

World Economic and Financial Surveys

Regional Economic Outlook

Sub-Saharan Africa

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APR 08

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Cataloging-in-Publication Data

Regional economic outlook : Sub-Saharan Africa – [Washington, D.C.] : International Monetary Fund, 2008.

p. cm. – (World economic and financial surveys)

APR 08.

Includes bibliographical references.

ISBN 978-1-58906-711-0

1. Monetary policy – Africa, Sub-Saharan. 2. Foreign exchange rates – Africa, Sub-Saharan. 3. Capital movements – Africa, Sub-Saharan. 4. Power resources – Africa, Sub-Saharan. 5. Africa, Sub-Saharan – Economic conditions – 1960- 4. Africa, Sub-Saharan – Economic policy. I. Title: REO. II. International Monetary Fund. III. Series (World economic and financial surveys) HC800 .R445 2008

Price: US\$31.00

(US\$26.00 to full-time faculty members
and students at universities and colleges)

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Tel.: (202) 623-7430 Fax: (202) 623-7201

E-mail: publications@imf.org

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The following conventions are used in this publication:

- In tables, a blank cell indicates “not applicable” and ellipsis points (. . .) indicate “not available,” and 0 or 0.0 indicates “zero” or “negligible.” Minor discrepancies between sums of constituent figures and totals are due to rounding.
- An en dash (–) between years or months (for example, 2005–06 or January–June) indicates the years or months covered, including the beginning and ending years or months; a slash or virgule (/) between years or months (for example, 2005/06) indicates a fiscal or financial year, as does the abbreviation FY (for example, FY2006).
- “Billion” means a thousand million; “trillion” means a thousand billion.

“Basis points” refer to hundredths of 1 percentage point (for example, 25 basis points are equivalent to $\frac{1}{4}$ of 1 percentage point).

Abbreviations

AICD	Africa Infrastructure Country Diagnostic
AREAER	<i>Annual Report on Exchange Arrangements and Exchange Restrictions</i>
ASEAN	Association of South East Asian Nations
BoT	Bank of Tanzania
CAPP	Central African Power Pool
CEMAC	Central African Economic and Monetary Community
CIS	Collective Investment Schemes
COMESA	Common Market of Eastern and Southern Africa
CPI	Consumer price index
EAC-5	East African Community
EAP	East Asia and Pacific
EAPP	East African Power Pool
ECA	Europe and Central Asia
ECOWAS	Economic Community Of West African States
EPA	Economic Partnership Agreement
FCP CBP	Foreign Private Capital Capacity-Building Program
FDI	Foreign direct investment
GCI	Global Competitiveness Index
GEM	Global Emerging Markets
GTAP	Global Trade Analysis Project
gwh	gigawatt hour
HIPC	Heavily indebted poor countries
kwh	kilowatt hour
LAC	Latin America and Caribbean
MDG	Millennium Development Goal
MDRI	Multilateral Debt Relief Initiative
MENA	Middle East and North Africa
MW	megawatt
NDA	Net domestic assets
NEPAD	New Partnership for African Development
ODA	Official development assistance
OECD	Organization for Economic Cooperation and Development
PFM	Public financial management
PPI	Private Participation in Infrastructure
PPP	Purchasing power parity
PRGF	Poverty Reduction and Growth Facility
PSI	Policy Support Instrument
RBZ	Reserve Bank of Zimbabwe
REER	Real effective exchange rate
SADC	Southern African Development Community
SAPP	Southern African Power Pool
SAS	South Asia
SSA	Sub-Saharan Africa
TWh	terawatt hour
WAEMU	West African Economic and Monetary Union
WAPP	West Africa Power Pool

Executive Summary

The economic expansion in sub-Saharan Africa is expected to continue, but risks are tilted to the downside. Growth in sub-Saharan Africa should again average about 6½ percent this year, driven by oil exporters, while growth in other countries is slowing somewhat. Inflation is projected at about 8½ percent this year.

The external environment has become less favorable. The global economy is slowing down, oil prices have risen to record-high levels, and global financial markets are unsettled. This marks a shift from recent years, when demand for sub-Saharan African exports was healthy and nonfuel commodity prices were growing at double digits. Rising oil and food prices pose increasing challenges to many countries and threaten the inflation outlook. If high oil prices are accompanied by a pronounced slowdown in the global economy—bringing weaker non-oil commodity prices—the exports of sub-Saharan Africa will be harmed. In addition, while African markets have so far shown limited reaction to continuing turbulence in global financial markets, a reversal of portfolio flows would reduce external financing and hurt growth in a few countries. In light of these risks, there is about a one-in-five chance that in 2008 growth in sub-Saharan Africa will fall to less than 5 percent.

The Gleneagles commitment of the G-8 heads of state in 2005 to double aid to Africa by 2010 seems increasingly unlikely to materialize, as aid disbursements have so far not shown any significant increase.

Internal risks have increased in some regions. Postelection violence in Kenya led to shortages and price hikes not only in Kenya but also in neighboring countries. Despite the recent political progress, uncertainty remains about the extent of growth slowdown and the pace of recovery. The unrest in Chad has implications for neighboring countries as well. Careful management of the political and security situation and appropriate policy responses can help sustain the current expansion.

This *Regional Economic Outlook: Sub-Saharan Africa* has three analytical chapters:

- *Many African economies are adapting their monetary frameworks to preserve hard-won stabilization gains, anchor expectations, and adapt to shocks* (Chapter 2). In countries with managed float regimes, the post-stabilization environment calls for a move, in many cases gradual, toward frameworks that place less weight on intermediate targets—notably money—and more on a broad range of indicators of expected inflation. In many of these countries, the nominal exchange rate plays a complex and often constructive role, but sustained efforts to use monetary policy to target the real exchange rate are likely to be counterproductive.
- *Private capital flows have overtaken official aid as the main source of external finance for sub-Saharan Africa* (Chapter 3). This investor interest brings tremendous opportunities, but policymakers also face particular challenges in managing the inflows. Sound macroeconomic management, transparent capital account policies, and financial sector reforms will be essential both to encourage inflows and to ensure that these inflows go

- to productive uses while avoiding macroeconomic instability and the buildup of vulnerabilities. Countries need to quickly improve their capacity to monitor the inflows so they can design an appropriate policy response to the increased inflows and assess their economic impact.
- *The power sector in sub-Saharan Africa requires urgent attention* (Chapter 4). Action on three major fronts is required: first, improving the effectiveness of power utilities; second, scaling up generation capacity; and third, expanding access to electricity. Simultaneous action will be required on all three fronts to improve energy supply, which is a bottleneck to growth in many countries.

I. Overview

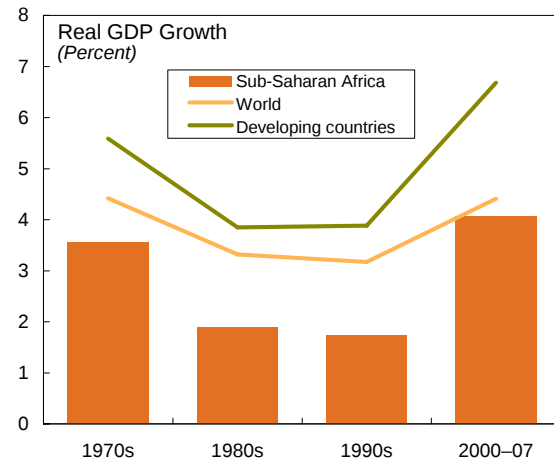
Macroeconomic developments in sub-Saharan Africa were broadly positive in 2007, with growth steady and as expected across most of the region. Inflation remains largely contained. The immediate prospects are for continued economic expansion but with a widening gap between oil exporters and oil importers. Because of the less favorable external environment, risks in 2008 are tilted to the down side, with the possibility of persistent high oil prices and a weakening of non-oil commodity prices as growth in major commodity-importing countries decelerates. Against this background, policymakers face the challenge of maintaining macroeconomic stability and moving their reform agenda forward.

Main Developments in 2007

In 2007 sub-Saharan Africa experienced one of its highest growth rates in decades (Figure 1.1).¹ Real GDP expanded by about 6½ percent (Table 1.1), fueled by growing production in oil exporters and rising domestic investment and productivity across the region. Drivers include successes in stabilizing economies and implementing structural reforms. Solid global demand for commodities, greater flows of capital to Africa, and debt relief have helped increase resources and lift growth.

But the external environment has recently become less favorable. The global economy is slowing down, driving down the demand for sub-Saharan African exports; oil prices have risen to record levels; and global financial markets are unsettled. This marks a

Figure 1.1. A Comparison of Growth
Sub-Saharan African growth is robust.



Sources: IMF, *World Economic Outlook*; and IMF, African Department database.

shift from recent years, when demand for sub-Saharan African exports was healthy and nonfuel commodity prices grew at double-digit rates. The region's growing integration with the global economy, albeit not as strong as in other regions, means a global slowdown would likely affect the economic performance of sub-Saharan Africa through trade and financial channels (Box 1.1).

While growth in 2007 was healthy in most countries, it was strongest in oil exporters (Figure 1.2).² In Angola and Equatorial Guinea, new oil fields came on stream. In Nigeria, the disruption of onshore oil output caused by civil unrest was partly offset by new offshore production. Some low-income countries like Ethiopia, Ghana, Mozambique, and Tanzania enjoyed growth above the regional average, in line with their leading performance in the last 10 years (Figure 1.3). In other countries, such as Côte d'Ivoire, however, growth has lagged, partly because of political instability. In Zimbabwe,

Note: This chapter was prepared by Calvin McDonald and Paulo Drummond.

¹ Excluding Zimbabwe, growth in 2007 was about 6½ percent. Hereafter, except where specifically noted, all indicators and figures in this chapter exclude Zimbabwe.

GDP growth figures in this *Regional Economic Outlook: Sub-Saharan Africa* (henceforth, *Regional Economic Outlook*) reflect country weights calculated from the new purchasing power parity data published by the International Comparison Program in December 2007. This has resulted in an upward revision of sub-Saharan African growth of 0.3 percentage point in 2007 relative to the estimates in the October 2007 *Regional Economic Outlook*.

² The typology of countries is explained in Box 1.1 of the October 2007 *Regional Economic Outlook*.

Table 1.1. Sub-Saharan Africa: Selected Indicators, 2003–08¹

	2003	2004	2005	2006	Estimate 2007	Current Projections 2008
<i>Percent change</i>						
Real GDP	4.9	6.9	6.2	6.1	6.6	6.5
<i>Of which:</i> Oil exporters ²	8.1	11.0	7.7	7.3	8.8	9.9
Non-oil exporters	3.5	5.1	5.6	5.5	5.6	4.9
Real non-oil GDP	4.3	6.9	6.7	7.4	7.7	7.0
Consumer prices (average)	10.8	7.3	8.8	7.3	7.2	8.6
<i>Of which:</i> Oil exporters	20.4	14.9	14.7	8.2	5.7	8.1
Non-oil exporters	6.9	4.2	6.2	7.0	7.8	8.8
Per capita GDP	2.7	5.1	4.2	3.9	4.6	4.4
<i>Percent of GDP</i>						
Exports of goods and services	33.5	34.4	36.8	38.1	38.0	39.6
Imports of goods and services	33.7	33.1	33.9	35.0	36.7	35.8
Gross domestic saving	19.1	21.5	23.0	24.9	23.8	25.9
Gross domestic investment	19.5	20.3	20.2	21.8	22.3	22.2
Fiscal balance (including grants)	-2.1	-0.2	1.7	5.1	0.8	2.6
<i>Of which:</i> Grants	1.0	0.9	0.8	0.8	0.9	0.8
Current account (including grants)	-2.9	-1.5	-0.4	0.7	-2.8	-1.2
<i>Of which:</i> Oil exporters	-6.2	2.8	7.8	10.8	2.8	7.4
Non-oil exporters	-1.7	-3.1	-4.0	-4.6	-5.8	-6.7
Terms of trade (percent change)	1.2	3.2	9.6	12.1	5.6	14.8
<i>Of which:</i> Oil exporters	3.4	15.1	32.6	16.9	7.2	26.1
Non-oil exporters	0.2	-0.8	-1.3	6.0	3.3	-0.8
Reserves (months of imports)	3.3	4.2	4.7	5.6	5.8	6.4
<i>Memorandum items:</i>						
Oil price (US\$ a barrel)	28.9	37.8	53.4	64.3	71.1	95.5
Advanced economy import growth (in percent)	4.1	9.3	6.3	7.4	4.2	3.0
Real GDP growth in other regions						
Sub-Saharan Africa (WEO definition) ³	5.0	6.8	6.2	6.4	6.8	6.6
Developing Asia	8.1	8.6	9.0	9.6	9.7	8.2
Middle East	6.9	5.9	5.7	5.8	5.8	6.1
Latin America	2.1	6.2	4.6	5.5	5.6	4.4

Sources: IMF, African Department database; and IMF, World Economic Outlook (WEO) database.

Note: Data as of March 31, 2008. Arithmetic average of data for individual countries, weighted by GDP.

¹ Excludes Zimbabwe. See Table A1.1 for a list of sub-Saharan African countries.² Consists of Angola, Cameroon, Chad, Republic of Congo, Equatorial Guinea, Gabon, and Nigeria.³ Includes the countries listed in Table A1.1, plus Djibouti, Mauritania, and Sudan.

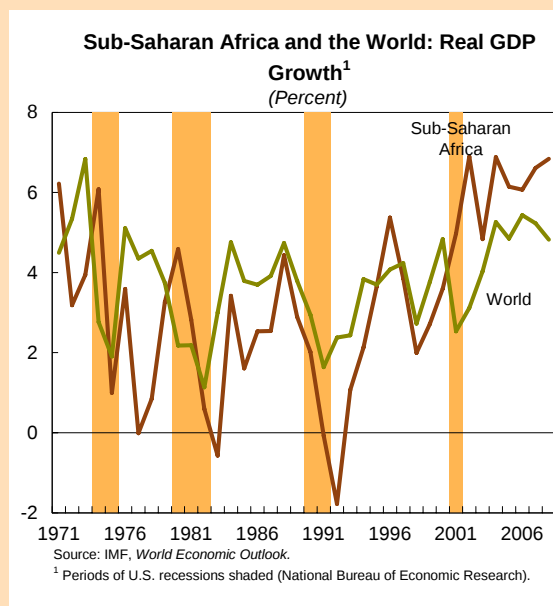
Box 1.1. Sub-Saharan Africa and the Global Slowdown

A global slowdown affects sub-Saharan Africa through two primary channels. The first is through trade. As growth in trading partners slows, sub-Saharan Africa is affected by lower real external demand and declines in commodity prices and the terms of trade. The second channel is through financial links, namely a reduction or reversal in capital flows to the region, including foreign direct investment (FDI). The figure and table show the historical co-movement of global and sub-Saharan African growth.

The impact on growth would depend on the strength of the trade and financial linkages. An IMF study (the April 2007 *World Economic Outlook*, Chapter 4) shows that, on average, a 1 percentage point decline in GDP growth in the euro area is associated with a slowing in GDP growth of about 0.25 percentage point in sub-Saharan Africa as a whole, with less pronounced spillovers from U.S. growth (0.1 percentage point). However, these results abstract from output co-movements between regions. If disturbances in the United States led to disturbances elsewhere, the impact on sub-Saharan African growth would be larger.

To estimate the impact of a global slowdown on individual African countries, a series of panel regressions were estimated for oil exporters and other countries, relating real growth in domestic output to world growth (trade weighted by partner countries) and with several control variables: oil prices, non-oil prices, and country fixed effects. The sample includes 40 countries and uses annual data for 1980–2007. The coefficients on the world growth variables provide a measure of the magnitude of the impact, controlling for commodity or terms of trade changes. On average, a 1 percentage point decline in world growth is associated with a 0.3–0.4 percentage point drop in growth across the sample of sub-Saharan African countries. The specification does not control for an explicit financial channel, which, while small, is growing. Taking this channel into account could mean that the growth impact on sub-Saharan Africa of a global slowdown would be toward the upper end of the range reported.

An additional model analyzes the impact of a global slowdown on the sub-Saharan Africa region over time. A VAR model was estimated for aggregate sub-Saharan African real output growth, world GDP growth, and export commodity prices. The model was estimated using annual data from 1980 to 2007, with lags. Estimates suggest that a 1 percent reduction in world growth leads to a reduction in sub-Saharan African GDP growth by about 0.5 percentage point after one year.



Sub-Saharan Africa: Real GDP Growth Correlations

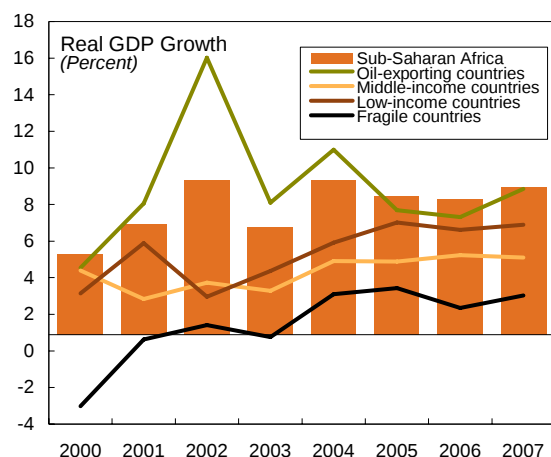
	1980–2007
Rest of the world ¹	0.60
European Union	0.32
United States	0.01
Developing countries ¹	0.54
Asia	0.30
Latin America	0.32

Source: IMF, *World Economic Outlook* database.

¹ Excluding sub-Saharan Africa.

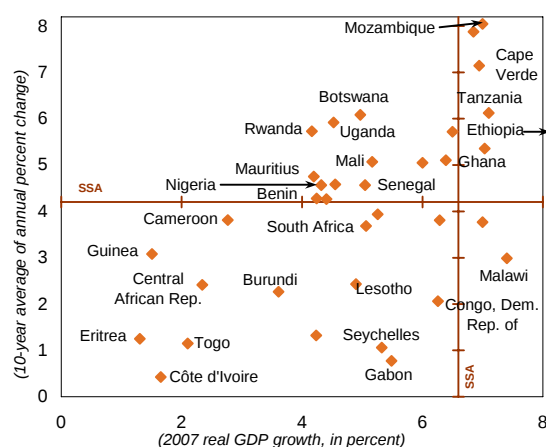
Note: This box was prepared by Paulo Drummond and Gustavo Ramirez.

Figure 1.2. Growth in Sub-Saharan Africa
The expansion cuts across country groups.



Sources: IMF, *World Economic Outlook*; and IMF, African Department database.

Figure 1.3. Regional Dynamics of Growth



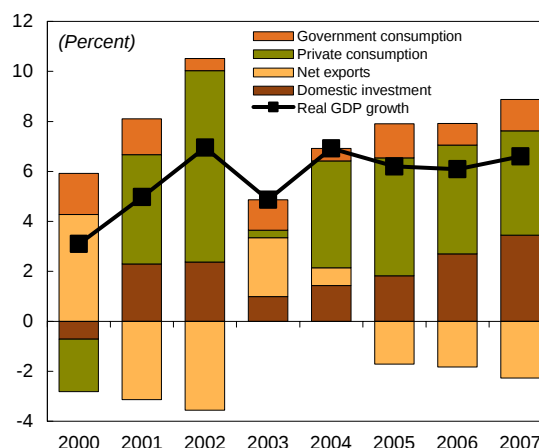
Sources: IMF, *World Economic Outlook*; and IMF, African Department database.

economic activity continued to contract as macroeconomic imbalances worsened owing to persistent monetary financing of quasi-fiscal activities and as price controls were intensified.

Overall, domestic demand continued to drive growth in the region (Figure 1.4). Domestic investment reached 22 percent of GDP in 2007, an all-time high for the region. Higher government consumption also contributed to growth in some countries, thanks to higher oil revenues and debt relief.

Over the past decade many countries have been reforming their economies and strengthening their

Figure 1.4. Contribution to GDP Growth
Domestic demand continues to drive growth.

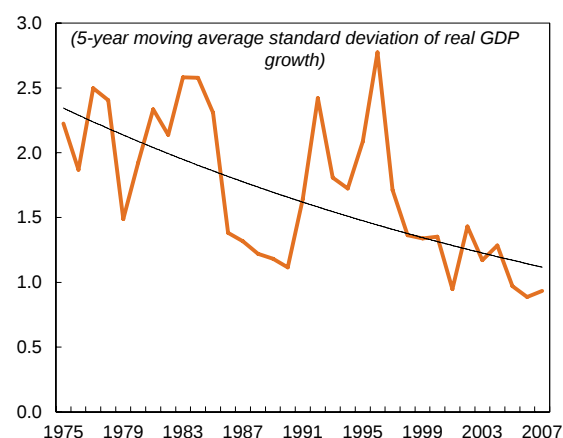


Sources: IMF, African Department database.

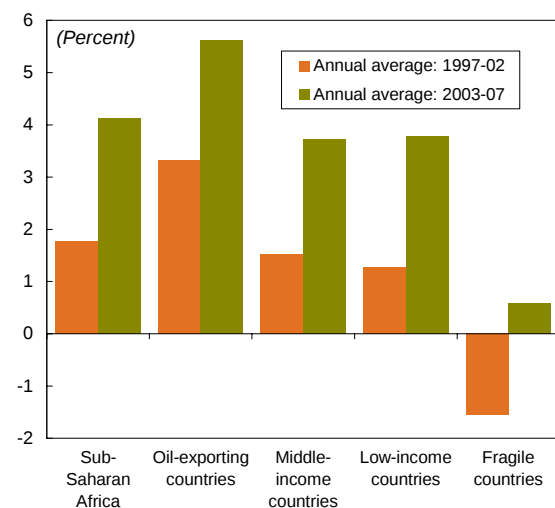
macroeconomic policies, and this is now bearing fruit. Improvements in the business environment in some countries have helped support growth (see the section of this chapter on the private sector). Moreover, armed conflicts and political instability have become less frequent. As a result, not only have investment and growth increased but income volatility has fallen to near-30-year lows (Figure 1.5). Not surprisingly, real per capita income is improving across all country groups, though fragile countries continue to trail (Figure 1.6).

Many countries have become more resilient to shocks. Oil exporters, and more generally net commodity exporters who have been benefiting from higher fuel and commodity prices, have improved their policies and are saving a considerable amount of the windfall revenues (Figures 1.7 and 1.8). Other countries have continued to grow even when prices for their exports have stagnated or deteriorated. This performance reflects efficiency gains from structural reforms and improvements in the business climate and macroeconomic policies.

Despite sustained increases in commodity prices in recent years, inflation on average was in the 6–9 percent range in 2007 (Figure 1.9). In response to inflation pressures, many countries (e.g., South Africa and Botswana) tightened policies, while others (Madagascar and Sierra Leone) have

Figure 1.5. Growth Volatility

Source: IMF, African Department database.

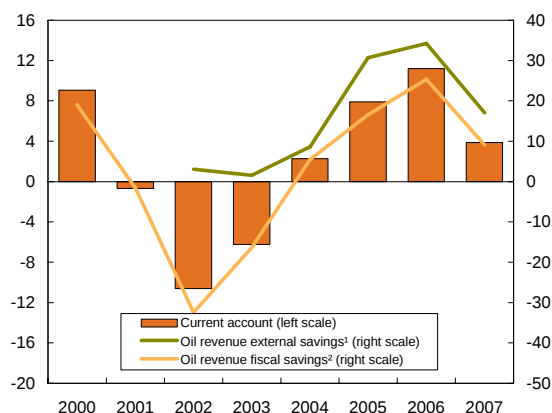
Figure 1.6. Real Per Capita GDP Growth
Per capita income is generally improving, but fragile countries are lagging.

