Africa's Macroeconomic Story

Douglas Hostland
Marcelo M. Giugale

The World Bank
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Abstract

Much of Sub-Saharan Africa's post-independence macroeconomic history has been characterized by boom-bust cycles. Growth accelerations have been common, but short lived. Weak policy formulation and implementation led to large external and fiscal imbalances, excessive debt accumulation, volatile inflation, and sharp exchange rate fluctuations. This characterization changed, however, in the mid-1990s, when debt relief and better macroeconomic policy began to provide a source of stability that has helped sustain robust growth throughout much of the region. In resource rich countries, the process was supported over the past few years by a dramatic increase in commodity prices. But resources are only one part of the story. Growth has exhibited impressive resilience even in

the face of negative external shocks, as in 2008–2009. While the short-term outlook remains positive, over the medium term policy makers face new challenges. Several countries have the potential to greatly expand natural resource production and become major commodity exporters; volatile resource revenue will complicate their fiscal and monetary planning. Rising investor appetite for financial assets of frontier markets and the development of domestic debt markets will continue to broaden the menu of and trade-offs among financing options at a time when global interest rates may start sloping upward. Complex financing arrangements—notably for private-public or public-public partnerships in infrastructure—will become more common and will generate new types of fiscal commitments and contingencies.

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Douglas Hostland and Marcelo M. Giugale¹

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¹ Hostland and Giugale are, respectively, Consultant and Director of the Poverty Reduction and Economic Management Department at the World Bank's Africa Region. The views expressed are the authors' own and not necessarily those of the World Bank or its member countries.

I. Introduction

Growth in Sub-Saharan Africa (“Africa”) averaged below other developing regions during the three decades following independence from colonial rule in the early 1960s. Growth was particularly weak from the mid-1970s to the mid-1990s. Africa’s dismal growth performance during this period was characterized by boom-bust cycles. There were several growth surges, but few were sustained. This characterization changed, however, in the mid-1990s, when most countries in the region began to sustain robust growth rates. Since the mid-1990s, real GDP growth per capita has averaged 1.8 percent, up from -0.8 percent over the previous 20 years and just below the average of 2.0 percent for all developing countries if one excludes China and India. Moreover, the region has exhibited impressive resilience to large external shocks over the past few years. Growth held up well in the face of the dramatic surge in world fuel and food prices in 2008 and 2011, and the sharp decline in external demand in the wake of the global financial crisis.

Africa’s improved growth performance is widely recognized but there is little consensus on the underlying factors. This paper examines the role of macroeconomic factors. Countries throughout much of region have made impressive gains in correcting fiscal imbalances and bringing inflation down to moderate, stable levels. Debt burdens have declined dramatically, largely due to HIPC/MDRI debt relief initiatives in many cases, leaving countries with more fiscal room to protect social spending priorities and fund growth-enhancing expenditures. Monetary and fiscal policy regimes have gained credibility, making countries less vulnerable to large exchange rate fluctuations, an important source of instability in previous periods.

The following section of the paper reviews the existing literature on the factors explaining Africa’s improved growth performance since the mid-1990s. While this literature does not reach a consensus, the emergence of macroeconomic stability is a common theme. Section III examines a series of stylized facts that characterize the recent growth acceleration from a historical perspective. Much of the discussion focuses on whether the growth acceleration has been pervasive across countries or concentrated in a few countries, commodity exporters being a prime example. Against this background, section IV discusses how common macroeconomic policy indicators—external and domestic debt, fiscal balances, inflation and exchange rates--have evolved over time. Section V draws attention to new challenges posed by major transformations underway throughout much of the region.

II. Literature Review

Africa's U-shaped growth history -- many explanations, little consensus

Africa's growth experience has been examined by numerous studies over the past decade. The "U-shaped" characterization is a common theme but there is little consensus on the role of macroeconomic policies, or other underlying factors for that matter. Most studies make reference to the macroeconomic environment as one of several factors that can explain Africa's growth history and differences in cross-country growth outcomes.

O'Connell and Ndulu (2000) and IMF (2008) emphasize the importance of policy and institutions:

"the policy environment and weaknesses in governance combine to create a capital-hostile environment, limiting accumulation and undermining productivity growth by diverting investible resources to unproductive uses." (O'Connell and Ndulu 2000, p. 2)

"sustained growers in sub-Saharan Africa have gotten the critical basics right and avoided major policy failures. Most of those that are getting ahead have achieved macroeconomic stability, including stable and low inflation and debt sustainability, pursued sound economic policies, and reinforced their institutions". (IMF 2008, p. 2)

An IMF (2011) report attributes the growth surge in the East African Community (EAC) to:

"extensive macroeconomic stabilization and policy reforms ushered in an uninterrupted period of financial stability, market development, and institution strengthening" (p. 51)

Ndulu et al (2007) add a reference to major reforms in the 1990s:

"Taking a half-century of African growth experience as a whole and controlling for differences in the composition of opportunities, the impacts of poor policy have been shown to typically account for between one-quarter and one-half of the difference in predicted growth between African and non-African developing countries. However, the evidence also suggests that the importance of policy in explaining the growth differential between African countries and others may have waned since the 1990s as a result of major reforms implemented in the region, which have moved policy performance in African countries much closer to the global average" (p. xvi)

Other papers list the macroeconomic environment as one of several factors:

"initial conditions and a better macroeconomic environment (including higher investment, lower inflation, lower government consumption, and better fiscal stance); improved political

environment; favorable exogenous terms-of-trade shocks; and fixed geographical factors” (Tsangarides 2005, p. 17),

“broad institutions, macroeconomic stability, trade openness, education, and inequality—may not now be binding constraints in Africa, although the extent of ill-health, internal conflict, and societal fractionalization do stand out as problems in contemporary Africa.” (Johnson, Ostry, and Subramanian 2007, p. 1)

“better microeconomic policies, more prudent macroeconomic management, a more generous volume of aid—and higher prices for their exports” (The Commission on Growth and Development 2008, p. 71).

Page (2009) concludes that Africa's growth acceleration in the mid-1990s “was largely due to better macroeconomic policies” (abstract), along with “some luck” (p. 2), the latter referring to a significant improvement in the terms of trade for the many countries in the region that benefit from higher commodity prices. Beny and Cook (2009) draw a similar conclusion.

By contrast, other studies have downplayed the role of macroeconomic policy. A World Bank (2009) study claims that “infrastructure contributed to over half of Africa's improved growth performance” (p. 2). Collier (2008, iv) emphasizes the region's “high dependence upon natural resource exports, the many landlocked countries, and the high ethnic diversity of the typical state”.

In sum, this literature is perhaps best summarized by an IMF (2010) report on growth in West African Economic and Monetary Union (WAEMU) countries which concludes that:

“The reasons for the growth divergence between the WAEMU and the fastest growing countries in Africa (high-growth non-oil exporters) are complex, and no single factor or simple story emerges.” (p. 45)

Growth accelerations -- extremely varied and episodic

Although there are some commonalities among African countries, growth experiences are also quite diverse, making it difficult to draw clear-cut conclusions for the region as a whole. This partly reflects policy differences:

“countries with very similar opportunities also have very different growth experience and outcomes, depending on the strategies pursued and the policy disposition adopted” (Ndulu et al 2007, p. 47).

