fiscal expansion complemented by currency depreciation implemented through exchange rate management. The fiscal expansion would be largely financed by borrowing from the central bank, with a component of additional external assistance. Exchange rate management is a necessary complement in order to 1) to raise the relative price of tradables to prevent the fiscal expansion from generating an unsustainable trade deficit; and 2) to achieve a real exchange rate associated with the fiscal expansion that is sufficiently trade altering but not excessively inflationary.

The policy package faces two types of constraints on its effectiveness: 1) those arising from the adjustment dynamics of the policy package itself; and 2) those derivative from donor behaviour and conditions. The first type can be managed by the government. The second type requires flexibility on the part of donors and the IMF.

As explained, the most important constraint on a successful outcome of the implementation of the policy package is the inflation induced by the weakening of the exchange rate. Exchange rate induced inflation feeds back into the external sector by reducing the real depreciation associated with any nominal depreciation. The inflation constraint is made tighter by the calculation if economy suffers from a substantial structural rate of inflation. It would be prudent for the government to identify an inflation rate which it considers to be the maximum consistent with macroeconomic stability. This would constrain the nominal devaluation managed by the central bank.

Less important than inflation but significant constraints are the trade balance and the fiscal deficit. In the absence of additional donor support, the stimulus package should not increase substantially the trade deficit, which in many countries is sustainable on the basis of those donor inflows and remittances. This constraint would be loosened by the real devaluation. With the goal of not generating a burdensome public debt, the fiscal deficit should be carefully monitored, though not made a binding constraint.

Depending on the size of the external shock to be redressed and existing donor flows, a country may not require a substantial increase in grants for the fiscal stimulus

to be effective in stabilising the economy. However, the government will need donors and the IMF to grant 'policy space' through the following measures:

- 1) elimination of the counter-cyclical conditionalities and 'benchmarks' for deficit limits, inflation rates and foreign exchange holdings, since the stimulus package requires a modest increase;
- 2) donor reliability on delivery of assistance because the fiscal stimulus 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 assistance which emphasise policy issues such as tax reform that the external crisis has rendered of less immediate importance.

The combination of a carefully calibrated stimulus package focusing on employment creation and donor flexibility offers the firm prospect of overcoming the potentially serious effects of the external shock to the economy. While the stimulus package involves risks, these are minor compared to the certain effect of the global depression on poverty and public welfare.

Statistical Annex

This annex provides the available statistics on total enumerated employment in Africa for those countries which have, or in most cases had, sufficient information to qualify as a time series. All the statistics are from the ILO Yearbook of Labour Statistics and the online database that replaced it. The definition of enumerated employment and of the labour force can vary by country, and are all clearly explained in the database. It is unlikely that the definitions allow for more than approximate comparisons across countries. The share of the labour force in enumerated employment, given in the first row of the tables, is indicative rather than precise. Statistics for twenty-three countries are provided. No other African country had data covering a period of more than five years. Very few countries had any data after 2000.

Table A1: Indices of total paid employment, African countries with statistics, 1977-2008

Year	<u>Algeria</u>	<u>Egypt</u>	<u>Morocco</u>	<u>Benin</u>	<u>Botswana</u>	<u>Burk F</u>	<u>Burundi</u>	<u>CAR</u>	<u>Chad</u>	<u>Cote d'Iv</u>	<u>Gambia</u>
% LF	57	68	25	4	31	1	2		1	10	7
1977	55	na	na	78	30	na	73	139	na	na	114
1978	65	na	na	84	33	na	80	164	na	na	na
1979	70	na	na	86	37	na	85	151	na	na	123
1980	73	70	na	130	40	na	80	96	na	na	na
1981	76	70	na	137	34	na	99	123	na	na	na
1982	81	71	na	144	35	na	104	113	na	na	na
1983	85	80	na	159	34	na	86	117	na	107	95
1984	88	80	na	144	37	na	93	na	na	103	100
1985	91	na	na	159	56	na	94	132	89	100	78
1986	na	na	na	151	62	84	100	107	89	101	70
1987	97	na	na	152	72	88	105	118	88	100	84
1988	na	na	na	154	81	91	114	111	108	100	98
1989	103	92	na	92	84	96	103	92	113	98	102
1990	100	100	100	100	100	100	100	100	100	95	100
1991	101	112	106	102	107	104	94	80	126	-1.3	nsgn
1992	107	99	105	110	109	107	+2.0	93	na	@.00	
1993	100	103	109	nsgn	na	+4.1	@.01	-3.1	na		
1994	101	107	na		na	@.00		@.01	na		
1995	105	109	124		na				na		
1996	+3.0	+3.2	129		180				155		
1997	@.00	@.00	139		na				136		
1998			119		211				+4.4		
1999			135		na				@.00		
2000			130		220						
2001			135		242						
2002			+2.8		na						
2003			@.01		229						
2004					na						
2005					na						
2006					213						
2007					+8.5						
					@.01						

Table A2: Indices of total paid employment, African countries with statistics, 1977-2008

	<u>Ghana</u>	<u>Kenya</u>	<u>Malawi</u>	<u>Mauritius</u>	<u>Niger</u>	<u>Senegal</u>	<u>Seychelles</u>	<u>SoAfrica</u>	<u>Swaziland</u>	<u>Togo</u>	<u>Zambia</u>	<u>Zimbabwe</u>
% LF	9	14	13	55	1		75	48	27	4	12	16
1977	na	64	68	69	122	82	68	87	72	na	102	85
1978	na	65	75	70	144	na	66	85	78	79	102	82
1979	na	69	78	70	144	na	71	86	79	80	103	82
1980	na	72	78	70	103	na	76	91	82	na	105	85
1981	na	73	70	68	136	85	74	94	87	110	104	87
1982	na	74	69	68	102	89	78	96	84	117	102	88
1983	156	78	82	67	80	na	74	95	86	108	101	87
1984	226	79	82	67	85	na	76	96	84	107	101	87
1985	233	83	88	72	89	65	78	95	79	108	100	88
1986	207	87	91	79	104	66	80	96	83	112	100	90
1987	198	90	87	86	111	na	83	98	91	111	100	91
1988	153	93	91	93	103	na	90	100	94	102	100	95
1989	107	96	93	95	111	na	95	101	99	100	99	98
1990	100	100	100	100	100	100	100	100	100	102	100	100
1991	87	103	119	101	96	101	102	98	100	106	+1.0	104
1992	nsgn	104	117	103	nsgn	+3.2	104	96	100	104	@ .00	103
1993		105	125	102		@.00	108	94	98	98		103
1994		107	140	103			108	99	95	94		105
1995		111	150	102			110	99	95	87		103
1996		114	+2.4	101			112	99	98	86		106
1997		117	@.00	101			121	97	96	-0.3		110
1998		118		103			125	94	95	@.00		112
1999		119		105			132	92	97			109
2000		119		105			137	89	100			103
2001		+3.9		-2.0			141	82	nsgn			98
2002		@.00		@.01			150	83				89
2003							146	83				+0.6
2004							nsgn	85				@ .00
2005								90				
2006								94				
2007								97				
2008								100				
								+1.2				
								@.00				

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