Source: IMF, African Department database.

adopted medium-term measures to improve agricultural production, storage, and distribution to contain food price increases. In Zimbabwe, price pressures have spiraled to hyperinflationary levels (see Box 1.2).

Rising food prices are contributing to inflation pressures in many countries. Several countries have been experiencing double-digit food price inflation, continuing a trend from previous years. This reflects both a global increase in food prices and, in many

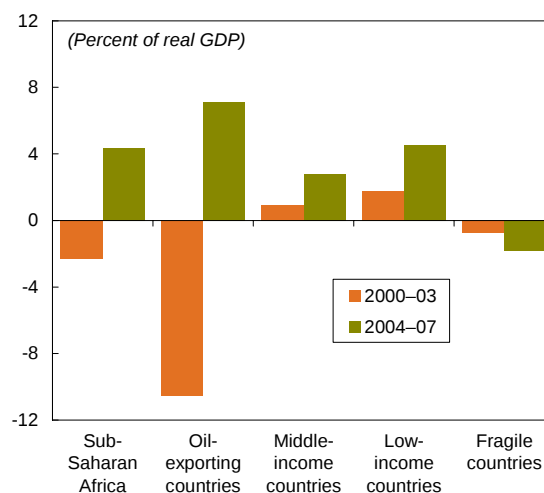
countries, droughts, which have done much damage south of the equator. Post-election violence in Kenya was also a factor, leading to shortages and price hikes not only in Kenya but in neighboring countries too.

Figure 1.7. Sub-Saharan Africa: Oil Exporters
Current account and oil income savings.

Sources: IMF, *World Economic Outlook*; and IMF, African Department database.

¹Current account surplus to oil and gas exports.

²Overall fiscal surplus to fiscal oil and gas revenues.

Figure 1.8. Sub-Saharan Africa: Trading Gains (Losses)¹

Sources: IMF, *World Economic Outlook*; and IMF, African Department database.

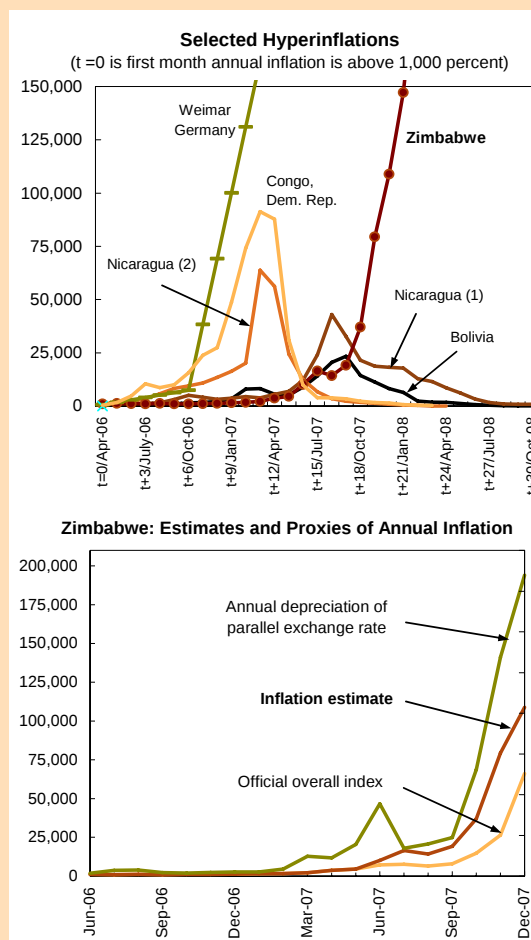
¹Trading gain = $(X-M)/P - (X/P_x - M/P_m)$, where X and M are exports and imports, P is the GDP deflator, and X/P_x and M/P_m are real exports and real imports.

Box 1.2. Economic Crisis in Zimbabwe

The deterioration of economic and social conditions that began in Zimbabwe in 1999 continued to gain momentum in 2007. Economic activity is estimated to have fallen by over 6 percent in 2007 after declining by more than 30 percent over the previous seven years. The external situation is precarious, with official reserves generally at minimal operating levels. Living conditions have worsened with the eroded purchasing power of wages and salaries and shortages of basic goods. The skills base has deteriorated due to the substantial exodus of economic refugees.

Inflation has spiraled to hyperinflationary levels. The official price index significantly understates price pressures, as many of the goods with controlled prices are no longer regularly available in the formal sector. Very rapid annual reserve money growth and a quickly depreciating parallel market exchange rate suggest that inflation reached about 100,000 percent by December 2007 and is continuing to spiral upward.

Price pressures have been fueled mainly by the substantial quasi-fiscal activities of the Reserve Bank of Zimbabwe (RBZ). While the central government continues to run overall fiscal deficits (estimated at about 10 percent of GDP in 2007), these have been dwarfed by the RBZ's quasi-fiscal activities, which skyrocketed to about 82 percent of GDP in 2007.¹ These include foreign exchange subsidies to public enterprises and government, price support for exporters, in-kind subsidies to farmers, and interest payments.



Note: This box was prepared by Robert Sharer, Said Bakhache, and Jens Clausen.

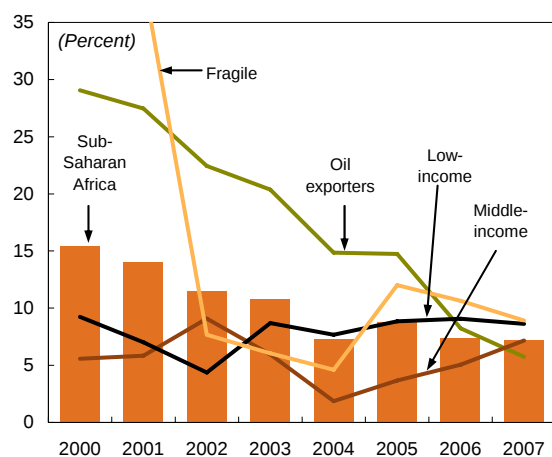
¹ These ratios represent the sum of deflated monthly flows divided by annual real GDP. Conventionally calculated annual flows in relation to nominal GDP become distorted in a hyperinflationary environment because, when inflation accelerates sharply, the real value of revenue and expenditure depends on the timing of these flows during the year.

Except for debt relief to Nigeria, official development assistance (ODA) flows from OECD countries to sub-Saharan Africa have been largely flat. Meanwhile, emerging creditors, particularly China, are stepping up assistance to the region, generally in the form of project assistance and

export credits, but comparable data are not available. Early estimates suggest that the doubling of aid to sub-Saharan Africa pledged at the G-8 summit at Gleneagles in 2005 is not on track (see the October 2007 *Regional Economic Outlook*, Box 1.3).

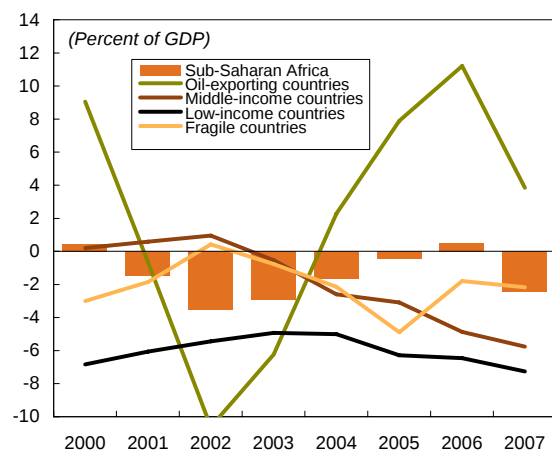
External current account deficits have generally been contained (Figure 1.10). In Angola and Nigeria, despite further improvements in the terms of trade, a volume decline in oil exports (as a percent of GDP) has been accompanied by rising imports due to investment in infrastructure. In other countries, the adverse impact of higher oil prices on the current account was partly offset by increases in non-oil commodity prices, especially metals (Figure 1.11). In low-income countries, imports rose modestly, partly financed by an increase in capital inflows.

Figure 1.9. Inflation in Sub-Saharan Africa
Inflation is in the single-digit range.



Sources: IMF, *World Economic Outlook*; and IMF, African Department database.

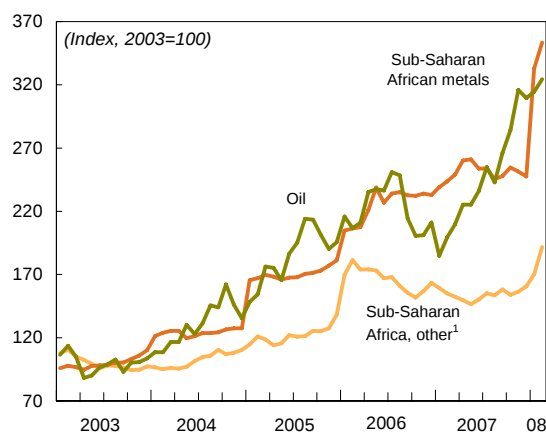
Figure 1.10. Sub-Saharan Africa: External Current Account Balance
The current account deficits are contained.



Sources: IMF, *World Economic Outlook*; and IMF, African Department database.

Figure 1.11. Commodity Prices in Sub-Saharan Africa

Commodity prices are still edging up.



Sources: IMF, Commodity Prices database; and UN Comtrade.

¹Composite of cocoa, coffee, sugar, tea, and wood, weighted by sub-Saharan African exports.

Financial market developments

The global financial market turbulence that started last year has to date had limited impact on sub-Saharan African countries. However, sub-Saharan African countries with more globally integrated financial markets in the region, such as South Africa, experienced some increase in sovereign spreads and interbank rates (Figure 1.12) and volatility in their foreign exchange and stock markets. In the case of South Africa, an additional factor at play is the realization that bottlenecks in the energy supply may impose constraints on future growth. Tighter credit conditions, however, have by and large not materialized.

Private capital flows to sub-Saharan Africa reached over US\$50 billion—about four times larger than flows in 2000. Most flows were directed to Nigeria and South Africa, but the increases also reflect the improved fundamentals elsewhere in the region. In a small group of countries, notably Ghana, Uganda, and Zambia, portfolio flows have been on the rise, attracted by improved risk ratings and higher yields.

Sub-Saharan African countries have continued to reinforce their financial systems. Banking systems in much of the region are more stable because many countries (though not all) have liberalized interest

rates, rehabilitated banks, and modernized the sector.

Bank credit to the private sector is growing rapidly, but economies in the region still lack financial depth (Figure 1.13). Faster progress in increasing financial intermediation would help foster private investment and growth. The priorities should be to increase access to formal bank financing; eliminate distortions in monetary and fiscal policy that discourage bank lending; strengthen creditor rights and information sharing; reduce reliance on unremunerated reserve requirements as a monetary tool; build domestic debt markets; improve the risk management capacities of banks; and encourage

integration to increase competition and use economies of scale.

Macroeconomic Policies

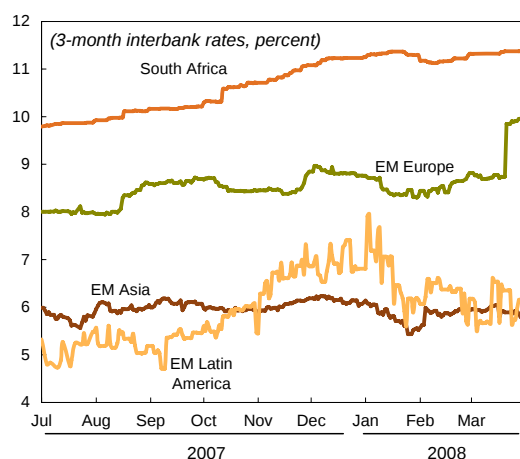
Monetary and exchange rate policies

With the stabilization of inflation in most countries, African countries have begun to adapt their monetary and exchange rate policy regimes to reduce macroeconomic volatility while achieving inflation objectives (see Chapter 2). African monetary policy regimes are in various stages of transition, which are difficult for countries that face structural changes or whose capital market imperfections generate uncertainty in the monetary transmission mechanism and affect the authorities' control over policy. In many countries, also, the lack of timely statistics makes it difficult to assess the current state of the economy. In addressing these challenges, a few countries, such as Ghana, have opted to move to some form of inflation-targeting regime, mirroring with a lag a global trend in monetary policy that places less weight on intermediate targets, such as broad or narrow money, to stabilize prices.

A pressing challenge for many countries in the region has been how to respond to rising foreign trade and capital inflows. While the inflows have helped raise investment and growth, in some countries they have also put pressure on prices and the real exchange rate (see Chapter 3). While the median real exchange rate is broadly in line with the 1995–2007 average for sub-Saharan Africa as a whole, the distribution is widening (Figure 1.14).

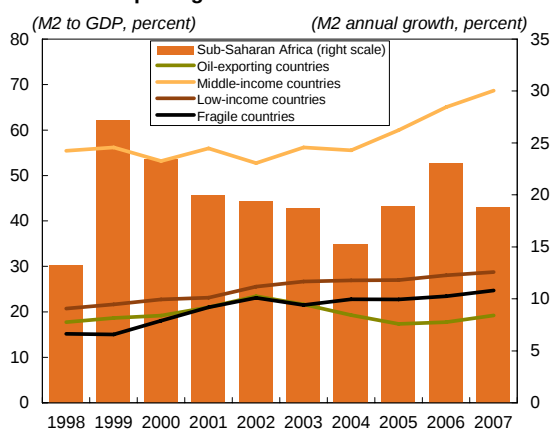
Rising food prices have also posed policy challenges for several countries in the region. Some countries are seizing the opportunity to encourage an expansion of domestic agricultural production, which is the best solution in the medium term. On the macroeconomic level, temporary increases in inflation due to the direct effects of food price shocks need not call for countervailing monetary policy, particularly if monetary policy credibility is already established.

Figure 1.12. Three-Month Interbank Rates in Selected Emerging Markets



Source: Bloomberg.

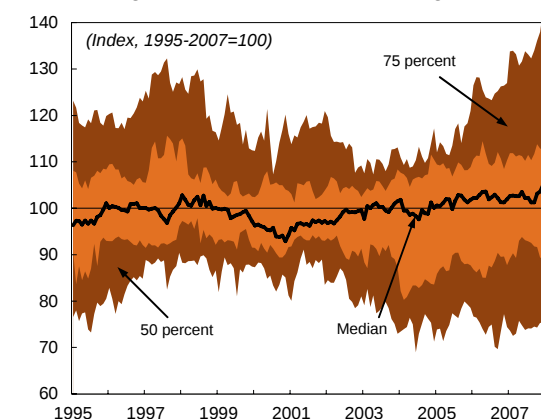
Figure 1.13. Monetary Developments
Financial deepening is low in most countries.



Sources: IMF, *World Economic Outlook*; and IMF, African Department database.

Figure 1.14. Real Effective Exchange Rates in Sub-Saharan Africa

The exchange rate distribution is widening.



Source: IMF, Information Notice System.

However, there could be a need to tighten policy if high food price inflation is sustained and starts to have significant second-round effects. Temporary and targeted subsidies and other carefully directed measures can help protect the most vulnerable while preparing for a well-targeted social safety net—the best long-run solution. Direct price and export controls, however, are likely to have unintended negative consequences: they may discourage food production, fail to help the most needy, and drain scarce resources from other critical purposes.

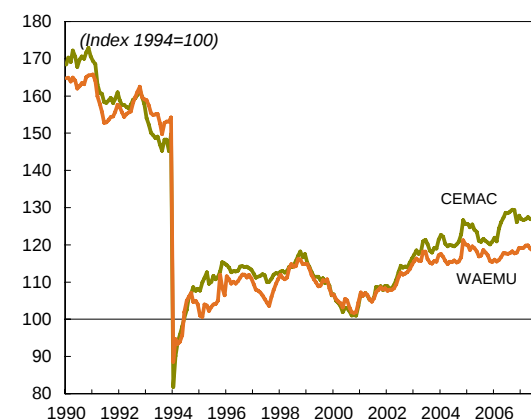
Fixed exchange rate regimes

In the CFA franc zone, where currencies are pegged to the euro and monetary policy is determined at the currency union level, rising inflows and the strengthening of the euro against the U.S. dollar in 2007 have led to a modest appreciation of the real effective exchange rates of both the Central African Economic and Monetary Community (CEMAC) and the West African Economic and Monetary Union (WAEMU) (Figure 1.15). Appreciating pressures were stronger in the CEMAC, though, because of the oil boom and an expansionary non-oil fiscal stance in the face of supply constraints.

Members of the CEMAC have accumulated sizable reserves (Figure 1.16). Reserve coverage for the zone was at 4½ months of imports last year, with much of the buildup in recent years resulting from a

Figure 1.15. Real Effective Exchange Rates in the CEMAC and the WAEMU

Appreciation in the CEMAC has been greater than in the WAEMU.

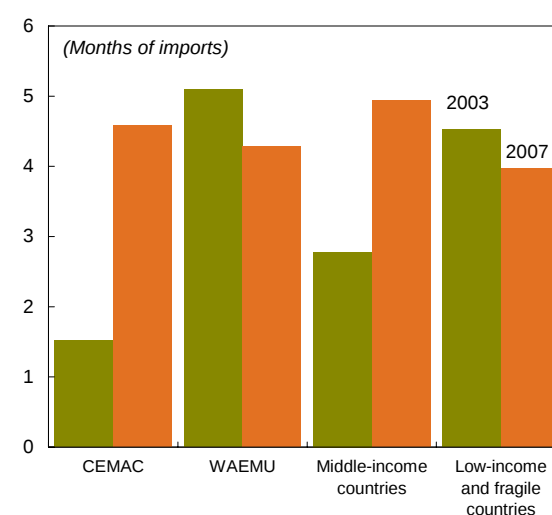


Source: IMF, Information Notice System.

policy choice to transform oil wealth into financial assets and build precautionary levels to insure against balance of payment risks.

Foreign asset accumulation has fueled rapid growth in money stocks and credit in several countries (Figure 1.17). CEMAC countries in particular have experienced high liquidity, which is partly structural because banks have few opportunities to expand assets faster. Central banks of the CFA franc zone have not pursued an active monetary policy, instead relying on differentiated reserve requirements and adjusting official interest rates only sparingly.

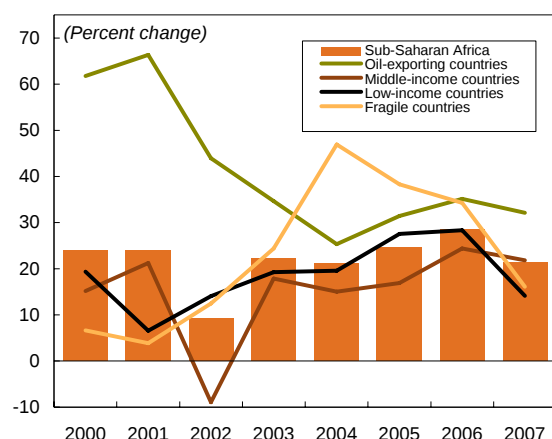
Figure 1.16. Sub-Saharan Africa: Reserve Coverage



Source: IMF, *World Economic Outlook*; and IMF, African Department database.

Figure 1.17. Credit to the Private Sector in Sub-Saharan Africa

Credit is growing fast, though from low levels.



Sources: IMF, *International Financial Statistics*; and IMF, *World Economic Outlook*.

Flexible exchange rate regimes

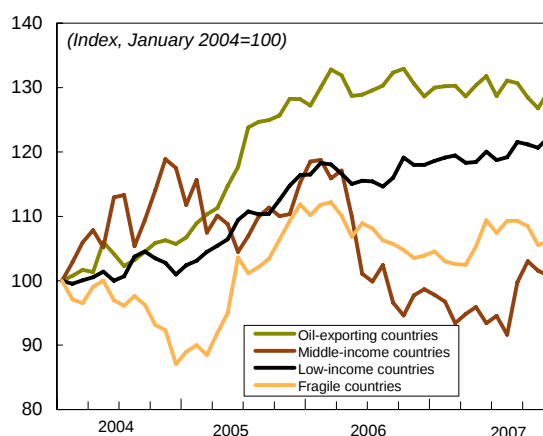
Among all countries with a flexible exchange rate regime, the real effective exchange rate has been appreciating only for oil exporters and some low-income countries (Figure 1.18). In many countries, exchange rate adjustments have only partly reflected their current account positions (Figure 1.19). In South Africa, under the inflation-targeting regime, continued inflation pressures led the Reserve Bank to resume its monetary tightening in 2007 to fight inflation pressures. The Reserve Bank has continued to strengthen its international reserves without an explicit exchange rate objective. In Nigeria, foreign reserve accumulation has helped stabilize the official exchange rate against the dollar since 2004.

Fiscal policy

Countries have generally attempted to address pressing development needs while preserving fiscal discipline.

- Mobilization of domestic revenue, complemented by grant inflows, has been a significant source of fiscal resources. Revenues peaked at 25 percent of GDP in 2006, with a modest decline in 2007 (Figure 1.20).
- In most low-income and fragile countries, capital outlays have picked up. Middle-income countries are also spending more to address infrastructure bottlenecks and social needs (Figures 1.21 and 1.22).

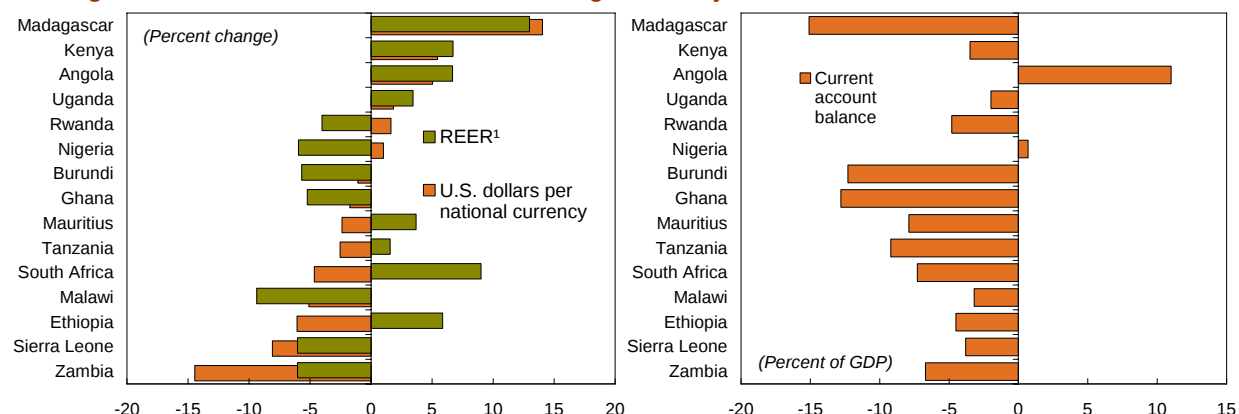
Figure 1.18. Real Effective Exchange Rates in Sub-Saharan African Countries with a Floating Regime
Reserve accumulation has limited currency appreciation in several countries.



Source: IMF, Information Notice System.

Note: The oil-exporting countries are Angola and Nigeria. The middle-income countries are Mauritius and South Africa.

Figure 1.19. Sub-Saharan Africa: 2007 Exchange Rate Adjustments and Current Account Balances

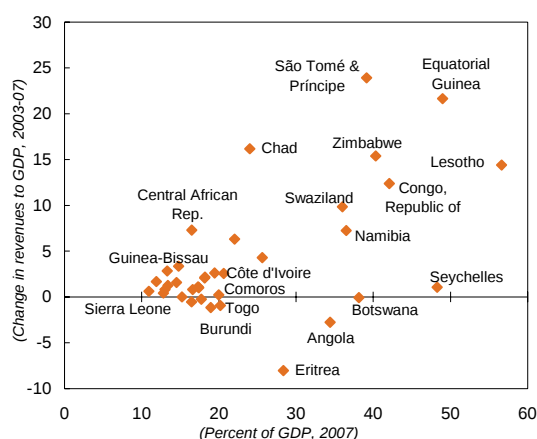


Sources: IMF, *International Financial Statistics*; IMF, *World Economic Outlook*; and IMF, African Department database.