Growth in African countries has been more episodic than in other developing regions, as described by Page (2009):

“Africa’s long-run record of slow and volatile growth reflects a pattern of offsetting accelerations and declines, rather than random variations of growth rates around the long-run trend.” (p. 2)

Much of the empirical literature has therefore focused on the episodic nature of growth, beginning with a paper by Hausmann et al. (2005) that examines “growth accelerations”, defined as episodes where higher growth is sustained for more than 8 years. Their analysis of 83 such episodes, 20 of which involve African countries, indicates that:

“growth accelerations are not preceded or accompanied by major changes in economic policies, institutional arrangements, political circumstances, or external conditions.” (p. 328)

An IMF (2008) study pursues a similar methodology focusing specifically on episodes in Africa since 1995 and comes to a similar conclusion:

“the growth takeoff in sub-Saharan Africa since 1995 has been associated with several factors, and no simple story emerges” (p. 41)

characterizing macroeconomic stability as a necessary and but sufficient condition:

“a number of conditions that are apparently necessary for sustained takeoff: absence of conflict; a stable macroeconomy, as reflected in low inflation and sustainable debt and a functioning market economy... A clear set of sufficient conditions for rapid growth does not emerge. The fast growers have, on the whole, done better in the areas of building reserves, sustaining high levels of public investment, and avoiding overvaluation of the real exchange rate, and on some measures of broad policy reform, notably the World Bank’s CPIA (the latter two hold true mainly for non-resource-rich fast growers). However, these patterns are not stark. In general, growth seems to have responded to the specific circumstances in each country in terms of the external environment it faced and the policy choices it made.” (p. 42)

Research along the same lines by Arbache and Page (2009) finds that growth accelerations over the post-1995 period were more prevalent in resource-rich countries:

the “improvement in economic performance in Africa after 1995 turns out to be due largely to two factors: a substantial reduction in the frequency and severity of growth declines in all economies and an increase in growth accelerations in mineral-rich economies”.

and have tended to coincide with higher FDI, trade openness and lower inflation. An analysis of growth episodes in West African countries by Imam and Salinas (2008) does not point to the importance of the macroeconomic environment:

“growth accelerations are most clearly associated with external shocks, economic liberalization, political stability, and closeness to the coast; decelerations occurred during short-lived regimes and when corruption indices weakened; and collapses are linked to external shocks, falling domestic credit, and proximity to the coast.” (abstract)

Berg, Ostry, and Zettelmeyer (2008) extend this line of research focusing on the duration of growth episodes:

“While surges in growth are in fact relatively common in the developing world, even in regions that have done very badly over the past few decades, (e.g., sub-Saharan Africa), what really sets poor-performing regions apart is that their growth spells have tended to end relatively soon” (p. 4)

They find that the duration of growth spells for 140 countries, 43 of which are in Sub-Saharan Africa, is positively related to macroeconomic stability among several other factors: the degree of equality of the income distribution, democratic institutions, manufactures export orientation, FDI openness, and avoidance of exchange rate overvaluation. Closely related research by Tsangarides (2012), however, finds that the determinants of growth spells in Africa are different from other countries. Several factors--initial income, terms of trade, exchange rate undervaluation and inflation--influence the duration of growth spells for low-income countries over all, but only openness and droughts seem to only affect those for Africa. In a recent study along similar lines, IMF (2013) garners support for the importance of macroeconomic stability:

“LICs have achieved strong growth without building macroeconomic imbalances—as reflected in declining inflation, more competitive exchange rates, and appreciably lower public and external debt accumulation” (p. 97)

noting that “recent takeoffs are associated with a faster pace of implementing productivity-enhancing structural reforms and strengthening institutions” (p. 97).

The role of resources -- blessing or curse?

Large swings in world commodity prices pose a major challenge to net commodity importers and exporters alike. Resources account for a significant share of exports in close to half of African countries. Several more countries are poised to become significant resource exporters in the near

future (IMF 2012a, p. ix and p. 97). One might expect that the dramatic rise in commodity prices over the past few years would boost growth in resource rich countries. However, the historical record is not so clear cut. In a series of seminal papers, Sachs and Warner (1995 and 2001) observed that resource-rich countries have tended to grow more slowly than other countries. Collier and Goderis (2007) argue that increases in commodity prices boost output in the short run (through the improved terms of trade channel) but tend to have adverse consequences over the longer term by impeding the development of governance and sound institutions needed to manage the resource wealth effectively and advance a development agenda more generally. The empirical evidence on the “resource curse” hypothesis is mixed. A recent IMF (2012a) study finds that countries highly dependent on resource revenues have experienced significantly higher volatility in exports, revenue, and non-resource GDP growth. Mehlum, Moene, and Torvik (2006) and Arezki and van der Ploeg (2007) find that the quality of institutions and openness to trade determine whether resources impede or enhance growth. In contrast, Cavalcanti, Mohaddes, and Raissi (2011) find that oil abundance has had a net positive effect on income levels and growth and hence has been more of a blessing than a curse.² Similarly, Smith (2013) finds that resource wealth tends to raise GDP per capita but erodes democratic institutions. Moreover, McMahan and Moreira (2013) show that low- and lower-middle countries highly dependent on mining revenues have posted higher growth rates than other countries over the past two decades, even in cases where governance indicators are weak.

Dutch disease plays a central role in the debate. Resource development can lead to a large real exchange rate appreciation and thereby undermine competitiveness of the non-resource tradable sector. An important element of the argument is that the development of a vibrant, diversified non-resource export sector is critical for sustaining growth over the longer term (especially where resources are being depleted over a relatively short horizon). The proposition that export-led growth is critical for sustained growth spurts is controversial. Yang (2008) finds that higher growth often precedes an expansion in the export sector, which brings into question the direction of causation. Collier and Goderis (2008) find that, although exchange rate appreciations have a statistically significant effect on growth, it is only a minor part of the overall explanation. They argue that macroeconomic volatility plays a more important role. Recent experience does not indicate that

² See Van der Ploeg, F. (2011) for a survey of the empirical literature on whether resources are a curse or a blessing.

higher commodity prices tend to appreciate the real exchange rate in resource-rich countries (IMF 2012a). On the broader issue of diversification, Papageorgiou and Spatafora (2012) contend that a lack of diversification in low-income countries increases their exposure to adverse external shocks. Their cross-country evidence shows that less diversified low-income countries tend to experience more volatility in their terms of trade and output. However, they do not find a systematic relationship between export diversification and growth.

Policy responses to external shocks

Collier (2008) highlights differences in fiscal policy challenges facing resource-rich economies, as well as countries emerging from conflict. Policy makers in resource-rich economies need to manage volatile revenues and have a longer-term plan that takes into account declining revenues from resource depletion. On this point, Page (2009) notes that “in contrast to the unchecked spending in the past, windfalls from oil revenue are increasingly being saved”. For resource-scarce economies, Collier notes that over the past two decades policy makers have been gradually rectifying two inherited fiscal errors: 1. the accumulation of excessive fiscal deficits, resulting in unsustainable levels of indebtedness and high inflation; and 2. excessive reliance on trade taxes which amounted to the heavy taxation of export agriculture (p. 43). In post-conflict situations, policy makers are typically confronted with unsustainable fiscal positions, high inflation and an institutional framework that has many major shortcomings.

With regard to exchange rate regimes, a common view in the literature is that flexible regimes can play a stabilizing role to the extent that flexibility helps avoid overvaluation and facilitates adjustment to shocks. However, large exchange rate fluctuations are also a major source of instability. The empirical literature on the issue is mixed. It is difficult to find a robust relationship between exchange rate regimes and growth outcomes in developing countries (Rogoff et al 2004) or in Africa specifically (Masson and Pattillo 2005). Berg, Ostry, and Zettelmeyer (2008) find that longer growth spells tend to occur during periods that have fewer large exchange rate depreciations but the relationship breaks down when other variables are included in the analysis.

On the whole, most studies attribute the improved macroeconomic environment in Africa to avoiding major policy errors and responding to external shocks effectively. Or as put by an IMF (2008) study: “growth seems to have responded to the specific circumstances in each country in terms of the external environment it faced and the policy choices it made” (p. 42).

III. Africa's Recent Growth Experience from a Historical Perspective

Stylized Facts

Africa's growth experience is often characterized with reference to three sub-periods. Rapid growth in the first 13 years following independence (1961-73), was followed by a 20-year period when per capita real GDP declined by 0.8 percent per year on average (Table 1). Growth then recovered in the mid-1990s, averaging 1.8 percent over the past 18 years (1995-2012) and is projected to increase to 2.5 percent over the next few years (2013-15).

Table 1: Real GDP Growth in Developing Countries

Percent

	1961-73	1974-94	1995-2012 ¹	2013-15 ²
All Developing Countries	5.7	3.4	5.3	5.7
ex. China and India	6.0	2.7	3.7	4.2
<i>Regional</i>				
East Asia & Pacific	5.2	7.8	8.3	7.7
Europe & Central Asia	6.7	1.0	3.7	4.0
Latin America & Caribbean	6.0	3.3	3.1	3.8
Middle East and Africa	5.5	2.6	4.1	4.3
Sub-Saharan Africa	4.8	2.0	4.3	5.1

Source: World Bank *Global Economic Prospects* January 2013.

Notes:

1. Estimated for 2012.

2. Projected.

Comparing growth rates across sub-periods presumes that the transition dates between low and high growth regimes are known a priori. An alternative approach is to apply a smoothing algorithm (the Hodrick-Prescott filter) to capture the trend component,³ which does not require any assumptions about transition dates. This leads to similar results (Figure 1). The trend growth rate declines from just over 2 percent in the 1960s, to around -1 percent 1980s and then recovers to just over 2 percent again by the mid-2000s.