¹ An increase indicates appreciation.

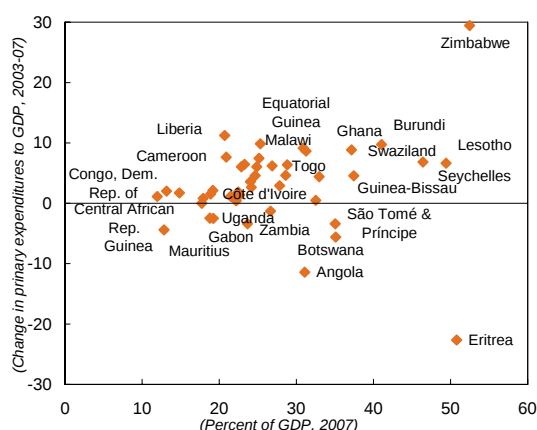
Figure 1.20. Central Government Revenues in Sub-Saharan Africa

Revenues have risen in most countries.



Sources: IMF, *World Economic Outlook*; and IMF African Department database.

Figure 1.21. Central Government Primary Expenditures in Sub-Saharan Africa



Sources: IMF, *World Economic Outlook*; and IMF African Department database.

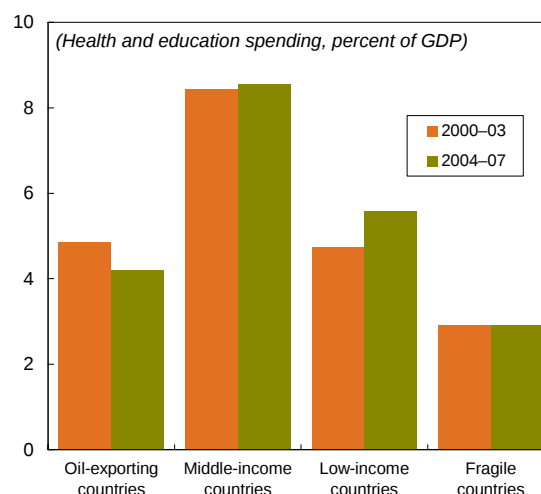
- The fiscal position of low-income countries swung back into a deficit of about 3½ percent of GDP in 2007 as grants dropped by almost 7 percentage points of GDP. The 2006 surplus had been based on significant Multilateral Debt Relief Initiative (MDRI) relief for Burkina Faso, Madagascar, Mali, Niger, and Zambia. The deficit was financed mainly through external borrowing (Figure 1.23).

With rapid growth, comprehensive debt relief, and debt repayment by several countries, sub-Saharan Africa's debt has declined and the challenge now is to safeguard debt sustainability. Total government debt (the median for sub-Saharan Africa) fell to

about 40 percent of GDP in 2007 (Figure 1.24). Countries should use resources released through debt reduction prudently, notably by strengthening their public financial management systems (PFMs) so that spending is efficient and within sustainable limits. Several countries would benefit also from strengthening their capacity to analyze all new loans, whether from traditional or nontraditional creditors, so that debt vulnerabilities do not reemerge. As they do so, it is increasingly important that domestic debt, which is rising in many countries as a share of total debt, be fully integrated into any assessment of debt sustainability (see Box 1.3).

Figure 1.22. Central Government Social Spending in Sub-Saharan Africa

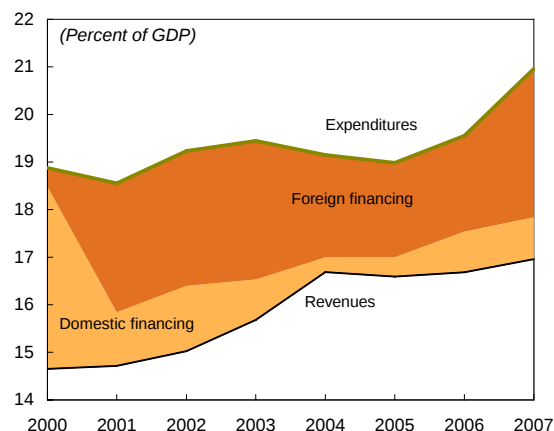
Social spending has been sustained across countries.



Sources: IMF, *World Economic Outlook*; and IMF African Department database.

Figure 1.23. Low-Income Sub-Saharan Africa: Government Financing of Fiscal Deficits

Deficits have been financed mainly by foreign resources.



Sources: IMF, *World Economic Outlook*; and IMF African Department database.

Box 1.3. The Changing Nature of Public Debt in Sub-Saharan Africa

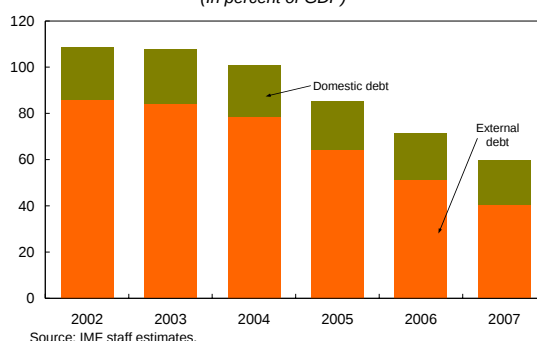
The size and composition of public debt in Africa have changed significantly in recent years. Debt relief under the HIPC and the MDR Initiatives and fiscal adjustment have significantly reduced external public debt over the past four years, creating room for fiscal spending and borrowing. At the same time, domestic public debt and debt held by private external creditors have become increasingly important, reflecting (i) increased banking sector liquidity; (ii) regional financial integration, which has allowed currency union members to tap larger pools of liquidity because private banks in the CFA franc zone are increasingly operating at the regional level, and the BCEAO is supporting development of a regional bond market; and (iii) higher capital inflows, reflecting improved macroeconomic conditions, a global search for yield, and greater interest in Africa by new official creditors.

The enhanced relevance of private domestic and external debt presents analytical and policy challenges as countries try to prevent a reemergence of debt vulnerabilities. The first is the lack of comparable cross-country data, with domestic debt data not being compiled systematically in many countries, and methodological differences in such areas as the definition of the public sector, treatment of contingent liabilities, and conventions for decomposing public debt. Another challenge is to go beyond the traditional focus on external

public debt and integrate domestic public debt into debt sustainability analysis, recognizing that a domestic debt overhang can contribute to future debt and balance of payments crises. The fiscal template of the IMF/World Bank Debt Sustainability Analysis for Low-Income Countries provides a starting point for analyzing long-term total public debt dynamics. In addition, it will be increasingly important to assess near-term vulnerabilities (such as rollover, currency, or interest rate risks), especially in countries with a high share of domestic debt, which has generally shorter maturities, higher and more variable interest rates, and debt rollover dependent on an underdeveloped local banking sector or potentially volatile foreign portfolio flows.

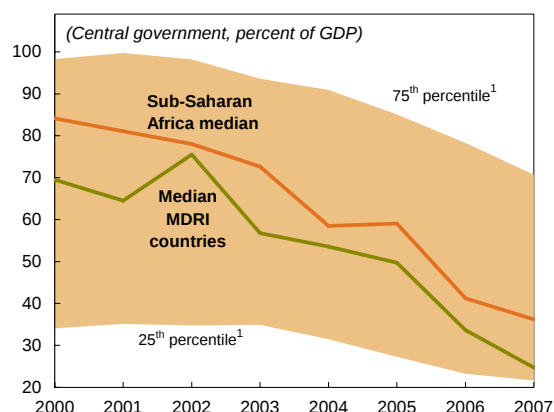
A central policy question is the appropriate speed of new borrowing in post-HIPC/MDRI countries, where the low level of debt and the benign borrowing environment may be seen as an opportunity for a rapid expansion of debt-financed public investment. The policy choice will depend on the cost and risk of new debt, especially in countries that have received HIPC and MDRI relief, the expected rate of return (and risk) of additional public investment, and the desired overall fiscal policy stance in a cyclical context. Another policy challenge is to better manage public debts, which can help governments control debt service and guard against exchange rate, interest rate, and rollover risks. In an environment with many new borrowing options, this will require careful cost-risk analysis to inform choices about debt composition. In many countries, it will take time and resources to improve public debt databases, strengthen debt management offices, and develop customized software tools. In addition, development of local financial markets will be important for reducing the cost and risks of domestic borrowing.

Sub-Saharan Africa: Central Government Debt, 2002–07
(In percent of GDP)



Note: This box was prepared by Christian Mumssen.

Figure 1.24. Total Government Debt in Sub-Saharan Africa



Sources: IMF, *World Economic Outlook*; and IMF African Department database.

¹The band is calculated based on 88 developing countries. The lower and upper limits are the 25th and 75th percentiles.

Outlook for 2008 and Risks

A global slowdown in activity, led by a marked downturn in the United States and the spreading crisis in financial markets, will face the sub-Saharan African region with more difficult external conditions. Global growth has been revised down since the October *World Economic Outlook* and it is now expected at 3.7 percent in 2008.

GDP growth in sub-Saharan Africa (including Zimbabwe) is projected at 6½ percent, driven by oil exporters; growth in oil importers is expected to taper off to about 5 percent. This is a markdown of about 1 percentage point relative to the October 2007 *Regional Economic Outlook*, part of which (0.6) is due to revised growth projections for Angola.³

- Growth in oil exporters is expected to accelerate to about 10 percent, underpinned by oil production from new facilities coming on stream in Nigeria and Angola and the coming online of a liquefied natural gas plant in Equatorial Guinea. Higher income and

wealth are expected to be the main drivers of domestic demand.

- Growth is projected to slow to 4 percent in middle-income countries and to about 6 percent in low-income countries, reflecting the less favorable global environment. Both public and private demand are expected to support growth, but the gap with respect to growth rates in oil exporters is projected to widen.
- Growth in fragile countries is projected to pick up again in 2008, to 5 percent, buoyed by a continued recovery in investment, especially in the Democratic Republic of Congo, where large infrastructure projects are under way, and in some post-conflict countries (e.g., Côte d'Ivoire).

Inflation is expected to be contained at about 8½ percent for the region as a whole, assuming macroeconomic policies hold firm. Inflation pressures arise mainly from oil prices, which are expected to increase by about 35 percent this year, and rising food prices. Overall, nonfuel commodity prices are expected to continue edging upward. In some countries inflation is expected to remain in the double digits. Unless policies change, hyperinflation in Zimbabwe is expected to continue.

In light of the economic outlook, the overall fiscal position of sub-Saharan Africa is projected at a small surplus. The fiscal surplus of oil exporters should widen as oil prices rise; changes in the fiscal position of most other countries are expected to be modest.

The external surplus of oil exporters is expected to rise as oil prices increase, but current account deficits in fragile and low-income countries should widen moderately as their terms of trade worsen.

What are the risks for sub-Saharan Africa?

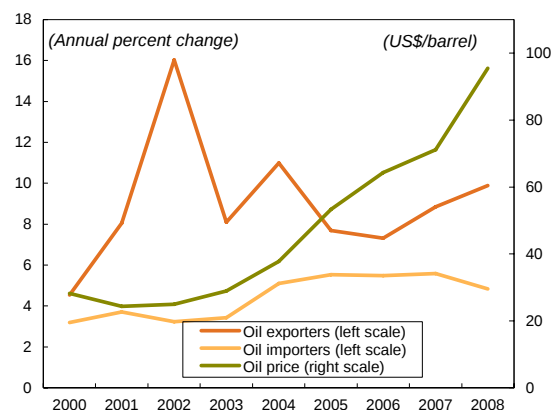
Sub-Saharan Africa faces several external risks: a pronounced global slowdown—bringing weaker non-oil commodity prices—would represent a

³ Using the new PPP country weights, the projected sub-Saharan African growth for 2008 in the October 2007 *Regional Economic Outlook* would have been 7.5 percent.

large shock; higher oil prices would reduce domestic demand, boost headline inflation, and worsen the current account and net foreign asset positions of net oil importers (Figure 1.25); and less favorable financial conditions would reduce external financing and hurt growth.

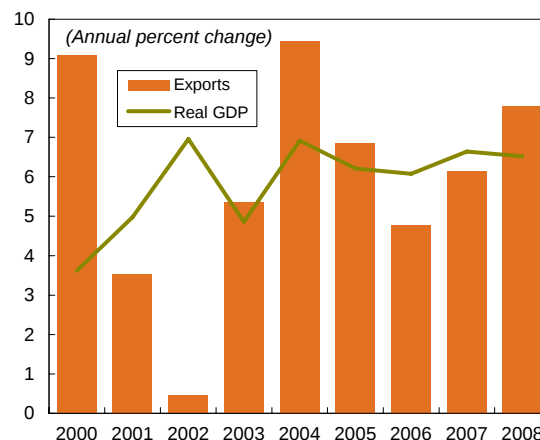
- Estimates were prepared assuming oil prices at \$100 a barrel in 2008, compared with the October *World Economic Outlook* projections of \$75 a barrel. As a result, GDP growth is estimated to be lower by 0.2–1 percent in sub-Saharan African countries, depending on the production structure and energy intensity of the economies (Box 1.4).
- However, the behavior of other non-oil commodity prices will be crucial to the growth outcome. If high oil prices are accompanied by a slowdown in the major commodity importers, particularly in Europe—the subcontinent’s largest trading partner—that would substantially affect demand for exports from sub-Saharan Africa, which have been a driver of growth in the region (Figure 1.26). It is estimated that for every 1 percent decline in global GDP growth, sub-Saharan African GDP growth will decline by about ½ percentage point. But lags are at play, and some of the global slowdown in 2008 will affect sub-Saharan African growth only in 2009.

Figure 1.25. Oil Prices and GDP Growth in Sub-Saharan Africa



Sources: IMF, *World Economic Outlook*; and IMF, African Department database.

Figure 1.26. Exports and Growth in Sub-Saharan Africa



Sources: IMF, *World Economic Outlook*; and IMF, African Department database

- A reversal of portfolio flows would reduce external financing and hurt growth in a few countries. But given the relatively small portfolio inflows in most sub-Saharan African countries, the impact is likely to be limited. As long as global growth is as projected, the economic impact of financial market turbulence on sub-Saharan African economies should be contained.
- A global slowdown could also hurt commodity prices, reducing the potential for an offset of higher oil prices. A decline in nonfuel commodity prices of 10 percent could reduce sub-Saharan African GDP by roughly 1.5 percent (Figure 1.27).

Sub-Saharan African countries also face significant internal risks (Box 1.5). While the number of conflicts has declined in recent years, they still ravage the Darfur region of Sudan and the Horn of Africa, and the situation remains fragile in the Democratic Republic of Congo. In Côte d'Ivoire the challenge is to consolidate the peace and reunification process and hold free presidential elections. Post-election violence in Kenya undermined investor confidence and tourism; it could also delay donor support and slow structural reforms that are needed to sustain recent growth. Neighboring countries were also affected: some transit routes, particularly for oil supplies, have

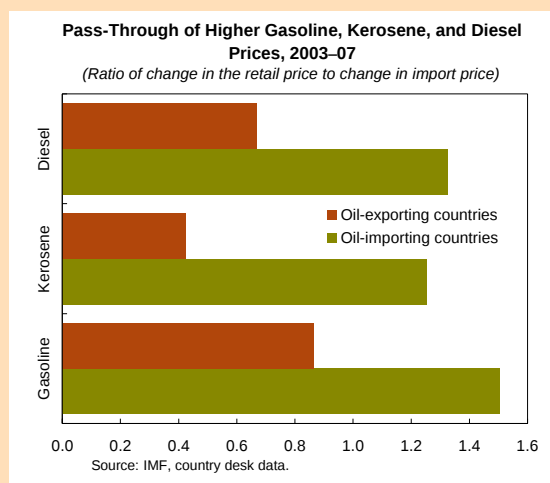
Box 1.4. The Impact of High Oil Prices on Sub-Saharan Africa

The recent surge in fuel prices poses new challenges for African policymakers in oil-importing countries. It will likely reduce GDP growth, boost headline inflation, and put pressure on external balances. Policy responses will need to be tailored to individual country circumstances, but some basic principles hold: higher fuel prices should generally be passed on to domestic users, net fuel importers will need to find the appropriate mix of adjustment and financing, and safety nets will likely be needed to protect the poor.

Since 2003 most sub-Saharan African countries have allowed a considerable degree of pass-through of higher fuel prices to domestic retail prices (see figure). The high pass-through to retail gasoline prices in some countries partly reflects both the use of ad valorem rather than specific taxes and the impact of higher fuel prices on the cost of transporting petroleum products from seaports.

From 2003 to 2007 oil importers were able to manage an average increase in the oil import bill of 2 percent of GDP, in part because of the concomitant increase in the export prices for non-oil commodities. Oil importers' terms of trade did not deteriorate on average (although some countries did experience a worsening).

To assess the impact of higher oil and other fuel prices on GDP, estimates were prepared assuming oil prices are \$100 a barrel in 2008 compared with the October WEO projections of oil prices:



- Estimates were prepared for all oil-importing sub-Saharan African countries using a simple net import model (UNDP/ESMAP 2005) to measure the direct impact of fuel price increases on GDP. Estimates are based on real oil prices (deflated by export prices for manufactures for industrial countries). Key model parameters are oil intensity, degree of financing, and efficiency changes/fuel switching in response to higher prices. The estimates provided do not include indirect effects, such as the ones caused by the reduction in GDP of all net importing countries, the impact of monetary policy adjustments, or offsettings that may occur from simultaneous changes in nonfuel commodity prices. GDP growth is estimated to be lower by 0.2–1 percent in sub-Saharan African countries.
- Simulations were also conducted using the Global Trade Analysis Project (GTAP) model for nine countries, to capture the effects of adjustments of economic agents to oil price increases as well as structural changes through input-output linkages. While the sizes of coefficients do not vary significantly, simulations suggest that the behavior of other non-oil commodity prices will have an important effect on growth for countries in the region.

Note: This box was prepared by Paulo Drummond and Yongzheng Yang.

been disrupted, which further aggravates the already acute energy situation. The conflict in Chad, with its ethnic, regional, and cross-border dimensions, also has implications for neighboring countries. To illustrate the uncertainties and the risks to the central growth forecast for sub-Saharan Africa, Figure 1.28 provides confidence

intervals based on the WEO assessment of global risks. The intervals incorporate the historical dependence of African growth on world growth as well as historical African growth volatility. The confidence intervals suggest there is about a one-in-five chance that in 2008 growth in sub-Saharan Africa will fall to less than 5 percent.

Box 1.5. Conflicts and Political Instability in Sub-Saharan Africa: Growth and Spillover Effects

The economic and social costs of conflicts can be enormous (see first figure). Collier (1999) found that during civil wars GDP growth is 2.2 percentage points lower than in periods of peace. Some costs persist over the long run, particularly damage to the social fabric as a result of heightened social divisions, human displacement, and psychological traumas (IANSA, Oxfam, and Saferworld, 2007). Conflicts also have spillover effects on neighboring countries, both human, in the form of refugees, and economic, in terms of shocks (Clément, 2004).

After a post-Cold-War surge through 1999, the number of sub-Saharan African countries affected by conflicts has declined sharply (see second figure). A return to peace in many countries has reduced the need for extra military spending and allowed more resources to be allocated to increasing productive capacity and reducing poverty (Knight, Loayza, and Villaneuva, 1996). In Angola, Mozambique, and Rwanda, such a peace dividend has resulted in faster growth, lower inflation, and improved current account balances.

These encouraging developments provide a stark contrast with countries that are still experiencing conflicts. Chad, for example, managed to grow only 0.5 percent in 2006 and 1.7 percent in 2007. The country has enjoyed only four years of peace over the past two decades. Slow growth in turn has been a main economic factor underlying the conflict, fueled by competition for power and by resource rents. The conflict has ethnic, regional, and cross-border dimensions, and the spillover effects in terms of refugees have been significant. The insecurity undermines the effective use of the oil windfall through high military spending and bypassing of sound budget principles. Recent events, which include a major rebel attack on the capital, reflect these vulnerabilities, which could be exacerbated by intensified competition to control oil revenues.

Although typically less devastating, political disputes can also inflict a heavy human toll as well as hinder economic progress, as illustrated by the recent events in Kenya. Violence triggered by a dispute over the presidential election outcome has claimed over 1,000 lives and displaced more than 300,000 people since late 2007. Initial disruptions to supply lines led to shortages and price hikes not only in many parts of Kenya but also in some neighboring countries. The violence and resulting insecurity have devastated Kenya's tourism industry and depressed other sectors. As a result, GDP growth in 2008 is expected to be much lower than the 7 percent achieved in 2007. This would translate into weaker regional demand and higher prices of imports from Kenya for neighboring countries, just when these countries are also affected by slowing global demand and higher oil prices.

Note: This box was prepared by Sekou Camara, Sukhwinder Singh, and Yongzheng Yang.

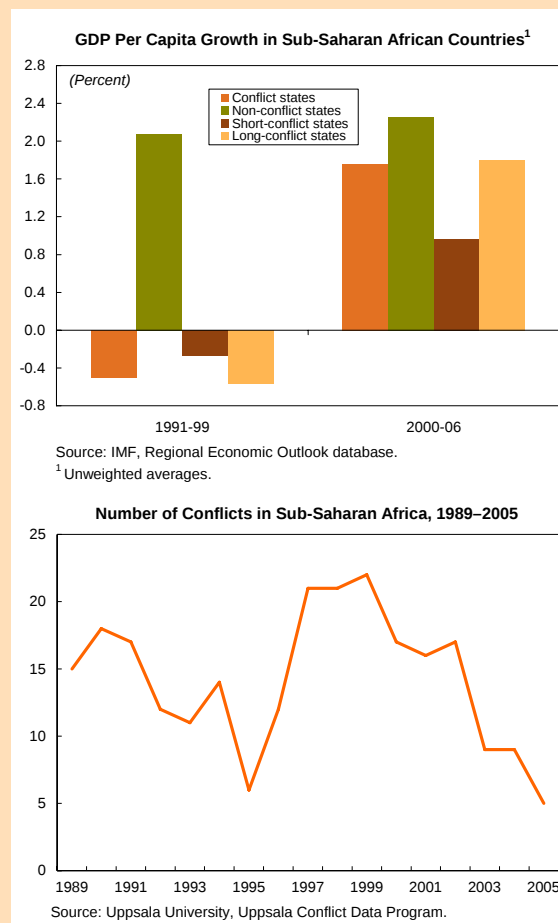
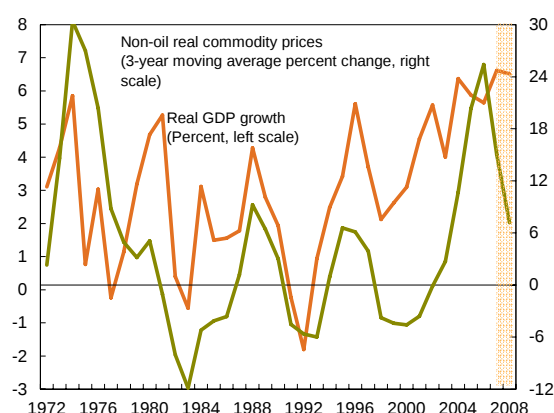
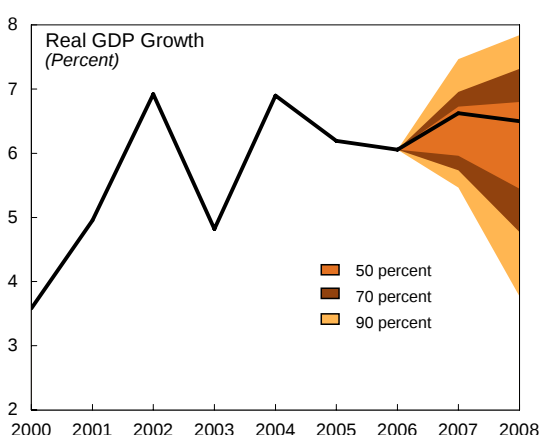


Figure 1.27. Sub-Saharan Africa: Growth and Commodity Prices



Source: IMF, African Department database.

Figure 1.28. Growth Prospects in Sub-Saharan Africa¹



Sources: IMF, *World Economic Outlook*; and IMF, African Department database.

¹Including Zimbabwe.

How vulnerable is sub-Saharan Africa to a worsening of the global environment?

Compared with the 1990s, many countries in the region are less exposed to shifts in global economic conditions. Smaller current account and fiscal deficits, lower inflation, reduced debt, increased foreign reserves, and strengthened policy frameworks have all helped make the region more resilient to external shocks.

- Current account–related vulnerabilities have been reduced in many countries, which have smaller financing requirements and improved foreign reserve positions. Several countries hold enough foreign reserves to cover large

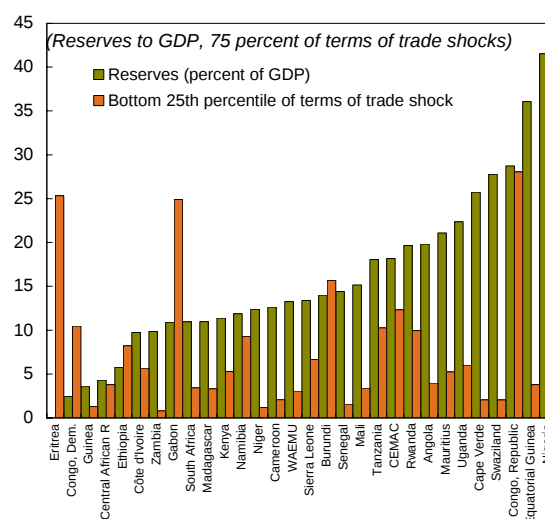
trade shocks (Figure 1.29). In these countries, policymakers would have the option to buffer shocks and smooth the path of adjustment in the event of a temporary slowdown.

However, countries that do not have enough reserves and whose current account vulnerabilities are high would have less room for maneuver.

- External debt ratios have been on a downward trend, opening up space for foreign financing in several countries. Countries need to use this space carefully to prevent a reemergence of vulnerabilities. Keeping debt sustainable continues to be a key anchor for their macroeconomic strategy.
- The fiscal positions of many countries have strengthened; both overall and primary fiscal balances have significantly improved in most countries in recent years. But some of the improvement is cyclical and subject to uncertainty.

While many countries in the region have become more resilient to shocks, trends in vulnerability vary significantly among them, and the region as a whole would still be affected by a pronounced slowdown in external demand and a deterioration in terms of trade. Appropriate policy responses can help sustain the current expansion.

Figure 1.29. Sub-Saharan Africa: Reserve Coverage for Terms of Trade Shocks, 2007



Source: IMF, African Department database.

How should countries respond if downside risks are realized?

Policy responses can help moderate the effects of external shocks, but some countries may not have room to ease monetary and fiscal policies in the event of a pronounced downturn. Responses, which will have to vary by country, depend on several factors, including the magnitude and nature of the slowdown and a country's own initial conditions: inflation and inflation expectations; fiscal position; and degree of vulnerability, including level of foreign debt and reserves. In the face of uncertainty, countries will have to adjust policies with caution to ensure they preserve hard-earned macroeconomic stability.

If the downside risks to growth materialize, countries with low and stable inflation and sound underlying fiscal positions may have scope to ease policies.

- Forward-looking monetary policy responses could help reduce the output response to adverse demand disturbances. To the extent that the slowdown is temporary, countries with comfortable foreign reserves could use reserves to smooth shocks. In some countries, exchange rate changes may help rebalance growth.
- Countries with a sustainable fiscal position may have room for countercyclical fiscal policy and could let their automatic stabilizers operate. However, those with no room for fiscal relaxation may have to offset at least part of the effect of automatic stabilizers. The degree of fiscal easing should take into account whether public debt is a constraint, and discretionary action, if any, should be well-targeted and reversed when possible.

In several countries, especially oil exporters, the challenge will be to maintain macroeconomic stability while dealing with still-rising foreign exchange inflows. Countries should identify ways to ensure that the economy can absorb higher spending effectively, and cast spending and saving decisions in a medium-term framework that takes

long-term fiscal sustainability into account. At the microeconomic level, better public financial management and reforms in budgeting and the implementation of capital projects would help ensure that expenditures are growth promoting and poverty reducing.

Medium-Term Challenges: Unleashing the Private Sector and Reducing the Cost of Doing Business

The main medium-term challenge for sub-Saharan Africa is to accelerate growth and achieve the MDGs. While a growing number of countries are enjoying robust growth, only a few sub-Saharan African countries seem well-positioned to halve poverty by 2015. Notwithstanding the improvement in economic growth since the mid-1990s, real per capita income is about the same as in the mid-1970s. Only with sustained per capita growth can extreme poverty rates for the whole of sub-Saharan Africa (41 percent of the population in 2004) be expected to fall.⁴ Progress on several policy priorities is needed (see the October 2007 *Regional Economic Outlook* for a more expansive discussion of the medium-term challenges sub-Saharan African countries face). In this section, we focus on private sector development: unleashing the private sector to spur investment is one of the critical medium-term challenges.

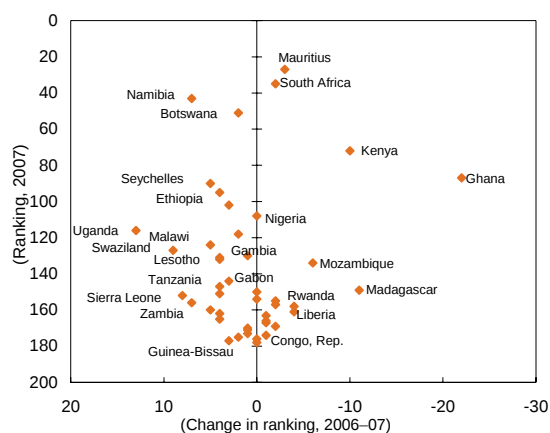
Economic performance in sub-Saharan Africa in the years ahead will depend in no small measure on whether countries can accelerate reforms that improve the investment climate, reduce the cost of doing businesses (including costs related to infrastructure), and strengthen governance.

Cross-country indicators suggest that the investment climate has been improving at an

⁴ Using survey data from a sample of 19 low-income countries, the World Bank's 2007 *Global Monitoring Report* estimates that a 1 percent GDP growth was associated with a 1.3 percent decline in extreme poverty in low-income countries. Extreme poverty is defined as the share of the population living on less than \$1 a day.

uneven speed in sub-Saharan Africa, although the pace is encouraging in a few countries. Kenya and Ghana are leading the way with broad-based reforms, including easing business regulations, procedures for property administration, and licensing requirements. In southern Africa, several countries have lifted regulatory obstacles that weigh heavily on the private sector, with Madagascar, Mauritius, and Mozambique taking the lead (Figure 1.30).

Figure 1.30. Sub-Saharan Africa: Doing Business, 2007



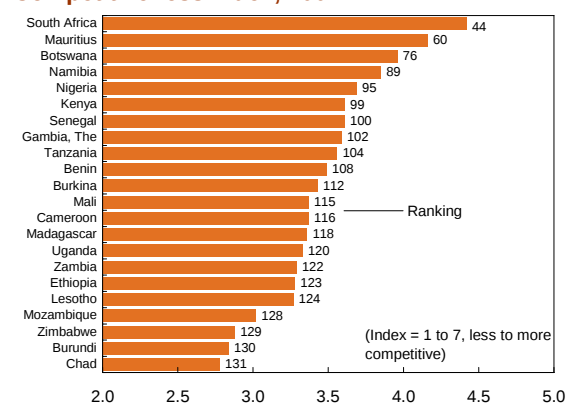
Source: World Bank, *Doing Business Indicators* (2008).

Several African countries have managed to firm up policies that determine the level of productivity as measured by the World Economic Forum's Global Competitiveness Index (GCI). The index provides numerous indicators for a large number of countries, thus providing a measure of a country's ability to sustain high growth. Of all the sub-Saharan African countries, only South Africa figures among the top 50 countries (Figure 1.31).

Recent reforms have also helped improve governance in a few sub-Saharan African countries, but much remains to be done (Figure 1.32). Priorities are to strengthen tax systems, establish transparent and comprehensive budgeting procedures, promote accountability and transparency, enhance budgetary control, increase accountability for revenues from extractive industries, and build capacity in fragile states and those with acute governance problems.

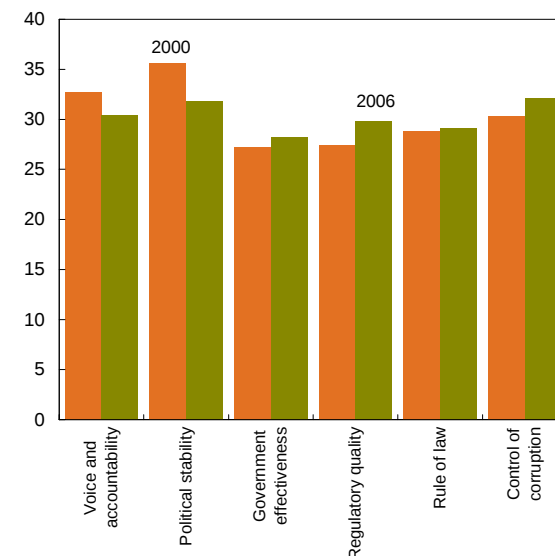
An essential driver of growth is high-quality infrastructure, which is critical for the efficient functioning of an economy. Quality roads, railroads, ports, and air transport, an adequate communications infrastructure, and reliable electricity supplies are prerequisites for the efficient functioning of markets and for export growth, as well as for the ability of poor communities to benefit from economic activities and schools.

Figure 1.31. Sub-Saharan Africa: Global Competitiveness Index, 2007



Source: World Economic Forum, *Global Competitiveness Report 2007-08*.

Figure 1.32. Sub-Saharan Africa: Governance Ranking, 2000-06



Source: World Bank Institute, *World Governance Indicators, 2000-06*.

Energy supply has emerged as a major bottleneck in most African countries and, as discussed in Chapter 4, policymakers should carefully consider their options, including regulation and pricing, to improve supply and provide the right signal to markets.

Private sector development requires access to financial markets that can make capital available for

investment from such sources as loans from a sound banking sector, well-regulated securities exchanges, and venture capital. Private sector bank credit in sub-Saharan Africa remains low. Financial underdevelopment in Africa is at least partly related to the development of legal institutions and their ability to enforce contracts (see Box 1.6).

Box 1.6. Creditor Rights in Sub-Saharan Africa

Over the past two decades, sub-Saharan African countries have embarked on substantial financial liberalization and made progress toward macroeconomic stability. However, financial deepening has remained elusive in most countries. For example, between the early 1980s and the end of 2004, the simple sub-Saharan African average of private sector bank credit to GDP fell from 15.6 percent to 15.1 percent. If we exclude 15 countries whose financial sectors showed signs of sustained development, the average private sector credit-to-GDP ratio declined from 17.2 percent in the early 1980s to 8.7 percent by the end of 2004. This contrasts with the doubling of private sector credit in developing Asia (to over 40 percent of GDP) between 1990 and 2004, and growth by about 50 percent (to over 20 percent of GDP) in Latin America and the Caribbean during the same period. There is evidence that sub-Saharan African countries could make faster progress toward financial deepening by strengthening creditor rights and implementing reforms to increase the sharing of information on borrowers.

Several studies have focused on the links between financial development and the legal institutions that can facilitate credit contracts, exploring the nature of these contracts based on the power theory of credit (ability to enforce contracts), information theories of credit, and the legal origin of institutions (see La Porta and others, 1998). The evidence supports this institutional approach. Djankov, McLiesh, and Shleifer (2005) found from data for 149 countries that, after controlling for macroeconomic factors, legal institutions made a clear contribution to the development of financial markets. Similar findings were reported by Galindo and Micco (2001) in cross-sectional regressions of Latin American countries.

As a contribution to this work, empirical research by McDonald and Schumacher (2007) on specific factors affecting financial intermediation in sub-Saharan African countries found a strong correlation between legal institutions and financial development. Using panel data for a sample of 37 countries between 1983 and 2004, they found that while financial liberalization and macroeconomic stability have promoted deeper financial markets, when financial liberalization efforts are similar those countries with stronger creditor rights and information sharing have deeper financial systems. This indicates that financial institutions seem more willing to extend credit if, in case of default, they can easily enforce contracts by forcing repayment or seizing collateral. The amount of credit to firms and individuals would also be larger if financial institutions could better predict the probability of repayment by potential customers.

The main policy implications of these findings are, first, that protecting creditor rights should be given a higher priority in financial sector reforms. That means not only firming up legislation at all levels, but also creating efficient property registries, promoting land surveys, and reforming courts. Second, governments should seek to sponsor credit registries where private credit bureaus do not seem to be commercially viable.

Note: This box was prepared by Liliana Schumacher.

Appendix 1.1

Table A1.1. Categorization of Sub-Saharan African Countries

Oil-Exporting Countries	Middle-Income Countries	Low-Income Countries	Fragile Countries
Angola	Botswana	Benin	Burundi
Cameroon	Cape Verde	Burkina Faso	Central African Rep.
Chad	Lesotho	Ethiopia	Comoros
Congo, Republic of	Mauritius	Ghana	Congo, Dem. Rep. of
Equatorial Guinea	Namibia	Kenya	Côte d'Ivoire
Gabon	Seychelles	Madagascar	Eritrea
Nigeria	South Africa	Malawi	Gambia, The
	Swaziland	Mali	Guinea
		Mozambique	Guinea-Bissau
		Niger	Liberia
		Rwanda	São Tomé and Príncipe
		Senegal	Sierra Leone
		Tanzania	Togo
		Uganda	Zimbabwe
		Zambia	

Note: Lesotho and Cape Verde are PRGF-eligible.

Table A1.2. Non-Oil Primary Fiscal Deficits, 2002–07

(Percent of non-oil GDP)

	2002	2003	2004	2005	2006	2007
Angola	83.3	69.9	61.1	60.9	50.3	52.6
Cameroon	0.5	0.7	2.7	0.0	-30.2	1.0
Chad	2.4	3.2	4.3	5.2	14.8	19.3
Republic of Congo	40.2	32.1	33.6	34.4	58.7	61.1
Equatorial Guinea	41.2	47.5	81.7	83.2	92.2	75.3
Gabon	16.7	8.9	9.1	17.5	18.0	11.7
Nigeria	18.8	35.8	28.7	33.8	32.9	31.6
Average (unweighted)	29.0	28.3	31.6	33.6	33.8	36.1

Source: IMF, African Department database.

Note: (–) denotes surplus.

II. Monetary and Exchange Rate Policies in Sub-Saharan Africa

A marked improvement in macroeconomic conditions in most sub-Saharan African countries in recent years has reshaped the environment for monetary and exchange rate policy. A number of post-conflict economies are still in a stabilization phase and remain vulnerable, and a much smaller number suffer from severe instability, but in many sub-Saharan African countries higher economic growth has been associated with lower inflation, higher international reserves, and healthier public finances (Chapter 1).

The burden of fiscal dominance for the conduct of policy has been greatly reduced in most sub-Saharan African central banks. With the support of IMF-supported programs and substantial debt relief, and with a favorable external environment, bank financing of the budget deficit is now negligible in most countries, helping anchor inflation expectations. Moreover, pervasive distortions in financial and exchange rate markets have been greatly reduced (Masson and Pattillo, 2004). The risk of fiscal dominance has not completely disappeared, however; a severe worsening of external conditions or political disarray, for example, could renew fiscal pressures on monetary policy.

Monetary policy in Africa was until recently concerned primarily with bringing inflation down to (or near) single digits and anchoring inflation expectations. Given a lack of credibility and the need for a nominal anchor, policy focused on targeting intermediate variables, such as the exchange rate or monetary aggregates. While most African countries initially relied on *de jure* exchange rate pegs as a nominal anchor, most countries outside the CFA zone shifted to targeting money (Adam and O'Connell, 2006).

With inflation stabilized, many African countries—particularly those with some form of managed floating exchange rate regime—are in the process of adapting their policy regimes. In the long run, stable and predictable inflation contributes to an efficient financial sector, low real interest rates, and a good investment climate (Box 2.1). In the short run, however, there are trade-offs between price, output, and exchange rate stability. These trade-offs become sharper in a low-inflation environment, and monetary policy must strive to minimize macroeconomic volatility while keeping inflation low by identifying and responding to domestic and external shocks. Transitioning toward such a framework, which is the defining feature of modern monetary policy (Goodfriend, 2007), is an important component of the medium-term policy agenda in sub-Saharan Africa.

The purpose of this chapter is to take stock of current practices and provide general policy recommendations. The first section reviews the landscape of monetary and exchange rate policy regimes in sub-Saharan Africa, with a particular emphasis on the role of reserve-money targets and exchange rates in the policy frameworks in the region. The second section discusses policy issues.

While all types of regimes found in the region are discussed, the focus is on managed float regimes. These present a special challenge: while they allow for more policy flexibility, there is little guidance on how policy should be conducted. Moreover, there has been little research on African, particularly low-income, countries with managed floats.

The review of monetary policy in the region reveals that many countries behave to some extent as informal inflation targeters. While money targeting is the official nominal anchor for many countries,

Note: This chapter was written by Andrew Berg and Rafael Portillo. Contributors included Anubha Dhasmana, Jan Kees Martijn, Marshall Mills, Shanaka J. Peiris, Manrique Saenz, and Hans Weisfeld.

Box 2.1. Inflation Objectives for Sub-Saharan African Low-Income Countries

Monetary policy should aim to bring about and then preserve price stability. This box analyzes the choice of inflation objectives in sub-Saharan Africa and offers some guidance.

The long-term objective is for inflation to be low enough to allow households and businesses to ignore inflation altogether while accommodating relative price changes without the need for deflation. While country-specific factors and value judgments about policy trade-offs generate some variation, there is a consensus among policymakers (including in low- and middle-income countries without IMF-supported programs) that inflation in the range of 2–5 percent is appropriate for developed countries and somewhat higher—perhaps 5–10 percent—is a reasonable long-run target for low-income countries, given their need for larger and more frequent relative price adjustments.

- A lower long-term inflation objective may not be desirable, given upward biases in CPI measurements, and may expose countries to the possibility of deflation and a liquidity trap.
- Higher inflation tends to lower growth, in part because higher and more volatile inflation tends to distort relative prices and depress the quantity and quality of investment.
- Higher inflation is a poor way to finance higher spending. It corresponds to a tax on holders of cash. It has several disadvantages: it is likely to fall mostly on the poor, who cannot escape through investment in indexed financial assets; it erodes other tax revenue; and it requires high inflation to raise a small amount of revenue. The 2005 review of the IMF's Poverty Reduction and Growth Facility (PRGF) concluded from a study of 48 PRGF countries that an increase in the inflation rate from 6 to 15 percent would finance only 0.4 percent of GDP in spending, ignoring second-round negative effects on growth.
- Empirical work on the long-run effects of inflation supports these arguments, though it does not give precise answers about appropriate upper and lower bounds (see Selassie and others, 2006).
- To maintain competitiveness, countries with fixed exchange rates, such as those in the CFA zone and the Rand Monetary Area, need to keep inflation in line with that of the anchor currencies, adjusted for any trend differences in productivity growth.

Short- to medium-term inflation objectives depend on initial inflation levels. Disinflation from a very high initial rate (say, above 50 percent) may be relatively painless, or even expansionary, provided there is a credible commitment to lowering inflation and fiscal and other policies are supportive (Fischer, Sahay, and Végh, 2002). However, at moderate levels of initial inflation (say, in the low double-digit range), disinflation becomes more costly because most of the adjustment must operate through aggregate demand. When starting at moderate inflation, it is generally advisable to reduce inflation more gradually.

In general, the higher the central bank's credibility, the less costly disinflation, and the lower the short- to medium-term inflation objective can be. Credibility and reputation are strengthened in part by a central bank's accepting output costs to controlling inflation. This would suggest that central banks may at times wish to be fairly tough in order to establish credibility. Policymakers' understanding of this is reflected in the adoption of institutional frameworks thought to support credibility, such as central bank independence. However, the benefits of higher credibility need to be balanced against the costs of acquiring it. And inflation expectations are also determined by the structure and the state of the economy. This limits room for tough policies to lower expectations of future inflation.

Once inflation is within the long-term target range, policymakers should resist persistent increases in inflation because the potential benefits are likely to be more than outweighed by the cost of later stabilization. Purely transitory supply shocks of volatile items such as food need not be counteracted.

Note: This box was prepared by Jan Kees Martijn and Hans Weisfeld.

there is considerable flexibility in meeting targets. For countries with low to moderate inflation, such target flexibility is not associated with inflation surprises. This suggests not that money target misses reflect unexpected (and undesired) deviations in the monetary policy stance but rather that these targets may not fully determine the stance of monetary policy in the short run. On the other hand, countries with high inflation persistently miss targets by substantial amounts, which suggests that money targets in these countries are one way to identify the substantial deviations in policy that are typically associated with fiscal pressures.

To the extent that there is substantial flexibility in practice in countries with low to moderate inflation, greater clarity about the policy stance and overall framework can contribute to monetary policy effectiveness. Depending on each country's specific conditions, the choice of policy regime falls along a continuum, from greater emphasis on intermediate targets on one end to a direct focus on inflation objectives on the other. Regardless of where each country stands, there are merits to greater transparency, communication, and a clearly articulated effort to actively respond to shocks while controlling inflation expectations.

Considerable uncertainty surrounds the monetary policy transmission mechanism in Africa, posing a challenge for the conduct of monetary policy. Thin though growing credit markets, pervasive excess liquidity in the banking system, and large structural changes affect the channels through which policy influences prices, notably by limiting the influence of policy interest rates (Box 2.2). Lack of reliable, timely statistics poses an additional challenge in terms of identifying shocks and pinning down the current state of the economy. Some of these uncertainties suggest a potentially important role for monetary aggregates, especially as an indicator variable, although they also confirm the need for flexibility in meeting monetary targets. Ultimately, however, the role that monetary aggregates should play in the policy framework is a country-specific question.

Formal inflation targeting is by no means the end goal for every floating exchange rate country in the region. International experience demonstrates that there are many effective ways of conducting monetary policy in a float. Nonetheless, central banks in Africa need to develop domestic financial systems, establish credibility, and improve in-house technical capacity—especially for liquidity forecasting—even as they may continue to target money, at least *de jure*, in the foreseeable future. However, inflation targeting provides a useful benchmark for understanding and assessing floating regimes, and countries may wish to move to adopt some elements of inflation targeting, especially if they are considering a move to formal inflation targeting in the longer term.