³ Hereafter *trend* growth refers to the trend component generated using the Hodrick-Prescott filter.

Figure 1: Real GDP per Capita Growth in Sub-Saharan Africa Region

Percent

Source: World Bank *Global Economic Prospects* January 2013.

Note: Trend generated by Hodrick-Prescott (HP) filter with smoothing parameter set to 100.

Cross-Regional Perspective

Africa's "U-shaped" growth history was shared by most other developing regions. The East Asia and Pacific region is an exception. Growth increased over time largely due to a sustained growth surge, initially in China beginning in the early 1970s and then in India beginning in the early 1990s. The differential between GDP growth per capita across all developing countries and that in Africa widened from about one percentage point over the first sub-period 1961-73 to about two percentage points over the two subsequent sub-periods (Table 1). A different picture emerges, however, when China and India are excluded from the calculations. The differential begins to narrow in the 1970s and almost disappears by the early 1990s (Figure 2). Since the early 1990s, trend growth in Africa has been very similar to that in all developing countries if one excludes China and India.

Figure 2: Trend Real GDP per Capita Growth in Developing Countries

Percent

Source: World Bank Global Economic Prospects January 2013.

Note: 2012 estimates.

Cross-Country Perspective

Much of the literature has focused on explaining differences in growth outcomes within the region using attributes such as:

- geographic disadvantages (landlocked versus coastal countries)⁴;
- commodity exporters versus importers (mainly metals, oil and other minerals); and
- fragile states (countries in conflict / post-conflict).

We consider each of these in turn.

⁴ Collier (2008) lists the relatively large number of landlocked countries as being one explanation for Africa's lower average growth rate compared to other developing regions.

Geography -- landlocked countries have outperformed coastal countries

Trend growth in landlocked countries was well below that in coastal countries during the 1960s, but the relationship reversed in about the mid-1990s (Figure 3). Growth in landlocked countries has outperformed that in coastal countries by over 1.5 percentage points over the past five years.

Figure 3: Trend Real GDP per Capita Growth - Landlocked versus Coastal Countries

Percent

Source: World Bank Global Economic Prospects database.

Commodity exporters have prospered but the gains are concentrated in just a few countries

The surge in world commodity prices beginning in the mid-2000s (Figure 4) is generally thought to be a major factor sustaining high growth in the region. Resources dominate export revenues in 20 of 45 countries in the region, 7 of which are classified as major oil exporters (Angola, Cameroon, Chad, Equatorial Guinea, Gabon, Nigeria, and the Republic of Congo).⁵ The other 13 resource-rich countries receive more than 25 percent of export receipts from other minerals and metals.

⁵ Defined as countries where oil revenues account for over 20 percent of total revenues (excluding grants) (IMF 2012a, Box 3.1).

Figure 4: World Commodity Prices

Constant \$2005 (index 2005=100)

Source: World Bank *Global Economic Monitor (GEM) Commodities* database.

The growth acceleration has been more pronounced in oil exporting countries (Figure 5, left panel). Trend growth in non-oil resource-rich countries (countries highly dependent on mining exports) was very similar to that in non-resource abundant countries, until just a few years ago. The differential widened to 1.5 percentage points in 2012 and is expected to widen further over the next few years.

Figure 5: Trend Real GDP per Capita Growth – Resource-Rich Countries, 1962-2012

Percent

Source: World Bank *Global Economic Prospects* January 2013.

Aggregate measures of real GDP per capita growth for the region (and for the various country classifications) are generated using weights based on population. Countries with larger populations therefore play a more prominent role in the aggregates. This is especially important for the oil exporting country grouping where Nigeria dominates.⁶ In 2012, trend growth for the oil exporters grouping is close to four percent, yet only Angola and Nigeria had growth rates above four percent. Four of the seven countries in the group have growth rates under two percent (Figure 6). Median growth rates (a measure that is independent of population size) show a different pattern (Figure 5, right panel). By this measure, the sharp increase in commodity prices in the mid-2000s appears to have had a transitory impact on trend growth in oil exporting countries.

Figure 6: Trend Real GDP per Capita Growth – Resource-Rich Countries, 2012

Percent

Source: World Bank *Global Economic Prospects* January 2013.

⁶ Nigeria accounts for almost three quarters of the total population in the oil exporting countries group in 2012. Similarly, three countries—Ghana, the DRC and Tanzania-- account for 60 percent of the population in the non-oil resource-rich country group.

Growth in fragile states has picked up recently

Up until the mid-1970s, trend growth in fragile states was very close to other countries (Figure 7).⁷ Per capital real GDP in fragile states declined at an average rate of 2 percent a year from the early 1980s up until the early 2000s, underperforming other countries by a wide margin. However, the differential has narrowed significantly over the past few years. The growth surge mainly reflects transition from conflict in three resource-abundant countries--Sierra Leone, Liberia and the Democratic Republic of Congo--where economic activity has been bolstered by an expansion in mining activity following years of civil war and political/economic instability.⁸ There is currently wide diversity across fragile states, with trend growth in those three countries well above other countries (Figure 8).

Figure 7: Trend Real GDP per Capita Growth – Fragile States vs. Other Countries, 1962-2012
Percent

Source: World Bank *Global Economic Prospects* January 2013.

⁷Our analysis is based on the World Bank definition of a “fragile state” as a low income country or territory, IDA eligible (including those countries which may currently be in arrears), with a CPIA score of 3.2 or below.

⁸ Sierra Leone and Liberia resumed iron ore mining in 2011; the DRC has recently agreed to a number of joint ventures that will expand production of copper and cobalt substantially.

Figure 8: Trend Real GDP per Capita Growth – Fragile States, 2012

Percent

Source: World Bank Global Economic Prospects January 2013.

The U-shaped growth pattern has been pervasive across countries

The dispersion of trend growth rates across countries has been fairly stable over time (measured by the distance between the lower and upper quartiles in Figure 9). In the 1990s, growth exceeded 4 percent in four countries each year while over 20 countries registered declines. Over the past few years, growth has exceeded 4 percent in ten or more countries each year while only a few countries registered declines.

Figure 9: Trend Real GDP per Capita Growth – Quartiles, 1962-2012

Percent

Source: World Bank Global Economic Prospects January 2013.

The magnitude of growth surges varies considerably across countries (Figure 10). At one end of the spectrum, trend growth increased by more than five percentage points in seven countries, five of which are resource abundant (the DRC, Sierra Leone, Liberia, Angola and Zambia). At the other end, real GDP per capita decreased in eight countries. However, in seven of the eight countries growth was already above three percent in 1994 (Mali being the exception).

Figure 10: Change in Trend Real GDP Growth per Capita, 1994-2012

Percent

Source: World Bank Global Economic Prospects January 2013.

Output has become less volatile

The growth acceleration in the mid-1990s coincides with a decline in output volatility. From the cross-regional perspective, the standard deviation of growth rates in Sub-Saharan Africa (SSA) has declined substantially but remains higher than in other developing regions, with the exception of East Asia and Pacific (EAP) (Figure 11, left panel). By contrast, the amount of variation in the output gap (the deviation in output from its trend level) in Sub-Saharan Africa is lower than in most other regions (Figure 11, right panel). From the cross-country perspective, the decline in volatility has been pervasive across most of the region. The standard deviation of growth rates has declined in all but 8

of 45 countries. In a few of the 8 exceptions (notably Sierra Leone and Liberia), higher volatility coincided with a marked increase in growth.⁹

Figure 11: Volatility in Real GDP per Capita by Region, 1960-2012

Standard Deviations

Source: World Bank *Global Economic Prospects* database.

Cross-Country Growth Regressions

In an effort to bring together some of the issues outlined above, we examined a few simple cross-country regressions to determine which of the factors can best explain the recent growth acceleration in the mid-1990s. The regressions have of the general form:

$$\tau_i = \alpha + \beta X_i + \delta Z_i + \varepsilon_i$$

where the dependent variable τ_i is the average per capita growth rate over the period 1995-2012 for country “i”, X_i is a vector of explanatory variables, Z_i is a vector of binary variables corresponding to various country groupings and ε_i is a random error term. Explanatory variables included growth and level measures of initial conditions and volatility:

- initial conditions:

⁹ Countries with greater growth accelerations did not exhibit either more or less output volatility, on the whole. The cross-country correlation between the change in trend growth between 1994 and 2012 and the change in volatility over the two sub-periods is essentially zero.

- growth: average per capita GDP growth rate over the period 1974-1994;
- level: real per capita in 1994;
- volatility:
 - level: standard deviation of output gap over periods 1995-2012 versus 1973-94;
 - growth: standard deviation of cyclical component of per capita GDP growth over periods 1995-2012 versus 1973-94.

Binary variables included seven country groupings discussed earlier: oil-exporting countries, non-oil resource exporting countries, fragile states, HIPC recipients, members of the CFA franc zone and landlocked countries.

Both the growth and level measures of initial conditions were found to be statistically insignificant (regressions [2] and [3]). The former result implies that the regression cannot explain cross-country differences in average growth rates over the two sub-periods.¹⁰ The latter result implies that countries with lower levels of per capita GDP in 1994 did not tend to grow faster, providing no evidence of conditional convergence. Only two explanatory variables—the level and growth measures of volatility—and two country groupings—oil exporters and fragile states--were statistically significant (regression [1] reported in Table 2). The level versus growth rate distinction is important for volatility—countries with larger output gaps tended to growth slower whereas those with larger fluctuations in growth rates tended to growth faster. In sum, the regression results suggest that volatility, oil wealth and conflict have had an important influence on cross-country growth outcomes since the mid-1990s.

¹⁰ The difference specification—where the dependent variable is the change in the average growth rate across sub-periods—is rejected by the data. Hence, the regression explains cross-country differences over the sub-period 1995-2012 but not cross-country differences in changes in growth over the two sub-periods.

Table 2: Cross-Country Regression Results for African Countries*Dependent variable: average per capita growth rate over the period 1995-2012*

Regression:	[1]	[2]	[3]	[4]	[5]	[6]
Constant term	3.79 (0.47) 8.08	3.80 (0.47) 8.01	3.87 (0.54) 7.20	3.81 (0.49) 7.71	3.88 (0.62) 6.23	3.82 (0.49) 7.73
Oil-exporters	1.82 (0.74) 2.47	1.78 (0.75) 2.37	1.72 (0.80) 2.13	1.79 (0.76) 2.36	1.76 (0.78) 2.25	1.87 (0.77) 2.42
Fragile states	-3.13 (0.72) -4.33	-3.14 (0.73) -4.29	-3.14 (0.73) -4.28	-3.11 (0.75) -4.17	-3.09 (0.75) -4.10	-3.12 (0.73) -4.25
Volatility - level	-1.30 (0.60) 2.18	-1.27 (0.61) -2.09	-1.35 (0.62) -2.17	-1.29 (0.60) -2.15	-1.32 (0.61) -2.17	-1.28 (0.61) -2.11
Volatility - growth	1.06 (0.20) 5.41	-1.27 (0.61) -2.09	-1.35 (0.62) -2.17	-1.29 (0.60) -2.15	-1.32 (0.61) -2.17	-1.28 (0.61) -2.11
Initial conditions - growth		-0.04 (0.09) -0.44				-0.17 (0.67) -0.26
Initial conditions - level			-0.24 (0.71) -0.34			
Non-oil resource exporters				-0.17 (0.87) -0.19		
HIPC recipients					-0.15 (0.67) -0.23	
CFA franc zone						-0.17 (0.67) -0.26
Landlocked						
R ²	0.681	0.682	0.682	0.681	0.681	0.681
F-statistic	21.9	17.2	17.1	17.1	17.1	17.1
Degrees of freedom	41	40	40	40	40	40

Note: OLS estimates. Standard errors reported in parentheses; t-statistics in *italics*: ***bold-italics*** denotes statistically significant at the 5 percent level.

IV. Macroeconomic Policy over the Historical Period

This section of the paper examines how macroeconomic policies in the region have evolved over the past few decades by focusing on key macroeconomic variables—debt burdens, fiscal balances, inflation rates and exchange rates.

Debt burdens have come down to more manageable levels

External debt increased from under 15 percent of GDP in the early 1970s to 23 percent at the end of the decade, just slightly higher than that for all developing countries (Figure 12, left panel). The debt burden rose dramatically throughout the 1980s and into the early 1990s, peaking at just over 75 percent of GDP in 1994, almost 40 percentage points above the level for all developing countries. In 1994, debt burdens exceeded 100 percent of GDP in half of African countries (represented by the median in Figure 12, right panel) and exceeded 160 percent in one quarter (the upper quartile). The sharp drop in the early 2000s was largely due to the HIPC/MDRI debt reduction initiatives.¹¹

Figure 12: External Debt in Developing Countries, 1971-2013

Percent of GDP

¹¹ Debt relief provided by the HIPC/MDRI initiatives are recorded in the external debt statistics when countries reach the completion point, the timing of which has varied significantly across the region. Uganda reached its completion point in (2000), followed by Mozambique and Tanzania (2001), Burkina Faso and Mauritania (2002), Benin and Mali (2003), Ghana, Ethiopia, Madagascar, Niger, and Senegal (2004), Rwanda and Zambia (2005), Cameroon, Malawi and Sierra Leone (2006), The Gambia and Sao Tome and Principe (2007), Burundi and CAR (2009), Liberia, Guinea-Bissau, Dem. Rep. of Congo, Rep. of Congo, and Togo (2010), Cote d'Ivoire and Guinea (2012), and Comoros (2013).

Source: World Bank *International Debt Statistics* and April 2013 IMF *World Economic Outlook* database.

Note: Estimates for 2012; projections for 2013.

The analysis above focuses on external debt (obligations incurred to non-residents) and hence does not include domestic debt (public sector obligations to domestic residents).¹² Data limitations prevent us from examining the evolution of public debt (public sector obligations to domestic and foreign residents) over the past few decades.¹³ Data available from 2000 indicate that public debt burdens have declined significantly throughout much of the region. The median level fell from 100 percent of GDP in 2000 to under 30 percent in (Figure 13). Public debt is now below 50 percent of GDP in three of four countries (the upper quartile).

Figure 13: General Government Gross Debt in Africa

Percent of GDP

Source: April 2013 IMF *World Economic Outlook* database.

Note: Estimates for 2012; projections for 2013.

As mentioned earlier, the dramatic decline in debt levels beginning in the early 2000s was largely due to the HIPC and MDRI debt relief initiatives.¹⁴ In most cases, debt burdens have not

¹² External debt also includes obligations incurred by the private sector to nonresidents. However, the amount of private external debt has not significant for most countries in the region, except South Africa.

¹³ Only five countries in the region provide data on government debt from 1980, 18 from 1990 and 40 from 2000.

¹⁴ 28 of the 44 countries in our sample benefited from HIPC and MDRI debt relief.

increased significantly after debt relief was granted.¹⁵ The Gambia, São Tomé and Príncipe, Guinea Bissau, Ghana and Malawi are exemptions. Debt-to-GDP ratios increased in all five countries and now exceed 50 percent (Figure 14). However, modest primary surpluses and strong growth are projected to reduce their debt burdens significantly (Table 3). In São Tomé and Príncipe, oil production beginning in 2015 is expected to generate a surge in growth (38 percent in 2015 and 48 percent in 2016) and revenues, resulting in a primary surplus at 20 percent of GDP in 2016 and 25 percent in 2017. In Ghana, an increase in oil production is also expected to generate a surge in growth and revenues, yet the debt burden is not projected to decline significantly. In Malawi, growth is expected to pick up over the medium term following the large exchange rate depreciation in 2012 (33 percent against the \$US; almost 50 percent in real effective terms).

Figure 14: Public Debt in African Countries that Received HIPC/MDRI Debt Relief

Percent of GDP

Source: April 2013 IMF *World Economic Outlook* database.

Note: Estimates for 2012

¹⁵ Merotto, Thomas and Stucka, (2013) examine debt incurred by all HIPC/MDRI recipients since 2007 whereas the above analysis focuses on recipient countries in the Africa region. They show that in cases where debt burdens have increased significantly, external debt (rather than domestic debt) accounts for most of the new borrowing.

Table 3: Public Debt Levels for Five HPIC/MDRI Recipients*Percent*

	<i>Public Debt / GDP²</i>			<i>2013-17 average</i>	
	2007	2012	2017	Primary Bal. / GDP	Real GDP Growth
The Gambia	62.7	77.2	51.5	0.8	7.1
São Tomé and Príncipe	60.0	75.5	25.6	4.2	21.3
Guinea-Bissau ¹	51.7	59.8	39.1	0.5	5.7
Ghana	31.0	56.5	55.0	n.a.	6.4
Malawi	35.4	54.9	33.3	1.3	6.3

Sources: April 2013 IMF *World Economic Outlook* database and IMF Country Reports No. 12/216 and 12/221.