The review of current practice finds that, in some countries with *de jure* managed float regimes, nominal exchange rate stability is common. In such countries, exchange rates display prolonged episodes of near-complete stability. They also display periodic discrete changes, however, suggesting that there may be only a limited commitment to a given exchange rate level. This assessment complicates the analysis of policy regimes in managed floats: some countries may be acting as *de facto* pegs, while others may rely on exchange rate stability partly to achieve inflation or other objectives. The chapter does not attempt to classify *de facto* regimes; rather, it considers alternative ways in which exchange rate stability may enter the policy framework in the region and the challenges this poses for monetary policy.

Given its role in influencing inflation and inflation expectations, management of the exchange rate can help stabilize inflation. However, exchange rate management must remain subservient to price stability in a floating regime, or tensions between exchange rate and inflation objectives will arise. The tensions are bound to become more prominent as capital mobility increases and, combined with the lack of transparency in exchange rate targets, can undermine the credibility of monetary policy.

Box 2.2. The Monetary Transmission Mechanism in Sub-Saharan Africa

An effective monetary policy requires an understanding of the ways in which monetary policy affects inflation and other key macroeconomic variables. The transmission mechanism is complex and constantly evolving, even in developed countries. In African countries, the challenge is compounded by structural changes and the stabilization of the economy.

The transmission mechanism differs depending on whether or not monetary policy is dominated by fiscal considerations. Under fiscal dominance, inflation expectations reflect lack of a credible anchor and are sensitive to fiscal news. Lax policies have a rapid effect on inflation, often preceded by nominal depreciations (Fischer, Sahay, and Végh, 2002).

- Nachega (2005) finds that the need for seigniorage revenue drove inflation in the Democratic Republic of Congo over the period 1980–2003.
- Unsustainable government spending may lead to inflation even if monetary financing is currently low, as the experience of Kenya, Nigeria, The Gambia, Zambia, and Zimbabwe in the 1990s demonstrates (Buffie, 2003).

During stabilization episodes, the anchoring of inflation expectations is the most important factor driving inflation. Provided that fiscal dominance is credibly eliminated, monetary policy can reduce inflation quickly.

Once inflation has been brought down to low levels, monetary policy operates through three channels: the exchange rate, the interest rate, and credit (Kamin, Turner and Van't dack, 1998).

- The exchange rate is often the most important channel in the region. In Kenya, Cheng (2006) finds that policy-driven changes in the short-term interest rate have a considerable impact on the shilling. Primarily through this channel, changes in monetary policy account for about one-fourth of annual inflation dynamics. The effect operates mostly through pass-through rather than expenditure-switching effects; output does not seem to respond to changes in policy.
- The interest rate and credit channels have been found relevant in some African countries. In Namibia, Uanguta and Ikhude (2002) show that monetary tightening, driven by balance of payments deficits under Namibia's peg, often lead to increases in real lending rates and a contraction in private sector credit.

Imperfections in the financial sector limit the effectiveness of the credit and interest rate channels:

- The transmission of the policy stance to interest rates, even at short maturities, is hampered by limited bank participation in shallow or dormant interbank markets (Laurens, 2005).
- Monetary tightening has limited impact on credit when banks hold involuntary excess reserves, which seems pervasive in local banking systems and may reflect unwillingness or inability to lend (Saxegaard, 2006).
- The small size of financial sectors in both low- and middle-income countries in the region limits the macroeconomic impact of credit conditions (IMF, 2006a). Over 2000–04, private sector credit averaged 13 percent of GDP for low-income countries and 21 percent for middle-income countries excluding South Africa. Such limited size reflects little access to bank credit (among the lowest in the world) and significant crowding out by public sector borrowing (Sacerdoti, 2005).

Changes in the financial sector imply that the interest and credit channel will become more important over time. Reforms are improving the operation of interbank and government debt markets, enhancing their role in the transmission process. Access to credit is improving and greater participation by foreign banks will likely improve the sector's efficiency (Cihák and Podpiera, 2005).

The Monetary and Exchange Rate Landscape

This section describes the policy frameworks in place in sub-Saharan Africa, with an emphasis on the role of reserve money and exchange rates in countries with managed floats. The section draws on a survey of IMF staff country teams and on empirical evidence from the past decade.

Overview

The policy framework can be characterized as the list of objectives and targets that guide policy and the instruments for implementing it. The ultimate objectives of policy usually include price and exchange rate stability, economic growth, and financial sector stability; and they are sometimes translated into final targets—for example, 2 percent inflation. *Intermediate targets* focus on variables that provide information about the expected path of final targets; they help guide policy without any necessary presumption that they must be met. *Operational targets* apply to variables that directly influence the money or exchange rate market equilibrium, usually signaling the current policy stance. Finally, *policy instruments* are the tools to help achieve these targets.

De jure frameworks are a useful starting point for the analysis of monetary and exchange rate policies. Because they reflect how the authorities describe their own regimes, a focus on them can facilitate the policy debate in the region. In addition, tensions between conflicting objectives or targets are easier to identify by comparing the de jure framework with actual practice.

Table 2.1 summarizes the de jure frameworks in sub-Saharan Africa.¹ Three main conclusions emerge:

- Countries with a managed float have a variety of competing policy objectives.² While the main objective is price stability, the stability of the exchange rate also appears as a policy objective in most countries (19), through either its effect on external competitiveness (8) or the desirability of exchange rate smoothing (11).
- Reserve money targeting, which is prevalent, is a distinctive feature of monetary policy in Africa. In the rest of the world, the practice of emphasizing money as the nominal anchor has long since disappeared.³
- The role of the exchange rate in the policy framework is difficult to assess from the de jure description. Some de jure managed float regimes may be pegs in disguise. It is also important to consider other ways in which exchange rate stability enters the policy frameworks in managed floats.⁴ These issues are explored in detail below.

Implementation of reserve money targeting

Broad money appears as an intermediate target in most countries that target reserve money. While in principle this intermediate target is essential to monetary targeting, it can be bypassed in practice: not all money targeters look at broad money. Moreover, it appears that overshooting broad money targets does not always elicit a policy response: reportedly, only five countries tighten policy when the target is overshoot.

¹ This subsection is based partly on a survey of IMF staff country desk teams, who were asked to describe current practices using the typology of objectives, targets, and instruments.

² We include in the managed float category all countries that, at least de jure, allow for some exchange rate flexibility, from tightly managed floats to fully floating regimes.

³ See Stone and Bhundia (2004); Clarida, Galí, and Gertler (1998); and Svensson (2001), among others. For a (small minority) contrary view, see Reynard (2007) and Seitz and Tödter (2001).

⁴ The IMF *Annual Report on Exchange Arrangements and Exchange Restrictions* (AREAER) classifies de facto exchange rate regimes in an attempt to assess whether this is the case in practice; because the purpose here is not classification per se, and because of an interest in looking in depth at the nature of (sometimes heavily) managed floating regimes, this classification is not the focus here.

Table 2.1. De Jure Monetary Policy Frameworks in Sub-Saharan Africa

Regimes	Policy Objectives	Intermediate	Operational Target	Main Instruments
Pegs (23)	Stability of the exchange rate regime (23) Price stability (23) Economic growth (12)	Private sector credit (1)	Exchange rate (23)	Open market operations Foreign exchange sales
Money targeting (18)	Price stability (all countries) External competitiveness (5) Exchange rate smoothing (12) Economic growth (9)	Monetary aggregates (16)	Reserve money (18)	Open market operations (17) Foreign exchange sales (18)
Inflation targeting (3)	Price stability (all countries) External competitiveness (1) Exchange rate smoothing (1)		Interest rates (3)	Open market operations (3) Foreign exchange sales (3)

Misses are common with reserve monetary targets. Over the past two years, most countries have missed targets at least once. The reasons vary, but they include limitations in policy implementation, portfolio inflows and incomplete sterilization, and changes in money demand.

Partial rebasing is also common. When there is a miss, the new money target to some extent preserves the subsequent rate of change, rather than attempting to undo the miss and preserve the previously targeted levels. Money targets were usually partially rebased in at least 11 of the 15 countries where money has been part of IMF-supported program conditionality. In that sense, monetary policy partially lets bygones be bygones.

A closer quantitative look at reserve money operating targets sheds some light on the role these targets play. Countries with high inflation do display consistently higher money growth than expected (Box 2.3). Moreover, in those countries, target misses are in the same direction as misses of the inflation target. In these countries, large and sustained misses tend to signal a breach of stabilization policy, which carries high inflation costs.

In lower-inflation countries there is no clear relationship between adherence to money targets and inflation. These countries make substantial target misses in both directions on any given test date (they tend to average out). However, misses are not generally correlated with inflation surprises. This indicates that, if average inflation is good, there are

no costs associated with greater money target flexibility.

Other evidence also suggests that targeting end-of-quarter money stocks in IMF-supported programs may create incentives for temporary adjustments to meet the targets. Compared with countries without IMF-supported programs, those that do have one tend to have a significant and large drop in money growth at the end of the quarter that is undone the following month. This may create a misleading impression about the true importance of the targets, as well as perhaps creating unnecessary interest rate volatility.⁵

These results indicate substantial flexibility in money targeting. The next subsection elaborates on why flexibility may enhance the effectiveness of monetary policy and also on the challenges it poses for policy transparency.

The role of the exchange rate

A clear conclusion from the staff survey is that monetary authorities include exchange rate stability as one of their policy objectives. This is not novel to Africa: in most developing countries there are concerns about the high pass-through of exchange rate fluctuations and how currency mismatches

⁵ This is based on a regression explaining money growth in a panel of 19 African money targeters with and without an IMF-supported program, using quarterly data from 2001 through 2006.

Box 2.3. Assessing Reserve Money Targeting in Sub-Saharan Africa

Monetary targets and outcomes were recorded for a sample of 16 countries with de jure managed floats. The selection of countries was based on the availability of data and the explicit targeting of reserve money in the context of an IMF-supported program. Variables used are quarterly reserve money growth (actual and 2–5-months-ahead projections) and end of period annual CPI inflation (actual and one-year-ahead projections). Data were obtained from IMF staff reports of individual countries for 2002–06.¹

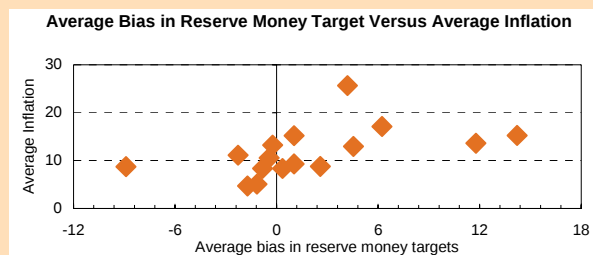
Reserve money targeting can be assessed in a number of ways. The average reserve money target bias indicates whether targets were missed systematically in a particular direction and by how much. The (squared) mean square error of the reserve money target measures the average size of misses, in either direction. It is also revealing to analyze whether reserve money target misses were correlated with inflation.

Countries with high inflation displayed higher than targeted growth in reserve money.

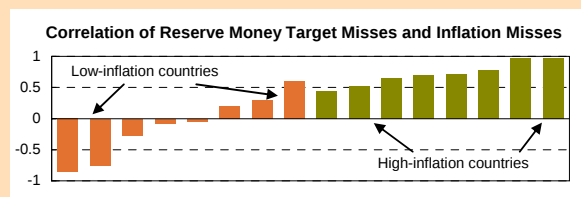
There is a positive correlation between average target misses and average inflation across all countries (first figure). This relationship is driven by the fact that reserve money targets in countries with high inflation (above 11 percent, the median inflation in the sample) behave very differently from those in countries with lower inflation. Countries are thus separated into two groups (high- and low-inflation countries) for the remainder of the analysis.

In high-inflation countries, money growth typically exceeded targets by 4.4 percent. The median mean square error in this group is quite high. In addition, within each country, higher than average target misses are strongly associated with contemporaneous misses in inflation (table and second figure).

In countries with lower inflation, target misses tend to have no cost in terms of inflation. Money growth was on average roughly on target. Yet misses were common and fairly large, though lower than for higher-inflation countries. Within each country, these misses were either not correlated or negatively correlated with misses in inflation (table and second figure).



Sub-Saharan African Countries: Reserve-Money-Targeting Performance				
	Average RM Growth	RM Target Bias	Mean Square Error of the RM Target	Correlation Between RM Misses and Inflation Misses
High-inflation countries	11.3	4.4	10.3	0.71
Low-inflation countries	5.6	-0.6	4.3	-0.06



¹ Given the limited number of observations per country, these results are indicative. Using annual observations for all PRGF countries, however, Selassie and others (2006) find broadly similar results.

affect domestic balance sheets (Calvo and Reinhart, 2002).

The concern for exchange rate stability raises the question of the role of the exchange rate in de jure managed floats. There is a range of possibilities: at one extreme the authorities may occasionally attempt to smooth extremes of exchange rate stability in the context of money or inflation targeting; and at the other, the regime may be indistinguishable from a pegged exchange rate, at least for a period of time.

In practice, countries do not generally persist at one well-defined point on the policy spectrum. The regimes and the external environment may evolve, and the shocks to which the authorities respond with exchange rate flexibility may only occur occasionally. Thus, even countries that display substantial exchange rate rigidity, including de jure pegged regimes, typically adjust them with some frequency (Frankel, 2004).

The potential—and frequently observed—flexibility even in countries that display substantial rigidity is of interest from a policy perspective. Thus, while efforts to classify regimes in terms of their de facto behavior are very important for some purposes, this chapter focuses on how to understand the role of exchange rates in a de jure floating regime.⁶

The complexity of the situation in African de jure floating regimes—and the frequency of changes even in countries that mostly keep their nominal exchange rate stable—can be observed indirectly by dividing de jure managed floating regimes in the region into two groups of countries: (i) those for which changes of more than 1 percent happen frequently; and (ii) those in which the nominal exchange rate often remains unchanged. Figure 2.1 plots the frequency distribution of monthly exchange rate changes for these two groups of

countries, with the first group defined as countries for which the exchange rate change is zero in less than 30 percent of months.⁷

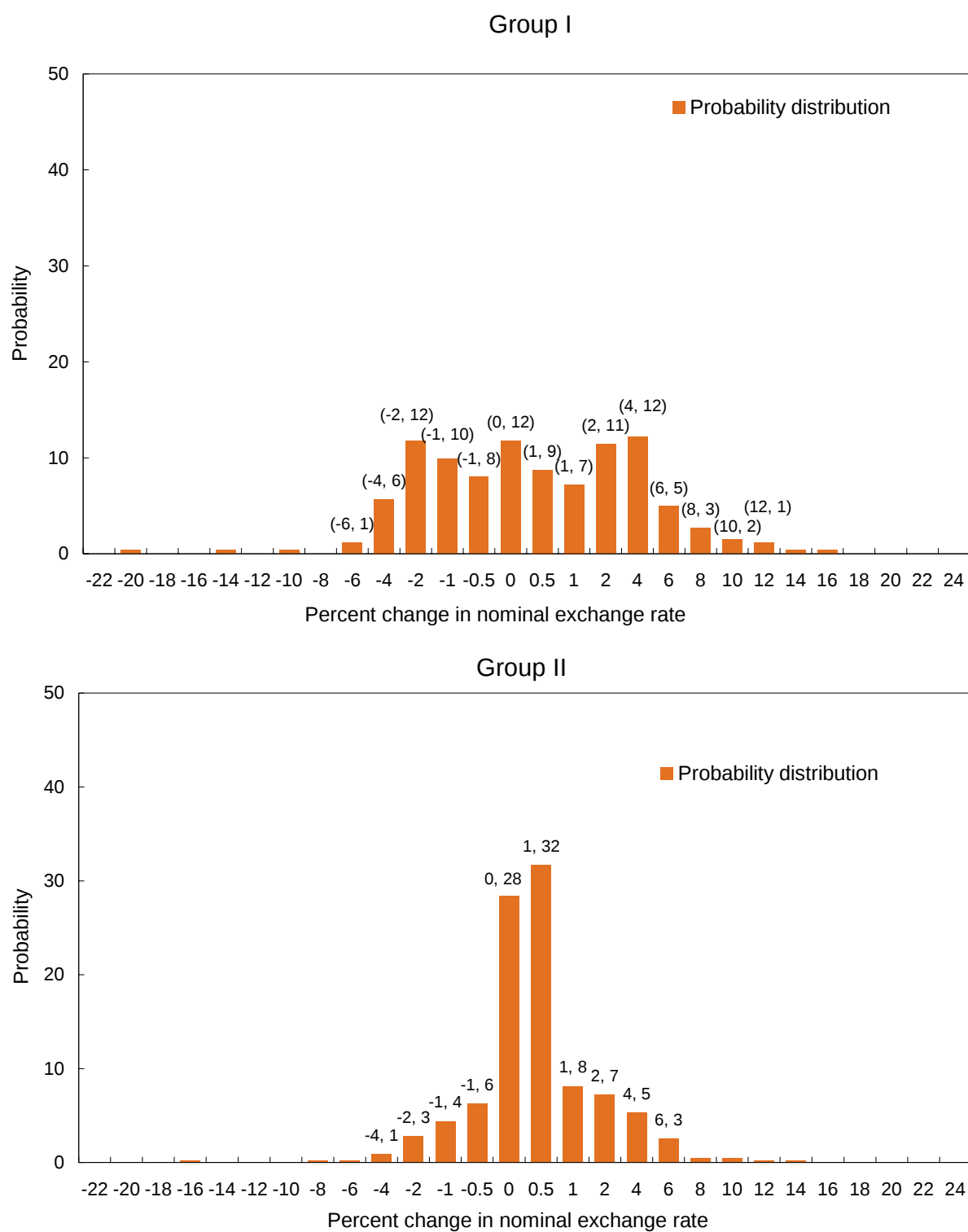
Broadly, exchange rate behavior in the first group of countries is consistent with the authorities using available instruments to influence the stability of the exchange rate without directly controlling its value. Authorities may conduct monetary policy partly to stabilize the exchange rate in addition to other short-term objectives.

The substantial exchange rate stability observed in practice in the second group of countries substantially complicates the analysis of policy frameworks in those countries. There are several possible reasons why some countries may display stable exchange rates, which may be difficult to disentangle:

- Some countries may be anchoring their policies on preserving a fixed nominal exchange rate. Of the 14 countries in this group 5 were classified as de facto exchange rate pegs by the IMF *Annual Report on Exchange Arrangements and Exchange Restrictions (AREAER)* for 2007. There may indeed be a de facto commitment to a given exchange rate level that may dominate other policy concerns, including inflation.
- The nominal exchange rate may serve as an operating target, possibly along with other operating targets like reserve money or interest rates. In this case, the monetary authorities aim to achieve the desired level of the exchange rate at a given point in time, not as the nominal anchor but in direct support of other objectives. These other objectives could be attempting to reduce nominal (and real) exchange rate volatility as an additional subordinate objective—especially if inflation falls within a certain range—as well as achieving desired

⁶ De facto classifications are very useful in that they attempt to reveal the true policy regime, which may differ from the authorities' officially announced arrangements. However, the variety of de facto regimes in practice is reflected in the fact that alternative published methodologies tend to yield very different de facto classifications (Frankel, 2004).

⁷ In some of the countries in the first group, the monthly change is equal to 1 percent, not 0, more than 30 percent of the time. This grouping is merely suggestive for several reasons, including the fact that regimes may change through time in a given country.

Figure 2.1. Sub-Saharan Africa: Exchange Rate Distribution, 2005–07Source: IMF, *International Financial Statistics*.

inflation rates.⁸ Unlike a peg, however, there may not be a clear commitment to a particular level, and the exchange rate may be adjusted as necessary in support of the final policy objectives. In some cases, the role of the exchange rate may be analogous to that of the policy interest rate in a developed country float, with the important difference that exchange rate target decisions may lack transparency.⁹

There is no clear difference between the two groups of countries in terms of inflation or output performance (in levels or volatility). There is also no clear relationship to per capita income, somewhat contrary to the “fear of floating/learning to float” literature for emerging markets, which emphasizes that time and development are required to achieve full flexibility of the exchange rate in a floating regime (IMF, 2004b).

The fact that some managed floats are hard to distinguish from pegs also suggests that lack of clarity about the role of the exchange rate may pose a challenge to the effectiveness and credibility of monetary policy. In assessing the nature of a particular regime, a critical question is which objectives are subordinate and which are dominant, and which may only be revealed by certain shocks (and possibly with a lag). For example, whether nominal exchange rate stability is subordinate to the inflation objective or not may only be revealed when there is a large and persistent shock to the real exchange rate, such as a major shift in the terms of

trade.¹⁰ The next section elaborates on the advantages of clarity and transparency in the conduct of monetary policy.

Policy Challenges of Implementing Monetary and Exchange Rate Regimes in Sub-Saharan Africa

This section provides general recommendations on monetary policy frameworks for Africa. It draws on specific features of African economies, the extensive literature on monetary policy in developed and emerging market countries, and the international cross-country policy experience of the past 20 years.

Monetary policy in countries with pegs

Countries with hard-pegged regimes—the WAEMU, the CEMAC, and the countries that have pegged their currency to the South African rand—have the benefit of a transparent framework that credibly provides nominal stability and lowers international transaction costs, providing impetus to trade and other forms of international integration.¹¹ The challenge lies in adjusting to shocks that call for shifts in the real exchange rate. The experience of strong growth after the 1994 devaluation of the CFA franc indicates the importance of avoiding prolonged and severe misalignments. In the absence of flexibility in nominal exchange rates, reliance must be placed on supportive measures, such as fiscal policy and structural reforms that encourage wage flexibility and promote productivity growth.

Monetary policy can provide a supportive role, however. With a hard peg, inflation determines the real exchange rate. In the medium to long run, monetary policy cannot influence this relative price.

⁸ For authorities to be able to influence both the exchange rate and domestic monetary conditions, they must have two separate effective instruments. The next section further discusses policy instruments.

⁹ Unlike regimes with short-term interest rates as operating targets, the predictability of future policy decisions may affect the viability of current exchange rate targets, given the possibility of large gains from exchange rate arbitrage. This suggests that the authorities will face market pressure to change the targets once these are clearly expected, particularly when capital mobility is substantial. It also suggests that information regarding target decisions, including the current target, the frequency of target changes, and the rationale behind target changes, may not be clearly announced. All of these reasons point to a potential lack of transparency in managed floats with such exchange rate operating targets.

¹⁰ A possibly fruitful approach to understanding the role of the exchange rate—but one that is beyond the scope of this chapter—would be to estimate policy rules for exchange rate fluctuations.

¹¹ See Rose (2000) on the large effects of currency unions on trade. Masson and Pattillo (2004) discuss at length the performance of currency unions in Africa and current prospects for further enlargements.

However, with limited capital mobility, it might make a difference over shorter horizons. Thus, monetary policy needs to be consistent with the demands of the exchange rate regime.¹²

The handful of countries with de jure conventional pegs benefit from the stability and credibility pegs can provide. These are mostly countries in the process of stabilization or small very open economies, such as Cape Verde. For these countries, the potential benefits of exchange rate stability are likely to outweigh the potential benefits of running an autonomous monetary policy (Mussa and others, 2000). As with hard pegs, these countries must ensure that other policies support required adjustments to the real exchange rate. They may also carefully consider possible vulnerabilities to capital account and other shocks as they become more integrated with international capital markets.

Managing a managed float

The considerable success many sub-Saharan African countries have had in stabilizing inflation over the past few years suggests that current frameworks have worked well for them. Supported by sound fiscal policy, countries using money targets have reduced inflation to near single digits. The relative flexibility in meeting reserve money targets that is seen in practice suggests that the authorities pay substantial attention to other indicators, such as wages, the exchange rate, credit conditions, and inflation itself.