Notes:

1. Completion point attained in 2010.

2. Estimates for 2012; projections for 2017.

Large fiscal imbalances have narrowed significantly

Once again, data limitations prevent us from examining the evolution of fiscal balances over the past few decades.¹⁶ Data available from the mid-1980s indicate a steady pace of fiscal consolidation from the early 1990s up until the onset of the global financial crisis in late 2008. The median cyclically-adjusted deficit declined from around four percent of GDP in the early 1990s to just one percent in 2005-07 (Figure 15). Budget balances then deteriorated in the wake of the global financial crisis. In addition, the sharp increase in commodity prices in 2008 and 2011 adversely affected fiscal positions in countries with large food and fuel subsidies. The number of countries with a cyclically-adjusted deficit exceeding four percent of GDP increased from 4 in 2007 to 15 in 2012. The deterioration in fiscal balances was most prominent in countries that had comfortable surpluses in 2007, many of which are commodity exporters (Figure 16). Those countries were able to allow automatic stabilizers absorb some of the impact of the shocks.

¹⁶ Data on fiscal balances dating back to 1980 is only available for five countries in the region; only 18 countries report data back to 1990.

Figure 15: Cyclical-Adjusted Budget Balances in Africa, 1990-2012

Percent of GDP

Source: April 2013 IMF World Economic Outlook database.

Notes: Estimates for 2012; projections for 2013.

Figure 16: Countries with large Cyclically-Adjusted Budget Surpluses in 2007

Percent of GDP

Source: April 2013 IMF World Economic Outlook database.

Inflation has come down to moderate, stable levels

Inflation surged in the early 1970s, fueled by the oil price shocks, and then became endemic throughout much of the region. In many cases, this was due to pressures on monetary authorities to provide inflationary finance in an effort to contain large fiscal imbalances and mounting debt levels. From 1980 to the mid-1990s, half of the countries experienced double-digit inflation. Inflation exceeded 20 percent in one of every four countries.

Given that the CFA franc was fixed to the French franc up until the introduction of the euro in 1999, inflationary conditions in the CFA franc zone largely reflected those in France (and later the euro area).¹⁷ In France, inflation declined from 13 percent in the early 1980s to below 3 percent by the end of the decade. The pace of disinflation was even more rapid in the CFA franc zone, declining to around zero up until 1994 when the CFA franc was devalued. The mean inflation rate in the zone has been relatively stable thereafter averaging close to 3 percent (Figure 17). Aside from the devaluation in 1994, the fixed exchange rate regime has been effective in providing monetary stability to members of the zone.¹⁸

Figure 17: Inflation – Africa Region, 1980-2013

Annual percent change in CPI, median values

¹⁷ The CFA franc zone, comprised of the West African Economic and Monetary Union (WAEMU) and the Economic and Monetary Community of Central Africa (CEMAC), included 11 countries until Mali joined in 1984, followed by Equatorial Guinea in 1985 and Guinea-Bissau in 1997.

¹⁸ Baldini and Ribero (2008) point out that in addition to providing a nominal anchor to member countries, the CFA monetary union also restricts domestic debt issuance making fiscal dominance less likely.

Source: World Bank *World Development Indicators* and IMF *World Economic Outlook* databases.

The transition to a moderate inflation environment occurred much later in countries outside the CFA franc zone. The median inflation rate averaged around 15 percent right up until the mid-1990s. Efforts made to correct fiscal imbalances (mitigating the need for inflationary finance) and curb inflationary pressures began to pay off. By the late 1990s, inflation declined to single digits in around half of the countries. For the most part, monetary authorities have been able to contain inflationary pressures stemming from the dramatic increases in food and energy prices in 2008 and 2011. Most countries are expected to bring inflation below 10 percent over the next few years.

Operational aspects of monetary policy have varied significantly across countries making it difficult to analyze policy responses for the region as a whole. That said, two observations are worth highlighting. First, broad money growth over the past decade has been much more stable in the CFA franc zone than in other countries (Figure 18). The rapid expansion in the global credit cycle over the period 2005-07 had little impact on broad money growth in the zone, but had a major impact in most other countries. Second, policy interest rates have begun to play a more prominent role in several countries. Monetary policy responses have been particularly aggressive in Uganda, Kenya and Malawi where policy rates increased sharply in an effort to contain excessive inflationary pressures (Figure 19, left panel).

Figure 18: Broad Money Growth – Africa Region, 2005-13

Percent

Source: IMF *Regional Economic Outlook Sub-Saharan Africa* May 2013.

Figure 19: Policy Interest Rates in Selected Countries, 2005Q1-2013Q2

Percent

Source: IMF *International Financial Statistics* database.

In Uganda, inflation increased from under 3 percent in late 2010 to 15 percent in July 2011 (12-month change in core CPI) at which point the Bank of Uganda announced its intention to bring inflation down to 5 percent over the medium term and proceeded to raise the Central Bank Rate by over 20 percentage points over the following 18 months. Inflation peaked at 30 percent in late 2011 and subsequently declined to 5.6 percent in May 2013. Kenya's experience was similar. Inflation increased from under 1 percent in late 2010 to over 10 percent in late 2011 (12-month change in core CPI). In response, the Central Bank of Kenya raised the Central Bank Rate by 12 percentage points. Inflation peaked at 18 percent in January 2012 before declining to 4.3 percent in April 2013, a level considered to be broadly consistent with its medium-term objective of 5 percent.

In Malawi the aggressive monetary policy response was spurred by the collapse of the fixed exchange rate regime. Inflation increased from 7 percent in early 2011 to 12 percent in April 2012 (12-month change in total CPI) when the Kwacha depreciated by 65 percent against the \$US. In response, the government announced the adoption of a flexible exchange rate regime, abandoning the *de facto* exchange rate peg to the \$US. The Reserve Bank of Malawi raised the Bank Rate by 12 percentage points over the balance of the year 2012 in an attempt to quell inflationary pressures,

which were exacerbated by pass-through from the large depreciation to domestic prices. The impact remains to be seen.¹⁹

Policy interest rates have also played a prominent role in Tanzania, Burundi, Zambia and Nigeria (Figure 19, right panel). For example, the Bank of Tanzania responded to mounting inflation by raising the Bank Rate by 3.9 percentage points in early 2009, bringing inflation down from 13 percent in late 2008 to under 5 percent by late 2010 (12-month change in total CPI). Inflationary pressures re-emerged shortly after, fueled by a surge in food prices. The Bank of Tanzania responded by raising the Bank Rate by additional 4.4 percentage point in late 2011, bringing inflation down from a peak at 20 percent in late 2012 to just under 10 percent in early 2013, achieving one of its macroeconomic objectives (attaining single-digit inflation by July 2013).

Currency crises have become much less common but exchange rates have not adjusted to help correct large external imbalances. Currency crises have been a major source of instability over the historical period, often in situations where large fiscal imbalances, mounting inflationary pressures and excessive debt undermine confidence in the exchange rate regime. From the mid-1980s to the mid-1990s there were an average of ten currency crises a year,²⁰ having a major impact on inflation (and debt sustainability in countries with large amounts of foreign-currency denominated debt). Since 2005 there have only been one or two such episodes each year, an indication that the improvements in monetary and fiscal policy have helped stabilize exchange rates.

The current account deficit for the region has remained steady at around three percent of GDP since the mid-1990s. There is, however, wide divergence across countries (Figure 20). Large surpluses in oil-exporting countries partially offset large deficits elsewhere. Deficits exceed 8 percent of GDP in one in every two countries, compared to one in four in the mid-1990s (Figure 21, left panel). In 2012, one in four countries reported deficits over 15 percent of GDP. This partly reflects the impact of higher world oil prices on import receipts in oil-importing countries (Figure 21, right

¹⁹ CPI inflation increased to 38 percent in April 2013 (12 month change).

²⁰ A currency crisis is defined as an exchange rate depreciation that exceeds 25 percent against the \$US. This calculation groups together the 14 countries in the CFA franc zone and the four countries in the Common Monetary Area--South Africa, Lesotho, Swaziland and Namibia (de facto). Similar results hold for exchange rates against the SDR.

panel). Deficits have also widened substantially in fragile states, notably Sierra Leone, Guinea, Zimbabwe, the Gambia and Burundi. In some cases, however, large deficits are mainly due to imported capital goods used in the construction phase of major mining projects (see Appendix). Many of the projects are financed by foreign direct investment (and project grants to a lesser degree) and hence have little impact on external debt. If such investments turn out as planned, the growth benefits and significant expansion in exports could improve the debt sustainability outlook considerably.