For policy to become more effective, however, greater discretion regarding money targets should be constrained by a clear commitment to price stability. This “constrained discretion” emphasized by Bernanke and others (1999) is the hallmark of inflation targeting, although it can also apply to other regimes with some degree of intermediate target flexibility. It implies that, while policy should not be constrained by mechanical rules, it should be held directly accountable for achieving its end objective (low inflation). Transparency about policy

intentions, articulated through a communication strategy that explains policy decisions and helps form inflation expectations, becomes the most effective nominal anchor. On the other hand, unconstrained discretion may greatly limit the effectiveness of monetary policy with little gain in achieving other objectives.

A monetary policy continuum

Depending on the country’s structural characteristics, the appropriate policy framework lies somewhere along a continuum. On one end are regimes that emphasize intermediate targets. On the other are regimes that allow greater flexibility for intermediate targets and emphasize achieving price stability directly (the so-called inflation targeters). In between there is a continuum of regimes that incorporate elements from both ends; many of these could be described as “inflation targeters lite” (Stone, 2003).

When countries are moving away from fiscal dominance but credibility is low, there are important advantages to intermediate targets. Because the relationship between policy and inflation is uncertain, targeting broad money or the nominal exchange rate can help anchor expectations and reduce inflation rapidly. Indeed, the successful stabilization of inflation in postconflict economies like Mozambique and Uganda in the early 1990s and in Burundi, the Democratic Republic of Congo, and Sierra Leone more recently seems to be based at least in part on the role of money targets.

The role of money targets in stabilizing inflation is not to strictly limit policy but rather to signal that stabilization is on track. The evidence from the previous section and the international evidence indicate that countries can be successful in their stabilization process without strict adherence to the money targets.¹³ What does matter is that the stabilization effort, namely the buildup of fiscal sustainability, stays on track. Money targets have

¹² See van den Boogaerde and Tsangarides (2005); and Veyrune (2007).

¹³ Carstens and Werner (1999); and Berg and others (2003) discuss the role of money targets during stabilization episodes in Mexico and selected emerging market countries, respectively.

such a “tripwire” role: large and sustained positive target misses indicate a clear policy breach that is often followed by higher inflation.

As inflation stabilizes and credibility increases, the trip-wire role of money declines. As Box 2.4 describes, strict adherence to money targets may have adverse consequences for inflation and output stability. For these reasons, such strict adherence is often not observed, even in countries with successful inflation outcomes. This flexibility also means, however, that money targets may fail to signal or guide policy, as they are only imperfectly related to the *de facto* policy stance in the short run. This lack of clarity may generate uncertainty and may not help establish or maintain policy credibility. Greater money target flexibility should therefore be complemented with additional innovations in the policy framework.

Increased flexibility seems to describe the current frameworks in mature stabilizers like Mozambique, Uganda, and Tanzania (Box 2.5). In some of these countries, the central bank implements a more eclectic monetary policy framework by defining a range of monetary aggregates (rather than a discrete target) and adjusting an interest rate corridor taking into account a variety of real and financial market developments, one of which is money. These countries could be described as informal inflation targeters, in that their policy frameworks are geared toward price stability but the inflation-targeting infrastructure is not fully in place.

Finally, some countries have begun to adopt full-fledged inflation targeting (Box 2.6). South Africa has a regime of the sort generally found in a large number of middle-income economies. Much attention is given to the inflation forecast, and policy decisions are clearly explained to the public. By clarifying the objectives of policy and providing a sound anchor for inflation expectations, the inflation-targeting regime has been very successful in stabilizing inflation in South Africa despite substantial exchange rate volatility.

Inflation targeting may serve as a benchmark for regimes along the monetary policy continuum (see

Box 2.7). While the choice of policy regime depends on each country's specific conditions, inflation targeting provides many insights about the adequate policy response to economic developments and may thus serve as guidance for policy decisions.

This benchmark is especially relevant for the many countries that are already practicing a regime with very flexible money targeting. These countries may not have the full set of preconditions often considered necessary for inflation targeting, but in effect they have largely forgone the comfort (or perhaps fiction) of simple money targeting. Authorities could more effectively respond to shocks—stabilizing output and inflation while anchoring long-term expectations—if they adopted certain elements of inflation targeting: a focus on adjusting policy instruments to bring expected inflation toward the target; an emphasis on developing an explicit understanding of the monetary policy transmission mechanism; and a public communication strategy for explaining how policy will achieve the inflation target over the medium term.

The question of the appropriate response to rising food prices illustrates the potential advantages of adopting elements of inflation targeting. Food prices have increased substantially over the last year in many sub-Saharan African countries, far outpacing nonfood inflation (Chapter 1). To the extent that price developments reflect world prices or local weather conditions, it is optimal to allow a temporary spike in inflation while taking measures to prevent entrenchment of higher inflation expectations. A clear and plausible public explanation of how food inflation developments alter the inflation profile over the short run, and how the central bank is planning to meet inflation targets over a longer horizon, can do a great deal to anchor expectations during these episodes. The communication strategy recently demonstrated by the South African Reserve Bank regarding recent breaches of target is a good example of such a response.

Box 2.4. The Role of Money

What role can money play in the conduct of a managed float in Africa? We conclude that (i) it can be a useful guide to policy as an intermediate target, particularly as a “trip wire” for major deviations from policy when the independence of the central bank from fiscal and political pressures is uncertain; but (ii) optimal policy is not likely to consist of strict adherence to monetary aggregates; rather, substantial use of other information is also required.

The targeting of monetary aggregates, typically reserve money, as a guide to monetary policy is now nearly unique to sub-Saharan Africa. Most of the rest of the world has transited to some form of inflation targeting or inflation-targeting ‘lite’ (Stone and Bhundia, 2004). However, low-income African countries present characteristics that may make some degree of money targeting desirable: (i) continued risk of fiscal dominance and weak central bank institutions that imply a need for a clear signal as to the direction of monetary policy, and (ii) thin financial markets that make the transmission mechanism hard to understand and may leave a relatively small role for interest rates.

The long-run relationship between money and prices is often presented as a justification for targeting money. While this relationship has broken down in many countries (developed, emerging, and low-income), it has remained stable in others. The argument is that, provided it is stable, controlling one of the variables of that relationship, money, ensures control of the other variable, inflation.

Moreover, many studies conducted in Africa—somewhat in contrast to other regions—find that, historically, deviations from that long-run relationship have led to increases in prices. These studies use vector error correction models that estimate both the long-run or cointegrating relationships (between money, prices, and other variables) and the short-run dynamics that ensure that the system converges back to equilibrium if there are temporary deviations. Money in excess of what is implied by that relationship, “excess money,” Granger-causes inflation (see Mikkelsen, 2008, for an application to Zambia, and Gerlach and Svensson, 2003, for the euro zone).

While of interest, this evidence is not sufficient to conclude that strictly targeting money is the best policy option. Historically, fiscal dominance has been a significant burden for monetary policy in Africa. An implication of such dominance is that money growth was driven mainly by central bank financing of fiscal deficit. In this context, it is to be expected that excess money leads to high inflation. Once fiscal dominance disappears, however, money growth may be driven mainly by shocks to money demand, as it is optimal to accommodate these shocks to prevent unnecessary fluctuations in interest rates. The positive short-run relationship between excess money and inflation would then shrink or disappear. In sum, the empirical relationship between money and prices may not be invariant to changes in the policy regime. This may be the case even if money demand itself remains stable.

Moreover, basing monetary policy on even a stable long-run relationship may not be the most effective strategy. Solely relying on the long-run relationship between money and prices amounts to a minimal information strategy that may be suboptimal because it does not make use of all the available information (Svensson, 2001). These arguments hold even in the absence of shocks or structural breaks in money demand. In addition, money targeting may lead to excessive volatility in inflation and output, as unaccommodated shocks to money demand can generate undesirable interest rate volatility.

Monetary aggregates may have informational content about the state of the economy, however (see Svensson and Woodford, 2003; Coenen, Levin, and Wieland, 2005; and Berg and Portillo, forthcoming, for an application to Africa). Provided money demand shocks are not excessively volatile or persistent and there is a strong contemporaneous co-movement between real money balances and economic activity, monetary aggregates may serve as an economic indicator. In Africa, this role may be important given the scarcity of accurate and timely economic data. Ultimately, though, the role of money as an indicator variable will depend on country-specific characteristics: countries with breaks in money demand, little correlation between money and output, or a relative abundance of economic statistics may find little use for monetary aggregates in the policy framework.

Box 2.5. Mozambique and Uganda: Adding Flexibility to Monetary Policy

This box describes the steps taken to add flexibility to the current frameworks in Mozambique and Uganda. In part driven by the gradual deepening of the financial system and large exogenous shocks, these regimes are moving away from strict money targets to a more eclectic framework, with the ultimate goal of implementing an inflation-targeting regime in the medium term.

Uganda and Mozambique have demonstrated a strong commitment to price stability, with core inflation at single digits for five years or more in both countries. Their excellent record reflects responsible monetary policy supported by prudent fiscal policy, in which reserve money ceilings have provided a nominal anchor.

Base money ceilings have recently been exceeded or adjusted upward in both countries in response to an apparent increase in demand for real money balances, due to stronger-than-expected economic activity and demand for currency in rural areas. The ratio of base money to GDP has been generally increasing in both countries for several years, but this process has recently accelerated. Consistent with a shift in real money demand, inflation pressures, other than those stemming from hikes in international food and oil prices, have not surfaced.

The conduct of monetary policy under a managed float has been complicated in both countries by increasingly large foreign exchange inflows. The authorities have reacted by smoothing exchange rate volatility, which has led to the accumulation of international reserves and required more intensive use of open market operations to meet reserve money targets. Mozambique has relied less heavily on open market operations than Uganda, mainly owing to stronger sales of foreign exchange and a less strict adherence to monetary targets. In Uganda, money targets based on monthly averages reduced the authorities' freedom. The Bank of Mozambique also operates an interest rate corridor by adjusting its deposit and lending facilities, which has helped bestow greater stability on interbank rates, though benchmark treasury bill rate volatility and credit growth remain comparable in both countries.

In view of such developments, the authorities are planning to move toward a more flexible monetary framework, aiming for inflation targeting in the longer term. Both countries are now looking at broader indicators of price pressures in addition to monetary aggregates, and their programs already include money target adjusters based on higher-than-expected growth in currency in circulation. Mozambique is considering introducing bands for monetary aggregates, and coordination between the ministry of finance and the central bank is being buttressed to increase the effectiveness of the monetary program. Uganda has adopted a target on net domestic assets in its IMF-supported program that allows for greater flexibility in money growth, although the base money target remains the operational target for the central bank.

Monetary and Exchange Rate Policy Indicators (Percent of GDP unless otherwise indicated)				
	Dec-05	Jun-06	Dec-06	Jun-07
Mozambique				
Accumulation of central bank net foreign assets ^{1,2}	-0.9	3.1	3.6	1.2
Change in base money ¹	1.2	0.0	1.5	0.0
Nominal exchange rate (12-month appreciation rate) ³	-21.8	-2.7	-2.5	-2.4
Uganda				
Accumulation of central bank net foreign assets ^{1,2}	1.1	2.2	6.0	2.5
Change in base money ¹	0.9	0.0	1.0	0.8
Nominal exchange rate (12-month appreciation rate) ³	-4.3	-6.5	2.3	13.2
Sources: Bank of Mozambique, Bank of Uganda, and IMF staff.				
¹ Cumulative from December of previous year. For month <i>m</i> and year <i>t</i> , change in <i>x</i> is defined as $(X_{m,t} - X_{dec,t-1})/GDP_t$.				
² Excludes valuation effect.				
³ Based on monthly exchange rate averages. A minus sign represents a depreciation of the exchange rate.				

Note: This box was prepared by Manrique Saenz.

Box 2.6. Inflation Targeting in Ghana

In May 2007, the Bank of Ghana announced its adoption of formal inflation targeting, becoming the first country in sub-Saharan Africa besides South Africa to do so. The move came after several years of preparation and a successful disinflation strategy that brought inflation down from the 40s in 2002 to near 10 percent by mid-2006. Inflation targeting is now an integral part of Ghana's strategy to accelerate growth and achieve middle-income status by 2015.

The motivations for the move to inflation targeting focused on the advantages of anchoring inflation expectations, particularly given the increasingly weak relationship between inflation and monetary aggregates. Broad money has grown sharply since late 2005, while inflation has continued falling. Ongoing structural changes in the economy have led to an increasingly unstable demand for money. In addition, increasingly focusing expectations on inflation targets should also allow for more flexibility in exchange rate policy. Finally, inflation targeting is seen as improving the accountability of both the central bank and the fiscal authorities, given the joint nature of inflation target decisions.

The institutional and analytical framework developed for inflation targeting provides numerous advantages, particularly in terms of transparency and predictability. The Bank of Ghana, has built the main institutional, analytical, and communications elements of this framework since 2002, although further progress on financial sector development and communications would strengthen it.

- The 2002 Bank of Ghana Act confirmed the independence of the central bank with the primary objective of price stability.
- To consolidate freedom from fiscal dominance, central bank credit to the government is limited each year to 10 percent of that year's total revenue collected, although in practice the government has not resorted to any central bank financing for the past several years. The target range for CPI inflation is set jointly by the government and the Bank of Ghana.
- The relative stability in the exchange rate between 2004 and mid-2007 has also anchored inflation expectations and appears to be an intermediate operational objective (notwithstanding the cedi's recent depreciation). The development of market-based liquidity instruments has advanced significantly, although further progress would be desirable.
- The Bank of Ghana has developed an analytical framework, and the Monetary Policy Committee's decisions are now informed by the results of an inflation-forecasting model, developed in cooperation with other central banks. The Committee also considers the results of a financial sector stability analysis, which includes stress testing. Surveys of inflation expectations also inform policy decisions.
- The Bank of Ghana has developed an elaborate communication strategy. The Monetary Policy Committee meets every other month, after which it issues a press release and holds a press conference, under the chairmanship of the governor, at which it explains its announcement and decision. A detailed monetary policy report, including the financial stability analysis, is published.

Initial indications of the effectiveness of the regime are encouraging. Despite the ongoing oil and food price shocks, CPI inflation remained stable at 10 percent from mid-2006 to late 2007, when it ticked up to near 13 percent. Headline inflation has thus remained above the Bank of Ghana's target range of 7–9 percent for 2007, although core inflation (excluding energy and utilities) has fallen below 9 percent. In explaining its November 2007 decision to increase its prime rate by 100 basis points to 13.5 percent, the Bank of Ghana acknowledged the need to tighten monetary policy in the context of strong domestic demand.

The Bank of Ghana is expected to continue to reinforce the credibility of the regime. The recent increased flexibility of the exchange rate is commensurate with a full-fledged inflation targeting framework. The communication strategy could be enhanced by the adoption of an "open letter" to explain the reasons for potential target misses. Bank of Ghana and IMF staff are also working together to refine the inflation-forecasting model. Ghana's transition to inflation targeting has shown the advantages and challenges of inflation targeting for a country aiming for middle-income and emerging-market status.

Note: This box was prepared by Marshall Mills and Hans Weisfeld.

Role of the exchange rate

The exchange rate can play a potentially useful role in support of inflation objectives in a floating regime. In a number of African countries, the absence of a commitment to a particular level and periodic, if infrequent, adjustments suggest that these might be characterized as regimes in which the exchange rate is being used as an operational target in the service of an inflation objective.¹⁴

This approach may make sense when the exchange rate is an important variable in determining inflation and inflation expectations, or if other targets (money, interest rates) are much less effective.

However, the exchange rate needs to adjust when circumstances change. Achieving credibility and transparency with this regime requires that the exchange rate target ultimately be subordinate to the inflation objective. In other words, the targeted level (or rate of change) of the exchange rate must be consistent with the inflation objective. This implies that the exchange rate target must also be consistent with the other policy levers, such as the announced growth of reserve money targets or the short-term interest rate, which have been chosen to steer the economy toward meeting the inflation objectives. Otherwise, tensions will arise between inflation and exchange rate objectives.

The experience of emerging market countries indicates that countries that targeted the exchange rate while simultaneously pursuing short-term inflation objectives eventually abandoned exchange rate targeting.¹⁵ In Chile, the use of exchange rate bands in the context of an inflation-

targeting regime was abandoned in 1999. Israel's framework also featured both exchange rate and inflation targets for several years, but exchange rate flexibility was officially adopted in 2005. In both countries, but especially Israel, exchange rate targeting initially helped anchor inflation expectations but it was gradually abandoned as tensions arose between multiple operational targets. These experiences suggest that exchange rate targeting, even if carried out for the purpose of achieving price stability, serves more as a transitional regime.

Moreover, pegging the exchange rate without admitting so greatly reduces policy transparency and may affect the credibility of monetary policy. Because it is difficult to distinguish a peg from a regime where the exchange rate is heavily managed to achieve the inflation objective, for example, the commitment to price stability may thus be hard to assess. Lack of transparency may be particularly undesirable in sub-Saharan African countries, where external shocks can be very large and large real exchange rate movements are required to preserve external and internal balance. In such an environment, lack of policy credibility may lead to inflation expectations no longer being anchored; inflation must fluctuate if the nominal exchange rate is kept constant.

Countries with less direct control of the exchange rate can still try to reduce short-term exchange rate volatility. The fact that real exchange rate volatility is considerably higher in floating than in fixed regimes (the "Mussa" puzzle; Mussa, 1986) could lend support to the pursuit of exchange rate stability as a secondary, subordinate objective, especially if exchange rate fluctuations are not driven by fundamentals (Jeanne and Rose, 2002).

Reducing excessive real exchange rate volatility may help mitigate some of its potential adverse effects on trade flows and investment, particularly

¹⁴ Outside of Africa, this appears to be the case in Singapore, where the authorities adjust the value of the Singapore dollar in response to developments in the economy. Several authors (Parrado, 2004; McCallum, 2007) consider that Singapore's regime is similar to an inflation-targeting regime, the main differences being the choice of operational target (the exchange rate in Singapore versus short-term interest rates in most inflation-targeting countries) and the degree of transparency in policy decisions.

¹⁵ See Ötcher-Robe and Vavra (2007); and Berg and Borensztein (2000).

Box 2.7. Inflation Targeting: A Benchmark for Monetary Policy in Managed Floats

Inflation targeting, or elements of inflation targeting, can serve as benchmarks on which to assess current monetary policy frameworks in the region. This box describes key elements of inflation targeting.

Inflation targeting is a monetary policy framework that has five main elements (Mishkin, 2007): (i) the public announcement of short- to medium-term numerical targets for inflation; (ii) an institutional commitment to price stability as the primary goal of monetary policy, to which all other goals are subordinated; (iii) an information-inclusive strategy in which many variables, not just monetary aggregates and the exchange rate, are used to inform policy decisions; (iv) great transparency and communication of plans, objectives, and decisions of the monetary authorities; and (v) increased accountability of the central bank for attaining inflation objectives.

In practice, an essential aspect of inflation targeting is the need for decisive policy actions to meet inflation objectives. Because inflation is partially predetermined in the short run, authorities focus on the impact of current policy decisions on future inflation. Indeed, inflation-targeting regimes are often described as “inflation forecast targeting” (Svensson, 1997). Several implications follow. First, central banks must make the best use of current information to update their forecasts of future inflation. Second, authorities must anticipate the effects of current developments on future inflation and change their policy instruments accordingly. Authorities cannot allow for current developments to have a long-lasting effect on inflation expectations, because the credibility of the policy regime may be questioned. For this reason, policy actions must be sufficiently decisive to influence expectations and keep inflation stable.

Although it is sometimes asserted that certain institutional and technical preconditions are required to implement inflation targeting, the experience of many emerging market countries suggests otherwise (IMF, 2004b). Often-cited preconditions include full central bank independence, a well-developed technical infrastructure to forecast and model inflation, an economic structure under which domestic prices are not overly sensitive to commodity prices and exchange rates, and a healthy financial system (Eichengreen and others, 1999). However, most emerging market countries that adopted inflation targeting in the past 10 years did not meet several of these preconditions. Instead, the adoption of inflation targeting was subsequently associated with improvement in all these areas, which suggests that inflation targeting may encourage the central bank to take a proactive approach to making improvements.

Inflation targeting is nonetheless challenging. The ability to control inflation in the short to medium term requires that policy levers influence economic activity in a way that is adequately understood; a challenging task in low-income countries (see Box 2.2). However, these challenges are a defining feature of any monetary policy, and not just for inflation targeting. The main difference with other regimes is that inflation targeting brings this discussion to the forefront of the policy debate. Under money or exchange rate targeting, the goals of monetary policy are confined to meeting intermediate targets that are (in principle) more readily controllable by the authorities. But the relationship between intermediate targets and inflation is equally difficult to pin down, for the same reasons.

Inflation targeting has important corequisites. Because central banks enjoy substantial discretion in implementing policy under inflation targeting, inflation stability requires that the central bank be perceived as committed to price stability. Otherwise, adopting inflation targeting will not help cement the authorities' reputation, and more conservative policies will be required to keep inflation in check. Credibility is thus an essential element of inflation targeting, although it can be acquired over time, following the formal adoption of inflation targeting. An additional corequisite is the need for fiscal sustainability. This is critical for the success of any monetary policy regime, but it may be more easily demonstrated in a regime with an explicit intermediate target.

since outside of South Africa there are no hedging instruments and derivative markets in the region.¹⁶

However, using monetary policy to stabilize exchange rates is challenging. The pursuit of secondary objectives—exchange rate smoothing, avoiding currency misalignments—risks confusing the public about the primary objective of policymakers. The risk of failure must also be considered: unsuccessful attempts to influence the exchange rate could undermine credibility. Another major policy risk is that central banks may not always be able to correctly identify episodes of exchange rate misalignment. Targeting the exchange rate or reducing exchange rate volatility could also cause higher volatility in interest rates and output and persistently higher inflation (Calvo, Reinhart, and Végh, 1995).

Monetary policy is limited in its ability to influence the real exchange rate in the medium term. Experience has shown that the use of monetary policy for purposes other than price stability ultimately leads to higher inflation, which is often difficult to bring down and can have negative consequences for long-run growth. For external competitiveness, empirical studies emphasize the potency of fiscal rather than monetary policy (for Africa, see Elbadawi, Kaltani, and Soto, 2007).

Adjusting to aid shocks is a special case of the difficulties associated with central bank targeting of the real exchange rate.¹⁷ If aid results in a corresponding increase in government spending, there may be pressures for the real exchange rate

to appreciate. Attempting to contain such pressures may lead to higher inflation, interest rate volatility, or both without impeding the real exchange rate appreciation in the medium run. Ultimately, differing views on what is the appropriate real exchange rate (one based on central bank preferences or one driven by public expenditure) need to be reconciled.

Understanding the monetary policy transmission mechanism

As countries move along the monetary policy spectrum, the need to understand the channels through which monetary policy affects inflation becomes more obvious. Moving backward from final objectives, an understanding of the transmission mechanism helps policymakers decide by how much to change their operational target. A clear grasp of the transmission process also helps clarify the trade-offs between price and output stability. Finally, a clear exposition of the transmission policy to the public can enhance policy.¹⁸

In Africa, the transmission mechanism is uncertain and constantly changing (Box 2.2). The recent history of fiscal dominance in many countries still affects inflation expectations. After stabilization, the exchange rate channel is typically quite potent in Africa; credit channels are less so, although they are strengthening as the financial sector develops. While these channels will likely become prominent, it will take time before their precise underpinnings are well understood.

An unfinished agenda for sub-Saharan Africa is the development of modern analytic frameworks for understanding the monetary policy transmission mechanism. Such frameworks have proven useful to a large number of central banks in conducting monetary policy, particularly those targeting inflation. Relatively little such work has been done in low-income countries, though this is beginning to change (Box 2.8).

¹⁶ As a practical matter, many African countries seem to be able to partly stabilize the exchange rate over short periods using exchange rate and monetary policies. However, whether exchange rate smoothing is possible in low-income or emerging countries with relatively open capital accounts and independent monetary policy is an open question. See BIS (2005) for a discussion of the cross-country evidence, and Kamil (2008) for an analysis of exchange rate intervention in Colombia.

¹⁷ The macroeconomic challenges of aid shocks have been discussed in a variety of recent papers and are only touched on in this chapter. See Berg and others (2007); Gupta, Powell, and Yang (2006); Adam and others (2007); Peiris and Saxegaard (2007); IMF (2007a); and IMF (2007b).

¹⁸ See Bernanke and others (1999).

Box 2.8. Analytic Frameworks for Monetary Policy in Low-Income Countries

Structural analytical models have become an important tool for the analysis of monetary policy in central banks around the world. Because they embody explicit assumptions on the structure of the economy, they help organize a coherent view of the monetary transmission mechanism and assess the likely effects of policy decisions. Current models are derived from solid micro-foundations, and great emphasis is given to expectations in the transmission of policy (Berg, Karam, and Laxton, 2006; and Galí and Gertler, 2007).

Analytical models are better suited than traditional econometric models to analyze policy decisions. The latter are pinned down by past data and may be misleading when there are changes to the policy regime. In addition, although empirical evidence may help, policymakers' judgment should play an important role in the model's calibration. Analytical models can also help characterize potential risks to the macroeconomic outlook and the required policy response in alternative scenarios, which is difficult to do in reduced form or partially identified econometric models.

The benefits of analytical models may be particularly pertinent to African countries. Ongoing structural changes in sub-Saharan Africa blur the relationship between policy objectives and instruments, and historical data are both limited and of little use for policy analysis. In particular, the recent move away from fiscal dominance and toward greater policy independence highlights the need for frameworks that assess likely effects of policy decisions under the current regime. Moreover, uncertainty regarding the transmission mechanism can be dealt with explicitly by conducting sensitivity analysis—that is, exploring alternative parameter values to check for robustness.

Little work has been done on using and adapting analytical models to address policy-related questions in Africa, although this is starting to change. This partly reflects economic policies until recently, where efforts were directed at stabilizing inflation, and fiscal consolidation was the key feature. In this environment, the fine-tuning that is associated with monetary policy in emerging or developed countries is less of a concern. In addition, the use of money targets is less amenable to standard models, which both focus on and recommend direct targeting of inflation and the use of the short-term interest rate as the policy instrument.

New and ongoing work has focused on three related areas:

- The optimal monetary policy response to increases in aid. Analytical models have been developed to look at the optimal degree of reserve accumulation and open market operations when public spending increases as a result of positive aid shocks (Adam and O'Connell, 2006; Berg and others, 2007; Adam and others, 2007; and Peiris and Saxegaard, 2007). Accumulating more reserves when public spending increases can have negative consequences for inflation and private sector growth; some degree of exchange rate flexibility can contribute to the economy's adjustment to the aid and other shocks.
- Analysis of current monetary policy in several countries in the region. Although the discussion of policy decisions in emerging markets often relies on analytical models (see Harjes and Ricci, 2005, for an application to South Africa), only recently has this approach been extended to other African countries: Nigeria (Steinberg, forthcoming) and Ghana (Mills and Weisfeld, forthcoming). Given the current state of the economy, analytical models have been used to assess the policy decisions needed to meet medium-term inflation objectives.
- The optimal role of monetary aggregates in monetary policy. Current research attempts to reconcile the relatively flexible use of money targeting in countries in the region with analytical models that justify some role for money as an indicator variable (Berg and Portillo, forthcoming). This research finds that the relative desirability of "partial" money targeting depends on country-specific characteristics: magnitude of money demand shocks versus shocks to aggregate demand, interest rate elasticity of both money demand and aggregate demand equations, strength of the interest rate channel, and wealth of timely statistical information about the state of the economy.

Choice of operational targets

There is a natural association between moving toward more explicit inflation targeting and moving from monetary aggregates to interest rates as operational targets for policy. The move away from monetary aggregates makes it clear that some form of inflation targeting, rather than money, is the true nominal anchor. Countries like Mauritius and Ghana have explicitly abandoned the reference to money and rely on short-term interest rates to determine policy.

However, operational targets need not change at this time. Even if intermediate money targets play a smaller role in policy decisions, it may still be preferable to have reserve money as an operational target: given financial market imperfections, the short-term interest rate that is under the control of the authorities may not reflect or influence credit market conditions. This approach coincides with current money targeting practices in the region in many ways; in particular, the reserve money growth targets should be implemented with sufficient flexibility to allow target misses and target rebasing as necessary. However, the agenda for making policy more effective is to be more explicit about this flexibility, analyzing how to use it wisely and emphasizing communication and transparency.

Choice of instruments

Most managed floats in Africa have two separate policy instruments: foreign exchange intervention and domestic open market operations. This allows authorities some ability to independently influence the exchange rate and domestic monetary policy even with an open capital account, provided that domestic and foreign assets are imperfect substitutes—a reasonable assumption in the African context.

The scope of independence among instruments should not be overstated, however. First, countries in the region may not be able to continue using two separate instruments if the current benign environment—growing capital and

aid inflows, pressures for real appreciation—worsens. In particular, foreign exchange operations may no longer be an option if there are persistent pressures for depreciation and international reserves are low. Moreover, over longer horizons monetary policy itself is unlikely to have a persistent effect on the real exchange rate and hence on the nominal exchange rate, except insofar as it works through inflation.

Conclusions

The time is ripe for evaluating key elements of monetary policy frameworks in many African floating exchange rate regimes, notably the role of monetary aggregates. The trend toward countercyclical monetary policy in the rest of the world is clear (Goodfriend, 2007). But many low-income countries have only recently emerged from stabilization episodes, and there has been insufficient application of modern monetary policy analysis. This needs to change in coming years, as countries look to reduce economic volatility and achieve inflation objectives. In practice, policymakers apply monetary targeting with appropriate flexibility. And African monetary policy regimes are in various stages of transition. However, further clarity about the framework could enhance policy effectiveness.

Monetary aggregates can play a useful role in the conduct of policy, particularly as a tripwire indicating major deviations from monetary and fiscal policies that are consistent with stabilization. This function is most important early in the process of establishing credibility and ending fiscal dominance.¹⁹

Monetary aggregates may be less effective in guiding and signaling the policy stance in countries that have successfully reduced inflation and are now considering fine-tuning monetary policy to

¹⁹ The continued role of monetary aggregates in conditionality under IMF-supported programs probably can best be understood in terms of this tripwire function. See Ghosh and others (2005).

stabilize the economy while anchoring long-run expectations. Flexibility in money targeting implies that the danger is not adherence to inappropriate targets but rather lack of clarity about the true policymaking process. This nontransparency can impair public communication and the quality of the internal policy dialogue.

The discretion implied by the acknowledgment that money targets do not strictly guide policy should be constrained by a clear commitment to moderate inflation. More generally, countries should consider adopting elements of an inflation-targeting approach—notably, accountability, transparency, and communication.

Of course, countries need to proceed at a pace appropriate to their own institutional capacity. Moreover, uncertainties about the transmission mechanism and the state of the economy, often still-nascent credibility, and the prevalence of supply shocks limit the scope for activist monetary policy, particularly in the near term. Countries must continue to develop domestic financial markets, improve in-house technical capacity, and build appropriate forecasting tools.²⁰ However, the role of prerequisites to moving away from strict intermediate targeting can be overstated: any monetary policy can only be effective if monetary policy is largely free from pressures to finance fiscal deficits and there is some understanding of how monetary policy affects the economy. A major potential benefit of more transparent frameworks would be the emphasis on understanding how monetary policy works in these economies.

There remains an important, albeit different, role for monetary aggregates, in addition to their tripwire function. They may contain useful information about the state of the economy,

particularly in Africa, where data on output and other important indicators are often scarce. Difficulties in controlling short-term interest rates may also justify partial targeting monetary aggregates. Ultimately, the optimal degree of adherence to monetary targets during the transition to greater flexibility is a country-specific question that depends on each country's structural characteristics and pattern of shocks.

There may also be a role for targeting the exchange rate in managed floats. The exchange rate may be useful as an intermediate target, particularly when other elements of the transmission mechanism are very weak and the signal provided by the exchange rate is strong. Moreover, intervention to smooth excess volatility may make sense. However, there are risks, for instance, that the regime will become an unannounced peg; that it will create a one-way bet for capital inflows; and that it may prevent an optimal policy response to unexpected shocks. The risks from heavy exchange rate management are likely to increase substantially with higher capital mobility (Chapter 3). Critically, sustained efforts to use monetary policy to hit real exchange rate objectives are likely to be counterproductive.

Ultimately, the transition to greater flexibility and transparency in monetary and exchange rate policy must be supported by sound fiscal policy. While the recent history of fiscal dominance may still influence inflation expectations, credibility earned in a very favorable global environment will be tested when times turn worse. It is thus imperative that countries build a reputation of fiscal sustainability and the independence of monetary authorities from fiscal or political pressures. That will greatly enhance the effectiveness of monetary policy.

²⁰ For example, a clear lesson from several recent country analyses under the World Bank–IMF Financial Sector Assessment Program is that there is a need to address pervasive excess liquidity in the interbank market and develop better liquidity forecasts.

III. Private Capital Flows to Sub-Saharan Africa: Financial Globalization's Final Frontier?

Private capital inflows to sub-Saharan African countries, having more than quadrupled since 2000, represent an increasingly important share of foreign financing to these countries.¹ This mirrors the trends among developed and emerging market countries, where capital flows have also surged owing to abundant global liquidity. Private equity and debt flows to sub-Saharan African countries remain small and are estimated at about US\$53 billion in 2007, compared with total global capital inflows of about US\$6.4 trillion in 2006. In 2006, private capital flows to sub-Saharan Africa overtook official aid for the first time.² The bulk of these flows went to South Africa and Nigeria, but portfolio flows are also trending up in a small group of other countries—notably, Ghana, Kenya, Tanzania, Uganda, and Zambia—in response to improved risk ratings and attractive yields.

The acceleration of private capital flows to sub-Saharan Africa is an opportunity, especially since aid flows have remained unchanged in recent years (Chapter 1), but it also presents challenges. These inflows provide countries with an alternative source of financing for infrastructure and other investments, and should contribute to higher growth while enhancing prospects for meeting the Millennium Development Goals (MDGs). At the same time, private capital inflows present a

challenge to policymakers, because significant inflows could lead to increased macroeconomic volatility and the buildup of balance sheet vulnerabilities, and over time to real exchange rate appreciation and loss of external competitiveness. In the current financial market turmoil, there is also the risk of a significant slowdown or even a reversal of the inflows if global liquidity dries up and with it investors' appetite for risk.

Some of the policy issues associated with the management of private capital inflows are akin to those induced by official aid, but there are important differences. First, unlike aid, private capital flows end up in the hands of the private sector (e.g., foreign direct investment (FDI) and portfolio equity). While the monetary authority still has to decide on whether or not to allow for absorption of the inflows, the spending decision is now decentralized and further complicates the monetary policy response (Berg and others, 2007). Second, although aid flows may be as volatile as private capital flows, they are not subject to sudden reversals. Avoiding the buildup of vulnerabilities during episodes of private capital inflows becomes paramount.

This chapter first discusses factors behind the distribution and composition of recent private capital flows to sub-Saharan African countries, including macroeconomic performance, capital controls, and financial market development. It then describes the experience with, and the policy challenges raised by, the rapid increase in portfolio flows in some countries, and draws on international experience to provide policy lessons.

Note: This chapter was prepared by a team led by John Wakeman-Linn and composed of Corinne Deléchat, Arto Kovanen, Inutu Lukonga, Gustavo Ramirez, Judit Vadasz, and Smita Wagh.

¹ These refer to net changes in external liabilities of the private sector, that is, foreign direct investment, and portfolio and loan flows. Official flows and private transfers from abroad are excluded.

² According to the OECD's Development Assistance Committee, total official flows to sub-Saharan Africa amounted to about US\$40 billion in 2006, compared with US\$48 billion for private capital flows.

Recent Trends in Capital Flows to Sub-Saharan African Countries

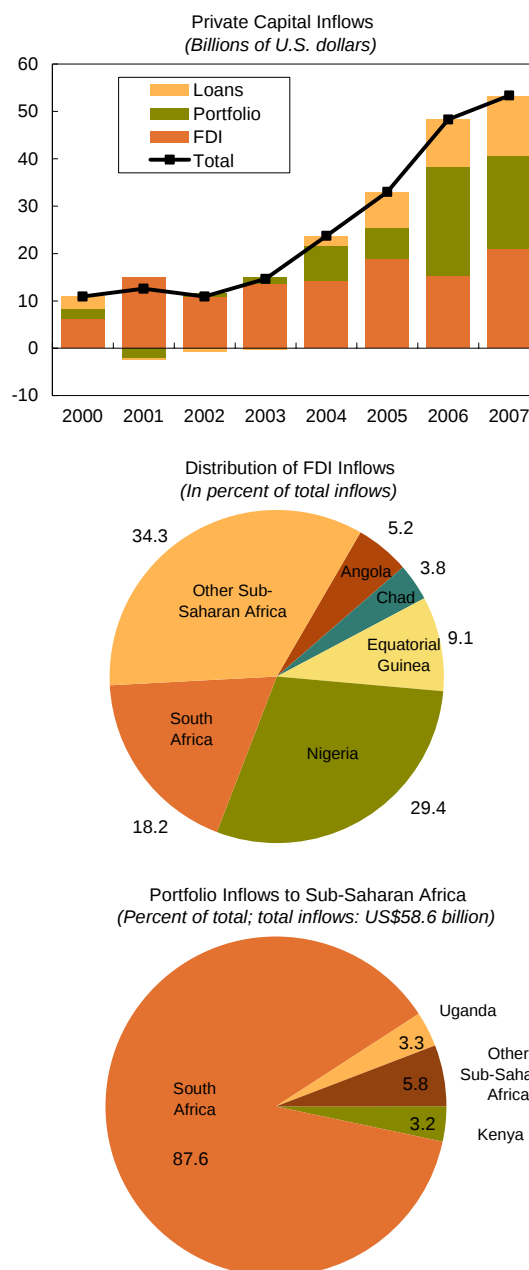
Private capital flows to sub-Saharan African countries have increased almost fivefold over the past seven years, from US\$11 billion in 2000 to US\$53 billion in 2007.³ The increase in portfolio flows to US\$23 billion in 2006 was particularly rapid, reaching about 14 times the 2003 level.⁴ Private debt flows have also increased rapidly since 2004. FDI remained fairly stable at about US\$15–21 billion. Nigeria and South Africa together accounted for 47 percent of total FDI flows; South Africa received 88 percent of the portfolio inflows (Figure 3.1).

Although relatively small in U.S. dollar terms, FDI and portfolio flows nevertheless represent a nonnegligible share of GDP and base money in about one-third of sub-Saharan African countries, particularly Gabon, Ghana, Kenya, South Africa, and Togo (Figure 3.2). In some countries, foreign holdings of domestic government debt are substantial: about 20 percent of the total in Nigeria, 11 percent in Ghana, 17 percent in Malawi, and over 14 percent in Zambia.

Beyond South Africa and Nigeria, private capital flows to non-resource-intensive low-income countries as a group have been increasing since

2004, both in dollar terms and as a share of GDP (Figure 3.3). In contrast, capital flows to resource-intensive countries have been declining as a share of GDP due to their rapid economic growth.

Figure 3.1. Sub-Saharan Africa: Capital Inflows, 2000–07



Source: IMF, African Department database.

³ The analysis in this chapter relies on data gathered for all sub-Saharan African countries and on case studies for seven countries (Cameroon, Ghana, Nigeria, Uganda, Senegal, Tanzania, and Zambia). The quality of data on capital flows is often poor. Financial account data on the balance of payments are of uneven quality: FDI data tend to be more reliable, but are often reported on a net basis, with little information on gross in- and outflows. Portfolio flow data usually do not allow for distinguishing between equity and debt investments, and private sector external debt is not well monitored in most countries. This may limit the robustness of this chapter's conclusions.

⁴ Based on preliminary estimates, portfolio inflows fell in 2007 to about US\$20 billion, largely due to a projected decline of about US\$4 billion in these flows to South Africa compared with 2006.

Figure 3.2. Sub-Saharan Africa: Capital Inflows, 2000–07
(Annual averages)

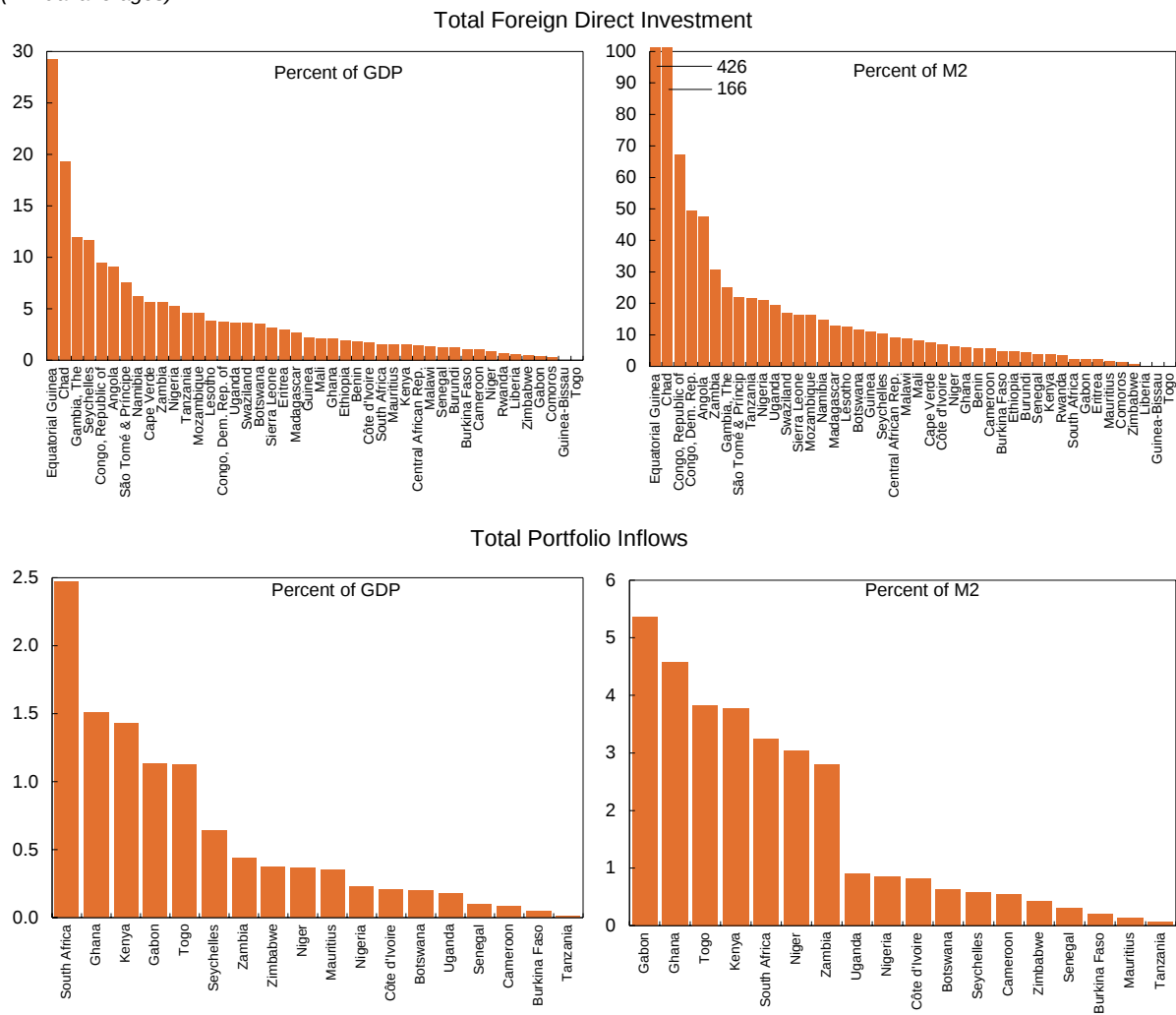
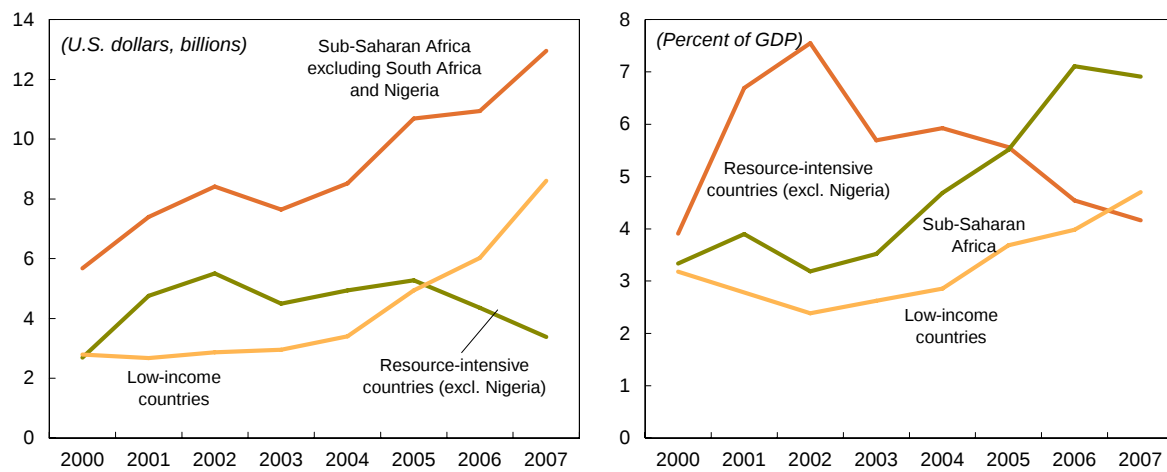


Figure 3.3. Sub-Saharan Africa: Total Private Capital Inflows, 2000–07



Capital inflows have been volatile, as measured by the ratio of the standard deviation of capital inflows to their average (Table 3.1). Total capital inflows to sub-Saharan Africa averaged 4.9 percent of GDP for 2000–07, with a standard deviation of 8.7 percent of GDP. FDI inflows were least volatile for the period whereas debt-creating inflows were most volatile.

Table 3.1. Private Capital Flows' Volatility, 2000–07

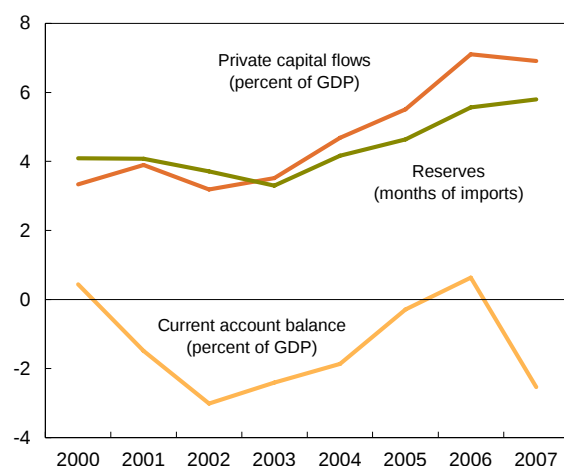
(Capital flows in percent of GDP)

	Mean	Standard Deviation	Volatility
Total inflows	4.9	8.7	1.8
FDI	12.7	7.0	0.6
Portfolio	0.2	0.9	3.8
Private debt	0.2	2.8	13.0

Source: IMF, African Department database.