Figure 20: Current Account Balances, 2010-12 Average
Percent of GDP

Source: World Bank *Global Economic Prospects* January 2013.

Figure 21: Current Account Balances in the Africa Region, 1985-2013
Percent of GDP

Source: World Bank *Global Economic Prospects* January 2013.

Note: Estimates for 2012; projections for 2013.

The real effective exchange rate for the region as a whole has appreciated by 20 percent since 2000 (Figure 22).²¹ However, this largely reflects the impact of resource development in resource-rich countries. The real effective exchange rate appreciated by 66 percent in oil exporting countries, but has hardly changed in oil importing countries. There are few examples where the real exchange rate depreciated significantly in countries with large external imbalances.

Figure 22: Real Effective Exchange Rates, 1990-2012

Index (2000=100)

Source: IMF *Regional Economic Outlook Sub-Saharan Africa* May 2013.

Assessments of economic management show improvement since 2005

The World Bank Country Policy and Institutional Assessments (CPIA) for IDA-eligible countries in Africa give economic management the highest rating of the four clusters (Figure 23, left panel). The increase in the economic management cluster average since 2005 stems from improvements in macroeconomic management and debt policy (Figure 23, right panel)²²

²¹ Data limitations prevent us from examining real effective exchange rates from a historical perspective. Data for real effective exchange rates are only available for 17 of the 46 countries in the region prior to 2000.

²² Gollwitzer (2010) finds that African countries with better budgetary institutions tend to have lower external debt burdens. The quality of budgetary institutions is measured using an index that takes into account the planning, approval and implementation aspects of the budget process.

Figure 23: CPIA Ratings for African Countries, 2005 and 2012*Rating scale from very poor (1) to very strong (6) performance*

Source: World Bank *World Development Indicators* (WDI) database.

The economic management cluster was found to be statistically significant in cross-country growth regressions (Table 4, regression [1]).²³ Each of the three components—macroeconomic management, fiscal policy and debt policy—are significant (regressions [2] to [4]), as are the two clusters—structural policies and public sector management and institutions (regressions [5] and [6]). The regression with the economic management cluster has the best fit and in this sense provides a better explanation for cross-country differences in growth outcomes than the alternative CPIA measures. The three components of the economic management cluster each become insignificant when entered simultaneously (regression [7]), indicating that they are highly collinear making it difficult to disentangle their separate influences.

²³ Note that the regression results reported in Table 4 are generated using IDA-eligible African countries (where CPIA ratings are available) whereas those reported in Table 3 are based on all African countries.

The same goes for the three clusters (regression [8]).²⁴ By contrast, macro policy outcomes such as average inflation rates and external debt burdens were not found to be statistically significant. We also found little evidence that countries with higher investment rates tended to grow faster.

Table 4: Cross-Country Regression Results for IDA-Eligible African Countries

Dependent variable: average per capita growth rate over the period 1995-2012

Regression:	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]
Constant term	-2.51 (1.03) -2.43	-1.96 (1.41) -1.39	-2.59 (1.10) -2.35	-1.70 (0.92) -1.85	-3.08 (1.44) -2.14	-3.76 (1.78) -2.12	-3.42 (1.78) -1.92	-2.29 (1.39) -1.65
Oil-exporters	1.31 (0.69) 1.88	1.42 (0.79) 1.79	1.02 (0.70) 1.46	1.45 (0.73) 1.99	1.97 (0.81) 2.45	1.71 (0.79) 2.18	1.52 (0.84) 1.80	1.15 (0.77) 1.49
Volatility - output gap	-0.69 (0.30) -2.31	-0.75 (0.34) -2.23	-0.65 (0.31) -2.10	-0.81 (0.30) -2.69	-0.77 (0.31) -2.45	-0.79 (0.32) -2.51	-0.68 (0.31) -2.22	-0.71 (0.32) -2.18
CPIA ratings in 2005								
Economic management	1.14 (0.31) 3.68						0.91 (0.56) 1.64	
Macro management		0.91 (0.41) 2.24						-0.19 (0.58) -0.33
Fiscal policy			1.17 (0.34) 3.50					0.84 (0.61) 1.36
Debt policy				0.89 (0.27) 3.27				0.45 (0.51) 0.87
Public sector management					1.40 (0.47) 2.99		0.08 (0.82) 0.10	
Structural policies						1.53 (0.55) 2.79	0.43 (0.77) 0.56	
R ²	0.485	0.366	0.470	0.451	0.427	0.410	0.492	0.483
F-statistic	10.0	6.2	9.5	8.8	7.9	7.4	5.8	5.6
Degrees of freedom	32	32	32	32	32	32	30	30

Note: OLS estimates. Standard errors reported in parentheses; t-statistics in *italics*; ***bold-italics*** denotes statistically significant at the 5 percent level.

²⁴ Similarly, CPIA ratings for 2005 and 2012 were each significant when entered separately but not when combined. The 2005 ratings were found to have a slightly better fit.

V. Macroeconomic Policy Challenges Ahead

Africa's frequent growth accelerations and collapses in the past provide a cautionary note for those who would like to interpret the progress of the past decade as a "turning point" in the continent's economic performance. (Go and Page 2008, xix)

Several countries in the region have the potential to greatly expand natural resource production and become major commodity exporters. This transformation, along with rising investor interest in frontier markets and the development of domestic debt markets, will likely broaden the menu of financing options, presenting policy makers with new challenges.

Development of Natural Resources

Africa has had great potential to develop its plentiful resources for some time. Until the early 1990s, most countries in the region were unable to attract the private sector investment needed to explore and develop such resources. This reflected several major shortcomings, including weak institutions and governance issues, along with capacity constraints. Uncertainty stemming from the enforcement of property rights, political instability, civil wars and large fiscal imbalances fueled investor concerns about appropriation of major investments. Gradual progress in those areas, along with high commodity prices over the past few years, has sparked investor interest in resource development.

Recent discoveries and major investments to exploit proven reserves have already had a major impact on the economic outlook in several countries. There is ample scope for further expansion throughout much of the region. Technological innovations in exploration and extraction have improved the probability of discovering viable reserves. Since Africa is the least explored continent it has greater potential for discovering vast resources (Collier 2011). Exploration results to date are encouraging.

Broader Financing Options

While only a handful of African countries play an active role in frontier markets, this segment of the global capital market is evolving quickly. Prospects for a major expansion in resource wealth throughout the region could accelerate the process. Major resource projects often require developing the supporting public infrastructure, especially in electricity and transport sectors vital for uninterrupted production and for moving products to markets efficiently. In many cases, investment in major resource projects and supporting infrastructure are planned, implemented and financed jointly.

A few countries have been able to tap the Eurobond market, most for the first time. Aside from South Africa, which has had frequent access to the international capital markets for some time, three countries issued inaugural Eurobonds in 2006-07 (Table 5). There was no further issuance in 2008-09 as investors' appetite for risk diminished during the global financial crisis. Investor interest was renewed in 2010 as record-low yields on benchmark sovereign bonds (mainly US treasuries and German bunds) spawned a search for yield. Eight African countries have issued Eurobonds since 2010. Kenya is planning to launch a debut Eurobond later this year, expected to be in the \$500 million to \$1 billion range. After making a \$1 billion private placement last year, Angola is planning a \$1 billion Eurobond issue later this year. Nigeria and Ghana are also planning \$1 billion Eurobond issues later this year. Senegal is planning a \$500 million ten-year Eurobond issue later this year. Uganda has indicated interest in issuing a Eurobond in the next two to three years.

Table 5: Recent Eurobond Issues by African countries

	<i>\$ millions</i>	<i>Tenor</i>	<i>Coupon</i>	<i>Date issued</i>	<i>Notes</i>
Seychelles	230	5	9.125	Oct. 2006	defaulted Jan 2010
Ghana	750	10	8.50	Sept. 2007	
Rep. of Congo	487			Nov. 2007	Restructuring of London Club debt
Gabon	1,000	10	8.20	Dec. 2007	
Senegal	200	5	8.75	Dec 2009	
Cote d'Ivoire	2,300	10	10.18	Apr. 2010	defaulted Jan 2011
Nigeria	500	10	6.75	Jan. 2011	
Senegal	500	10	8.75	May 2011	Exchange offer ²
Namibia	500	10	5.50	Oct. 2011	
Angola	1,000	10	7.000	Aug. 2012	private placement
Zambia	750	7	5.625	Sept. 2012	
Tanzania	500	7	<i>floating</i> ¹	Feb. 2013	private placement
Rwanda	400	10	6.875	Apr. 2013	
Nigeria	500	5	5.375	Jul. 2013	
Nigeria	500	10	6.625	Jul. 2014	

Note: 1. Amortising bond with floating interest rate: 6-month LIBOR plus 600 basis points.

2. Replaced \$200 million Eurobond issued in 2009.

Governments in many countries have been able to meet a growing portion of their financing needs in domestic markets. For example, domestic debt exceeds 20 percent of GDP in Mauritius, the Gambia, Malawi and Kenya (Figure 24). In the case of Nigeria, external debt burden declined sharply

in 2005-06, mainly due to debt relief provided by its Paris Club creditors.²⁵ Nigeria's domestic debt has risen from 9.5 to 15 percent of GDP over the past four years, and accounts for almost all of its total public debt.

Figure 24: Pubic Debt in Selected Countries, 2008 and 2012

Percent of GDP

Sources: Central Bank of Kenya, Nigeria Debt Management Office, IMF Country Report No. 12/129 (Jun. 2012), IMF Country Report No. 13/97 (Apr. 2013), IMF Country Report No. 12/221 (Aug. 2012), IMF *World Economic Outlook* April 2013 and World Bank *International Debt Statistics* 2013.

Managing the Risks

The development of domestic debt markets provides several potential benefits, but not without risks. Reliable access to a wider range of domestic debt instruments provides a broader set of financing options. The ability to issue debt denominated in domestic currency reduces foreign currency exposures. An active debt issuance program in the domestic market can expand the investor base and help build a benchmark yield curve to facilitate corporate and subnational debt issuance. Domestic currency bonds with long maturities enable institutional investors (pension funds and insurance companies) to manage their liabilities more effectively.

²⁵In 2005 Nigeria reached an agreement with its Paris Club creditors to cancel \$20 billion of the \$35.9 billion in its external debt outstanding at the time.

While a few countries in the region have been able to issue medium- and long-term debt maturities, issuance for the most part has been confined to short-term maturities (mainly treasury bills). Refinancing risk is therefore a concern, especially where the investor base has limited capacity (predominantly commercial banks in many cases). The current search for yield in global capital markets has enticed investors to seek out high yields in frontier markets, in compensation for the exchange rate exposure and default risk. Foreign participation in domestic debt markets serves to broaden the investor base but only to the extent that it can be accessed in good times and bad.²⁶ The recent global credit cycle provides a fresh reminder of how the search for yield can lead investors to underprice risk, which often leads to a sharp correction. Countries with a history of political instability and civil conflict are especially susceptible to sudden swings in investor confidence.

There are some early signs that such a correction might not be too far away. Suggestions that the US Federal Reserve might begin to curtail the pace of its purchases of agency and treasury debt sooner than envisaged by markets have led to a 100 basis point increase in the 10-year US treasury yield between May and August 2013. Higher yields on benchmark bonds have in turn led investors to reassess the pricing of risky assets, putting downward pressure on equity prices and currencies in emerging and frontier markets, notably in India, Indonesia and South Africa.

Complex financing arrangements will make it harder to manage the risks effectively. Private-public partnerships (PPPs) provide an additional source of funding for much-needed public infrastructure projects. The financing arrangements often have complex debt / equity characteristics, including special tax treatment for capital expenses and in some cases explicit or implicit claims on future resource revenues. Such claims serve as collateral to secure future debt service and represent a contingent liability for the government.

The complexity of PPP financing agreements varies greatly across projects. Most countries currently lack the legal and financial expertise required to assess the risks effectively and negotiate agreements that support their long-term policy objectives. For example, creditors are generally more able to diversify across a much broader scope of projects and hence should be willing to cover

²⁶ In this context “domestic” debt refers to the jurisdiction of issuance, not the residency of the creditor (the convention used in the balance of payments).

downside losses in exchange for upside gains. On the other side, governments should be willing to forego upside gains and limit downside losses to ensure that adverse outcomes do not undermine debt sustainability. The contingent nature of the sovereign's liability complicates debt sustainability assessments. Public disclosure of accurate, timely information, including analysis of contingent liabilities, would help ensure that the risks are well understood by official and private sector creditors.

Volatile resource revenues complicate fiscal planning but also provide scope for precautionary saving. Countries undergoing a major expansion in the resource sector will need to reorient the macroeconomic policy framework to address the volatile nature of resource revenues and absorptive capacity constraints. Technical assistance can play a valuable role in helping countries make the transition in a pre-emptive manner.²⁷ Monetary and fiscal policy coordination is vital to ensure that domestic spending can be absorbed without fueling inflationary pressures and that an overvalued currency does not undermine the competitiveness of non-resource tradable sectors. Initiatives to promote diversification of the export and production base merit a high priority in the policy agenda.

Governance also plays a pivotal role. Building sound institutions is essential to instill investor confidence in the rule of law and protection of property rights, a major concern for long-term equity investments. Major legal and regulatory reforms are needed to ensure that extraction rights maximize resource revenues. Developing capacity for public financial management and achieving compliance with the Extractive Industries Transparency Initiative would help ensure that resource revenues are monitored in a transparent manner.

Foreign asset accumulation provides a mechanism to decouple resource revenue flows and domestic spending. Resource revenues saved during expansions and spent during contractions would enhance macroeconomic stabilization and also improve the efficiency of public investments. Channeling spending to contractionary periods would reduce factor costs and mitigate capacity constraints. Holding financial assets in foreign currency implies that more export receipts are exchanged for domestic currency during contractions and less during expansions, alleviating

²⁷ For a comprehensive review of how the macroeconomic policy framework can be tailored to meet the special needs of resource-rich developing countries, see IMF (2012c, 2012d, 2012e and 2012f).

exchange rate pressures. Precautionary saving is especially important for countries unable to access capital markets on a regular basis. Moreover, foreign assets can provide a hedge against currency risk for countries with foreign currency denominated debt and gives the monetary authority more scope to implement sterilization operations.

One can argue that holding foreign assets is suboptimal, given the high potential social and economic returns from social spending priorities and growth-enhancing expenditures. Inadequate public infrastructure is a serious bottleneck throughout much of the region, constraining productivity of private investment in non-resource sectors and undermining long-term growth prospects. Improving public infrastructure, especially in electricity and transport sectors, can also alleviate capacity constraints and support the development of the non-resource sector, by moderating the potential for Dutch disease.²⁸ The historical record indicates that public infrastructure projects often do not generate the benefits projected at the planning stage, especially in countries with weak institutions and limited managing capacity. Capacity constraints limit how quickly public investment can be scaled up. Projects need to be implemented at a measured pace taking into the prospective impact on inflation and the exchange rate as well as the administrative capacity for managing and implementing projects efficiently.²⁹ Foreign assets also provide a contingent source of funding for existing and planned projects.³⁰

Although the region as a whole has tremendous potential for developing resources, this is not assured for individual countries. Many countries currently face declining resource revenues due to depleting oil resources. Net oil export revenues are expected to decline significantly over the next five years in the top six oil-producing countries (Figure 25).³¹ Intergenerational equity plays a central role

²⁸ An empirical study by Calderón (2009) finds that expanding expenditures on public infrastructure in Africa has had sizeable growth benefits.

²⁹ Berg et al (2012) have developed a model designed to help developing countries examine these trade-offs. It provides a comprehensive analysis of the various fiscal risks entailed by public infrastructure investment projects undertaken in Africa.

³⁰ A recent empirical study by Dessus and Varoudakis (2013) indicates that countries in West African Economic and Monetary Union (WAEMU) tend to cut capital expenditures in response to adverse fiscal shocks but do not raise capital expenditures in response to favorable shocks. As a consequence, capital expenditures tend to remain well below planned levels over the course of the business cycle.

³¹ These projections do not take into account the possibility of discovering new reserves or technological innovations that could make proven reserves commercially viable

in those situations. Policy makers need to design and implement a long-term fiscal plan to ensure that resource wealth is shared equitably across current and future generations. Sovereign wealth funds (set up in Angola and Nigeria) can help achieve this objective by developing such expertise.

Figure 25: Value of Net Oil Exports, 2000 and 2018

Percent of GDP

Sources: IMF World Economic Outlook April 2013.

Note: projection for 2018.

VI. Conclusions

To recap, poor macroeconomic policy management was a source of instability throughout the 1970s and 1980s. Policy makers were often unable to put in place and follow through on a credible medium-term fiscal plan. Fiscal imbalances mounted following adverse shocks. Insufficient action was taken to correct imbalances during expansions. Debt accumulated to excessive levels. Monetary policy became dominated by inflationary finance considerations, resulting in high and volatile inflation. Countries facing large fiscal imbalances, heavy debt burdens and excessive money growth were vulnerable to large exchange rate devaluations/depreciations, which in turn added to inflationary pressures. Macroeconomic instability created an adverse environment for attracting private investment and developing a diverse export sector, undermining long-term growth prospects.

The mid-1990s marked a turning point in many countries. Policy makers began to address the large fiscal imbalances and take measures to curtail inflationary pressures. Steady progress on both monetary and fiscal policy fronts, along with HIPC/MDRI debt relief initiatives, put countries in a stronger position to weather the large external shocks encountered over the past few years. Policy responses, for the most part, have been effective in preserving macroeconomic stability, which has helped sustain robust growth throughout much of the region.

Despite the impressive gains in macroeconomic policy performance, it would be premature to conclude that boom-bust cycles are a thing of the past. At the current juncture, a continued slowdown in key emerging market economies (China in particular) poses a significant downside risk for countries highly dependent on resource revenues. Policy makers in those countries need to carefully consider the potential repercussions of lower resource revenues, perhaps for an extended period, and develop contingency plans in a preemptive manner. Policy makers also need to recognize that the search for yield is not be a permanent feature of global capital markets. Benchmark bond yields have been abnormally low for some time. While the timing is uncertain, the transition to historical norms is inevitable and will likely entail re-pricing of risky assets. Higher benchmark yields and the possibility of wider spreads on sovereign debt issued by frontier markets need to be reflected in countries' borrowing strategies.

Appendix: Large External Imbalances Stemming from Mining Projects – Four Examples

This appendix examines four countries—Sierra Leone, Guinea, Mozambique and Niger—where foreign investment on major mining projects has resulted in large current account deficits. High expenditures on imported capital goods during the construction phase of major projects worsen the current account. In many cases, foreign direct investment finances most of the investment outlays, having relatively minor implications for external debt. The projected expansion in export capacity improves the current account over the medium term and the debt sustainability outlook.

Sierra Leone recorded a current account deficit that exceeded 50 percent of GDP in 2011.

This was mainly due to imported capital goods used to expand mining production (diamonds and iron ore). Those imports were largely financed by non-debt incurring inflows--foreign direct and portfolio investment--and hence had little impact on external debt obligations. An expansion in mining production is expected to increase exports substantially, narrowing the current account deficit to almost 10 percent of GDP in 2013. External debt is set to decline relative to GDP, and fall sharply relative to exports. Official transfers play a declining role, though project grants remain a significant source of external funding.

Sierra Leone, Balance of Payments, 2011-13

	2011	2012 ^e	2013 ^p
<i>Percent of GDP</i>			
Current account	-52.3	-14.9	-10.4
Trade balance - goods	-49.0	-42.6	16.3
Imports of goods	55.9	42.3	39.4
Exports of goods	12.7	36.8	37.5
<i>of which: diamonds and iron ore</i>	4.9	23.4	22.5
Current transfers	5.7	5.0	4.7
<i>Official</i>	2.4	1.3	1.1
Capital account	3.5	2.4	2.4
<i>of which: project grants</i>	3.4	2.3	7.3
Financial account			
Foreign direct and portfolio investment	42.3	12.1	7.3
Public sector borrowing (net)	2.7	2.5	2.2
External debt (nominal)	29.9	25.2	25.4
Present value	19.9	16.2	15.4
<i>percent of exports</i>	125.3	46.7	45.9

Source: IMF Country Report No. 12/285 (Oct. 2012)

Note: estimates for 2012; projections for 2013.

Guinea's large current account deficit, estimated at almost 40 percent of GDP in 2012-14, is mainly due to imported capital goods used to expand mining production, as in the case of Sierra Leone. A significant expansion in mining exports (projected to increase from 25 percent of GDP in 2012 to 50 percent in 2016) is expected to reduce the current account deficit to just 5 percent of GDP by 2016. The expansion in mining projects is largely financed by foreign direct investment, expected to reach 35 percent of GDP in 2014, having relatively minor implications for the external debt burden. External debt is set to decline modestly relative to GDP and fall sharply relative to exports.

Guinea, Balance of Payments, 2012-16

	2012	2014	2016
<i>Percent of GDP</i>			
Current account	-38.8	-39.7	-5.0
Trade balance - goods	-24.9	-25.6	6.7
<i>of which: mining projects</i>	4.3	0.3	30.6
Imports of goods	51.5	52.8	44.8
<i>of which: mining projects</i>	20.7	24.9	19.0
Exports of goods	26.7	27.2	51.4
<i>of which: mining projects</i>	25.0	25.2	49.6
Current transfers	2.3	2.1	1.4
<i>Official</i>	0.3	0.4	0.0
Capital account balance	1.4	1.1	0.6
Financial account			
Direct and other private investment	23.0	30.4	2.0
<i>of which: mining projects</i>	28.0	35.4	9.0
Net public borrowing	0.6	0.1	1.1
External debt (nominal)	19.0	18.3	13.4
Present value	14.9	13.8	9.8
<i>percent of exports</i>	53.2	49.0	18.6

Source: IMF Country Reports No. 12/295 (Oct. 2012) and No. 12/301 (Oct. 2012).

Note: estimates for 2012; projections for 2014 and 2016.

Niger's current account deficit is projected to narrow from an estimated 26.5 percent of GDP in 2012 to almost 10 percent in 2016, as mining exports (uranium and oil) increase and imported capital goods decline. In this case, however, foreign direct investment is expected to decline significantly. Official transfers, project grants and net public borrowing provide the bulk of external resources.

Niger, Balance of Payments, 2012-16

	2012	2014	2016
<i>Percent of GDP</i>			
Current account	-26.5	-13.5	-10.6
Trade balance - goods	-11.7	-3.6	-0.7
Imports of goods	36.5	30.3	29.5
<i>of which: capital goods</i>	13.5	10.2	10.0
Exports of goods	24.8	26.7	28.8
<i>of which: uranium and oil</i>	15.4	17.4	18.5
Current transfers, balance	4.6	4.3	4.0
<i>of which: public, net</i>	3.5	3.1	2.9
Current transfers	6.5	6.4	6.3
<i>Official</i>	5.9	5.8	5.7
Financial account			
Foreign direct investment	15.1	1.1	-1.5
Public borrowing, net	4.7	5.2	5.1

Source: IMF Country Report No. 12/109 (May 2012).

Note: estimates for 2012; projections for 2014 and 2016.

In *Mozambique*, the current account deficit is expected to widen from an estimated 27 percent of GDP in 2012 to 41 percent of GDP in 2014, mainly due to imported capital goods for megaprojects. The current account deficit is projected to narrow modestly over the medium term with an expansion in exports from the megaprojects and a decline in related imported capital goods. This is partially offset by higher dividend payments on the megaprojects. The composition of external financing is expected to shift from foreign direct investment in 2012 to net borrowing by the private nonfinancial sector. The external debt burden is projected to decline slightly in nominal terms, but increase in present value terms as the increase in net private borrowing reduces the average concessionality of total (public and private) external debt.

Mozambique, Balance of Payments, 2012-17

	2012	2014	2017
<i>Percent of GDP</i>			
Current account	-26.9	-41.0	-33.2
Trade balance - goods	-21.5	-32.8	-14.4
<i>of which: megaprojects</i>	-4.4	-15.9	-0.4
Imports of goods	46.5	59.3	45.5
<i>of which: megaprojects</i>	20.4	33.0	21.8
Exports of goods	25.0	26.4	31.0
<i>of which: megaprojects</i>	16.0	17.1	21.4
Income balance	-0.7	-1.7	-10.9
<i>of which: dividend payments by megaprojects</i>	-0.1	-1.1	-4.5
Current transfers	5.0	2.3	1.1
<i>Official</i>	4.3	3.1	1.8
Capital account balance	2.7	2.5	1.9
Financial account			
Foreign direct investment	21.2	10.7	4.7
Net foreign borrowing	2.9	28.8	28.4
by government	4.1	6.1	3.2
by nonfinancial private sector	-1.2	22.7	25.1
External debt (nominal)	53.1	52.8	50.3
Present value	22.5	27.6	28.5
<i>percent of exports</i>	138.5	133.3	133.1

Source: IMF Country Reports No. 13/1 (Jan. 2013) and No. 12/148 (June 2012).

Note: estimates for 2012; projections for 2014 and 2017.

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