The region's vulnerability to sudden reversals of private capital inflows seems to be limited by two factors. First, the inflows have been associated with stronger current accounts and a buildup of foreign reserves (Figure 3.4). Second, relatively stable FDI inflows represent about half of total inflows. Because physical investments take time to liquidate, the immediate vulnerability to a sudden reversal seems small. The more volatile portfolio flows are limited to a handful of countries with

Figure 3.4. Sub-Saharan Africa: Capital Inflows, Current Account, and Reserves, 2000–07



Source: IMF, African Department database.

relatively illiquid markets, and private debt flows are small.

Factors Influencing Capital Flows in Sub-Saharan Africa

“Push” versus “pull” factors

Both global “push” and local “pull” factors have been at play in the recent episode of capital inflows to sub-Saharan Africa. Although in practice it is difficult to assess their relative importance, such a judgment would help determine whether capital inflows are likely to be permanent or temporary. By their own account, investors' interest in Africa is driven by strong macroeconomic performance, improved governance and a more stable political landscape, debt relief, and rising commodity prices that have led to improved external and fiscal balances—as well as expectations of appreciating currencies (Goldman Sachs, 2008). In an environment of abundant global liquidity and search for yields, Africa is seen by some investors as the last “frontier” market. This interest is reflected in improved investment ratings and the renewed ability of some countries to tap international capital markets (Gabon, Ghana, and Seychelles have recently issued sovereign bonds internationally), as well as in the rising number of private investment funds dedicated to sub-Saharan Africa.⁵

The mounting interest of rapidly growing emerging market countries in securing natural resources is an additional factor promoting investment flows to Africa. China has made significant investments in oil and gas, mining, and infrastructure through FDI as well as financing

⁵ A number of the new Africa Funds aim to increase international investors' information about the region, while helping African firms access global markets. Examples include Renaissance Capital (Rencap); the Investec Africa Fund; the Duet Victore Africa Index Funds; the S&P/IFCG extended frontier 150 Index; the Nigerian Africa Finance Corporation (AFC); Pamodzi Investment Holding; and the AfriCap Microfinance Fund.

instruments. Chinese companies have successfully bid for oil blocks in a number of countries and embarked on major mining operations such as in the Belinga iron ore project in Gabon. In early 2008, a joint venture agreement was signed by three Chinese parastatals and a Democratic Republic of Congo parastatal to embark on a US\$9 billion resource mining and infrastructure project that will be financed by the China Export-Import Bank. Investment is also taking place through the financial sector. China's ICBC Bank acquired a 20 percent stake in Standard Bank, a leading South African bank with substantial operations all over Africa in a deal valued at US\$5½ billion. The two banks plan to establish a joint fund to invest in mining, metals, oil, and gas.

In Nigeria, China Development Bank and United Bank for Africa signed a memorandum of understanding to pursue similar opportunities throughout the continent.

These trends raise two related questions: first, whether Africa is rising to emerging market status, as compared, say, with Asian economies in the 1980s when the term was coined; and, second, whether foreign investors' interest would survive a global economic downturn. On the first issue, today's mature African markets seem to compare rather well with ASEAN economies in the 1980s (Box 3.1). This holds promise for the sustainability of private inflows in the medium term, though there are risks of a temporary downturn.

Box 3.1. Transition to Emerging Market Status: Where Does Africa Stand?

The term "emerging market" was coined in 1980 to refer to countries that had stock markets and were in transition toward having the features of the mature stock markets in industrial countries.¹ This box suggests that some African countries fit within the emerging market group and supports this view by benchmarking these African economies of 2007 against the ASEAN countries (Indonesia, Malaysia, Philippines, Singapore, and Thailand) of 1980, when the term "emerging market" entered the lexicon.

Selected African countries compare favorably with the ASEAN countries of 1980. The ASEAN countries were already experiencing strong economic growth. Yet, in many other respects, the ASEAN countries looked quite different from what we see today. Inflation rates were still high in some cases, the depth of their financial sectors was limited, foreign direct investment had yet to accelerate, and their financial resources, reflected in international reserves, were adequate but not high. Many African countries have perhaps reached broader macroeconomic stability than the 1980 ASEAN benchmark. Growth is strong, inflation moderate, and international reserves relatively high. Like ASEAN, financial depth remains limited. Foreign direct investment is quite high, although this is in large part a reflection of the larger share of natural resources such as oil in the case of African countries.² Debt-to-GDP ratios are low.

The scale of the policy challenges and the environment for the emerging markets in Africa is, however, dramatically different from that facing ASEAN in 1980. First, consider the nature of investment vehicles and

Selected Economic Indicators: ASEAN 1980 and Africa 2007

	ASEAN 1980	Selected African Countries 2007 ¹	Sub-Saharan Africa 2007
GDP (growth rate in percent)	7.3	6.4	6.6
Inflation (average in percent)	17.0	7.1	7.9
Financial depth (M2/GDP in percent)	27.2	27.9	52.4
Size of government (expenditure, percent of GDP)	19.4	22.8	25.1
International reserves (months of imports)	3.6	10.0	5.8
Debt (percent of GDP)	3.4	9.9	23.2
Foreign direct investment (\$ billion) ²	2.6	13.0	31.8
Portfolio flows (\$ billion) ²	0.2	0.9	18.8

Sources: IMF, *International Financial Statistics*, African Department database.

¹ Botswana, Ghana, Kenya, Mozambique, Nigeria, Tanzania, Uganda, and Zambia.

² For sub-Saharan Africa, 2007 data are IMF staff estimates.

Box. 3.1 (concluded)

financial technology. Portfolio flows in the ASEAN countries were largely about equity markets using conventional “buy and hold” strategies and, in some instances, sovereign foreign currency issues. These flows were relatively long term and grew steadily. Today, institutional investors in Africa are involved in a broad range of financial market activities, including domestic bond and foreign exchange markets, through both physical and derivative instruments. Second, a big-bang introduction of financial technology contrasts with the ASEAN emerging market experience; they saw financial market complexity grow in a measured way over many years. Financial technology is transferred to today’s emerging markets more or less simultaneously with its development in more sophisticated markets. Hence, complex financial instruments are being introduced into African markets that are at a far less mature stage in market and economic development. The “technology transfer” from emerging markets elsewhere into the nascent emerging markets of Africa is limited only by the severe constraints of market depth as well as the regulatory and market infrastructures.

Africa’s candidates for emerging market status are thus following the path of earlier emerging markets but at a much faster pace. This investor interest will continue to bring tremendous opportunities to African economies that can attract these flows. Yet the changed global environment poses a significant challenge for policymakers to keep pace with these developments. The failure to maintain macroeconomic, regulatory, and supervisory policies commensurate with rapidly changing financial markets raises the possibilities of market volatility and setbacks.

Note: This box was prepared by David Nellor.

¹ Staff of the International Finance Corporation initiated the term “emerging market.”

² In the case of ASEAN economies, capital inflows mostly financed export-oriented manufacturing sectors. Inflows may have initially been small but, together with other policies, they helped progressively increase value added and export competitiveness.

On the second point, Africa is clearly participating in the global surge of private capital flows to emerging and developing economies,⁶ but domestic pull factors are also important. Preliminary econometric analysis indicates that domestic characteristics have helped attract private capital flows to sub-Saharan Africa (Box 3.2). Results of simple cross-country regressions underscore the importance of solid economic performance, but suggest that capital market infrastructure, market size, and the business environment also influence investor decisions to allocate capital to the region. This is consistent with the results of similar studies using large samples of developing countries (Alfaro, Kalemli-Ozcan, and Volosovych, 2005b; Faria, Minnoni, and Zaklan, 2006; Faria and Mauro, 2004; and

IMF, 2007d), which have found that the level of economic development or growth performance and the quality of institutions are important determinants of capital inflows.

The surge in private inflows is too recent to draw definitive conclusions about its impact on macroeconomic stability and growth, but the results are encouraging: the factors that drive capital flows have also been empirically associated with improved productivity and growth (Alfaro, Kalemli-Ozcan, and Volosovych, 2005b), and with lower macroeconomic volatility (IMF, 2007c). There is also evidence that the composition of capital flows matters, with FDI and portfolio equity investments found to be more stable and associated with positive growth outcomes

⁶ See for example IMF (2007d); and Kose and others (2006).

Box 3.2. Domestic Determinants of Private Capital Inflows to Sub-Saharan African Countries

The estimation results for the determinants of total capital flows and foreign direct investment (FDI) are shown below. Regarding total capital flows, the preferred specification (table, fourth column) includes macroeconomic performance (both real GDP growth and fiscal balance), the index of securities market development, and a dummy for South Africa and Nigeria (a proxy for market size). The preferred model for FDI is somewhat different: there, growth performance, the quality of the business environment, and a dummy variable for oil producers are significant. The Chinn-Ito (2007) measure of capital account openness is never significant (but is correctly signed), possibly reflecting low effectiveness or weak implementation of capital account restrictions.

The different roles of institutions and financial market development are worth highlighting. The development of securities markets appears to have a significant impact on the allocation of capital flows, but particularly portfolio inflows. Market size, proxied by a dummy variable for South Africa and Nigeria matters for total flows but not for FDI. On the other hand, after controlling for oil-producing countries, the quality of the business environment (proxied by the World Bank's 2007 Doing Business Index¹) seems to matter more for FDI.

Domestic Determinants of Private Capital Inflows to Sub-Saharan African Countries, 2000–06										
Variable			Total Private Capital Inflows ¹						FDI Inflows ¹	
	Coeff.	Prob.	Coeff.	Prob.	Coeff.	Prob.	Coeff.	Prob.	Coeff.	Prob.
	(1)		(2)		(3)		(4)		(5)	
Output growth ²	0.21	0.01	0.23	0.00	0.22	0.00	0.23	0.00	0.26	0.02
Fiscal balance, excl. grants ²	0.09	0.01	0.07	0.01	0.05	0.10	0.06	0.01		
Securities markets ³			0.77	0.00	0.71	0.00	0.66	0.00		
Capital account openness			-0.17	0.34	-0.17	0.38	-0.12	0.54	-0.07	0.84
Business environment					-0.01	0.51	-0.00	0.98	-0.03	0.01
S. Africa and Nigeria dummy							2.28	0.05		
Oil producer dummy					0.85	0.27			2.58	0.02
Constant	4.04	0.00	2.42	0.00	3.04	0.03	2.51	0.07	6.22	0.00
Adjusted R-squared	0.28		0.55		0.55		0.58		0.30	

Sources: IMF, African Department database; IMF staff estimates.

¹ Total private capital inflows comprise FDI, portfolio, and debt inflows. Both explanatory variables have been averaged over 2000–06 and are measured in logarithmic units of their U.S. dollar values. Coefficient estimates (coeff.) and significance levels in percent (prob.) reported for various specifications.

² 2000–06 annual averages. Fiscal balance measured as a percent of GDP.

³ The index measures the development of countries' treasury bill, treasury bond, corporate bond, and equity markets. For each market, the index receives a value of 1 if the market is well developed (otherwise zero). We sum the index values across the four markets for each country.

¹ Available on the Internet at www.doingbusiness.org.

relative to debt-creating flows. More specifically, the recent literature on the growth benefits of capital flows suggests that they depend on a number of factors: (i) initial conditions or thresholds, in terms of macroeconomic stability, domestic financial markets development, and quality of institutions (governance and protection of property rights); (ii) the composition of capital inflows; and (iii) the macroeconomic policy response to the inflows, and in particular whether large overvaluations and their detrimental effects

on exports and production structure can be resisted or avoided (Box 3.3; Edison and others, 2004; Gourinchas and Jeanne, 2007; IMF, 2007f; Kose and others, 2006; and Prasad, Rajan, and Subramanian, 2007). Similar factors have also been shown to affect the impact of capital flows on macroeconomic volatility and crises in developing countries. Although the overall empirical evidence is mixed (Edwards, 2005; Kose, Prasad, and Terrones, 2007; and Kose

Box 3.3. Are Capital Flows Good for Growth?

Evidence from aggregate data

The evidence from empirical studies using aggregate data is inconclusive with some puzzling results (Edison and others, 2004; Kose and others, 2006; IMF, 2007d; and Prasad, Rajan, and Subramanian, 2007, provide comprehensive reviews of the empirical literature on the economic impact of capital flows). Not only does capital flow from poor to rich countries (the Lucas paradox: see Alfaro, Kalemli-Ozcan, and Volosovych, 2005b, for a discussion), but among developing countries, it also flows more to countries with a lower marginal product of capital and lower productivity growth (the allocation puzzle: see Gourinchas and Jeanne, 2007). The fastest-growing developing countries are those that use foreign capital the least—i.e., the ones with a current account surplus. This suggests a stronger link between savings and growth than between investment and growth.¹ A possible explanation of this puzzle is trade: fast-growing countries also are the ones that experienced a takeoff in their export sector—associated with capital outflows (Gourinchas and Jeanne, 2007). If capital inflows lead to higher prices for nontraded goods owing to absorptive capacity constraints, and thus to overvaluation, they will have a negative impact on growth (Kose and others, 2006; Prasad, Rajan, and Subramanian, 2007).

FDI and growth

Stock market liberalizations have been found to reduce the cost of capital and to have a positive impact on investment and growth (Bekaert, Harvey, and Lundblad, 2005; Henry, 2006). In a rare study of African stock markets, Collins and Abrahamson (2005) show that the cost of equity has declined in most sectors and countries, owing to improved risk perceptions. There is also evidence that countries with a higher share of FDI in external liabilities experience faster growth (IMF, 2007b; Moran, Graham, and Blomström, 2005).

Indirect or collateral benefits of capital flows

Klein (2005) finds support for a model in which institutional quality intermediates the impact of capital account liberalization on growth by affecting the extent to which savings are protected from expropriation and the premium borrowers pay for funds from abroad. In countries with better institutions, capital account openness has a significant positive impact on growth (see also IMF, 2007c). Using firm-level data, Alfaro and Charlton (2007) find a significant relationship between entrepreneurial activity and both de jure and de facto international capital integration. Their results suggest that foreign capital may improve access to capital either directly or through improved domestic financial intermediation.

Institutional and financial development threshold

Bekaert, Harvey, and Lundblad (2005) find that the largest growth response to equity market liberalizations accrues to countries with better legal systems, above-average financial development, and better-quality institutions in terms of investor protection and accounting standards. Similarly, Chinn and Ito's (2006) findings suggest that financial openness spurs equity market development only if a threshold level of legal development has been attained. Using industry-level data, Prasad, Rajan, and Subramanian (2007) indicate that for countries that have above-median levels of financial development, foreign capital aids the relative growth of those industries dependent on finance. But for countries below the median for financial development, the effect of foreign capital inflows is diametrically opposite.

¹ The allocation puzzle continues to hold after taking into account official aid flows, which are negatively correlated with productivity growth. Adjusting for aid, capital flows are at best unresponsive to differences in long-term productivity growth (Gourinchas and Jeanne, 2007).

and others, 2006), some studies suggest that, above a certain level of institutional quality and governance, capital mobility is associated with

lower volatility of both consumption and output growth (Alfaro, Kalemli-Ozcan, and Volosovych, 2005a; Bekaert, Harvey, and Lundblad, 2006; IMF,

2007c). Conversely, in countries with underdeveloped financial systems, low governance, and trade restrictions, capital flows may be associated with greater economic volatility and a higher probability of crisis (IMF, 2007d).

Trends in capital controls and capital account liberalization⁷

Capital flows to sub-Saharan African countries are surging in an environment of significant de jure capital account restrictions—de facto financial integration seems to be outpacing de jure capital account openness.⁸ The regulatory framework for capital account transactions in most sub-Saharan African countries still largely reflects the perceived need to limit outward capital mobility in the context of historically low reserves. As a result, developing countries, including those in Africa, tend to restrict capital flows more than higher-income countries where financial systems are developed and policies are more market oriented. However, this is gradually changing even in Africa.

At present, frameworks for regulating capital account transactions in sub-Saharan African countries remain highly complex and nontransparent, limiting their effectiveness. Combined with administrative weaknesses and limited capacity to monitor the inflows, this has led to uneven and inconsistent application of exchange controls. Inconsistencies between different regulations have also made capital controls relatively easy to circumvent. This could explain why it is difficult to establish an empirical relation between capital controls and capital flows in sub-Saharan Africa (as shown in Box 3.2). In practice, countries that have received the bulk of portfolio inflows include those that have no capital controls (Uganda and Zambia) as well as

those where debt and equity flows are subject to comprehensive de jure controls (e.g., Mozambique; details are provided in Table A3.1), which suggest that other factors are also important for guiding capital inflows.

Although there has been no coherent policy approach toward capital account liberalization, there is nevertheless evidence that longer-term transactions have often been liberalized before short-term flows. For example, more African countries have liberalized bond transactions than money market transactions. Furthermore, there is some indication that in Africa FDI inflows have been liberalized more often than other inflows and outflows, compared to other regions. The speed of capital account liberalization has differed significantly between countries. Some African countries liberalized in one go (Uganda), others more gradually (Ghana, Nigeria, and Zambia), and the rest barely at all (Angola, Burundi, Ethiopia, and Mozambique). In a third group of countries, some transactions have been liberalized de jure, but in practice restrictions remain (foreign exchange shortages have forced Seychelles and Zimbabwe to limit the repatriation of profits or investments).

The complexity of capital controls in sub-Saharan Africa has probably contributed to shaping the composition of inflows, and Ghana's example illustrates that a deliberate and well-sequenced capital account liberalization strategy can successfully tilt the composition of inflows toward longer-term maturities. Successful capital account liberalizations (e.g., Ghana, but also Nigeria and Zambia) have been part of an overall macroeconomic and financial sector reform strategy, consistent with the IMF's integrated approach to sequencing of capital account liberalization (Ishii and Habermeier, 2002; Figure 3.5).⁹ That is, less volatile flows and those

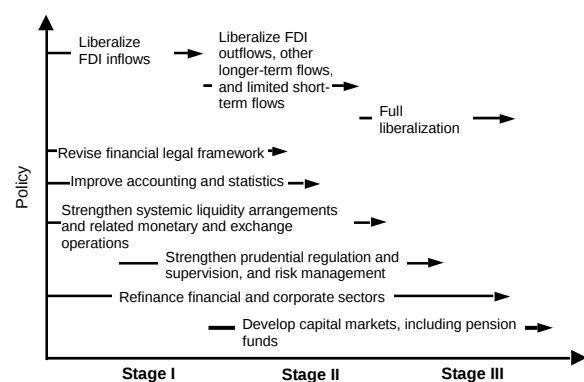
⁷ This section relies on information from the IMF's Annual Report on Exchange Arrangements and Exchange Restrictions (AREAER) database.

⁸ In this study, capital account or financial openness refers to the de jure status of regulations affecting capital account transactions. Financial integration refers to the de facto degree of openness as measured by the actual size of capital inflows a country is experiencing.

⁹ This does not mean that one-step liberalizations have not or cannot be successful (e.g., Uganda). However, in Uganda's case, the capital account liberalization was also part of a broader macroeconomic and structural reform strategy.

that are most beneficial for growth (such as FDI inflows) should be liberalized first, while longer-term capital flows and perhaps limited short-term flows would be liberalized in the second stage. Full liberalization would be achieved in the final stage.

Figure 3.5. Sequencing of Capital Account Liberalization



Source: Ishii and Habermeier (2002).

Capital and financial market development

Even with excess global liquidity, portfolio flows to sub-Saharan Africa have been concentrated in the relatively small number of countries that have more sophisticated financial markets. South Africa, which has the most developed capital and financial markets, attracts substantial portfolio capital into its equity and debt markets, including some from Global Emerging Markets (GEM) portfolio funds. The other current favorites include Botswana, Ghana, Kenya, Nigeria, Uganda, and Zambia.¹⁰ In these countries, foreign investors target selected equity and bond issues, including initial public offerings by private enterprises and long-term bond issues. A recent wave of cross-border banking investments and the emergence of global banks suggest potential for increasing integration in international capital markets (Box 3.4).

¹⁰ It is not yet clear how the recent political turmoil will affect Kenya (and the whole region) as a favorite destination for investment.

The degree of capital and financial market development is an important factor in attracting portfolio capital (Table 3.2). Where the financial sector is sufficiently developed, foreign investors can channel their capital through a variety of instruments, including equity shares, government bonds, corporate bonds, and collective investment schemes (CIS), which they can buy on first issuance or subsequently in the secondary market. Where markets exist, capital inflows will depend on such factors as the depth and liquidity of the markets, and the perceived risks and returns on investment (which could be affected by information asymmetries). The October 2007 *Global Financial Stability Report* shows that, in a panel of 15 industrial and 41 emerging economies, capital inflows increase along with market liquidity and financial openness (IMF, 2007c).

For the vast majority of sub-Saharan African countries, the absence of capital and financial markets, the lack of depth and liquidity where there are such markets, and the absence of debt management and issuance strategies seem to be the main constraints on portfolio flows. Of the 44 sub-Saharan African countries, only 22 have established equity markets, and of these, only 9 markets have more than 20 listings.¹¹ Besides the small size of the overall market, the small volume of issues in the primary markets limits entry. The modest capitalization of listed equities also limits the foreign funds that can come in through equity markets. As for government securities, about 30 sub-Saharan African countries issue or have issued treasury bills and 20 issue bonds. However, bond markets for the most part consist of only a handful of small issues, and there are no

¹¹ The nine countries are Botswana, Côte d'Ivoire (WAEMU), Ghana, Kenya, Mauritius, Namibia, Nigeria, South Africa, and Zimbabwe.

Box 3.4. Recent Cross-Border Banking Investments

Cross-border foreign direct investment (FDI) in the banking sector, although still small in volume, along with the emergence of global banks in sub-Saharan Africa, may strengthen regional financial market development and integration in a way that extra-continental investments have not.

Within the envelope of flows into the banking sector, the major recipients and sources of FDI are South Africa and Nigeria, followed distantly by Kenya; Togo is a source but not a recipient. South Africa was a major recipient, mainly because Barclays Bank (U.K.) acquired a controlling stake in the bank ABSA South Africa in 2005, and the Industrial and Commercial Bank of China recently invested in South Africa Standard Bank (Stanbic). South Africa is also an important source of outward investments into sub-Saharan Africa, largely through the sustained expansion by Stanbic, which recently made acquisitions in Ghana, Kenya, Malawi, Nigeria, and Uganda.

Nigeria attracted substantial inflows into its banks after the consolidation and recapitalization of its banking system, completed in December 2005. At the same time, Nigerian banks have expanded rapidly into the rest of west Africa. Kenya has been a recipient of foreign investment from Stanbic and an outward investor into Sudan through the expansion of Kenya Commercial Bank and into Rwanda through the expansion of FINSA. Togo is an investor through the expansion of Ecobank Transnational Incorporated, which is present in 16 sub-Saharan African countries. Other emerging players include the Bank of India and the Moroccan Attijari-Wafa Bank.

Cross-border banking investments in sub-Saharan Africa have been boosted by mergers and acquisitions, associated with privatization, regulatory changes for minimum capital, and intensified domestic competition. Privatization of state-owned banks provided opportunities for attracting foreign investment in Uganda, Mozambique, Ghana, Kenya, and Zambia. The increase in minimum regulatory capital in Nigeria, Ghana, and Zimbabwe also forced foreign bank subsidiaries to attract additional equity injections from parent companies and to seek mergers and acquisitions. Intensified competition in both South Africa and Nigeria pushed these countries' major banks to seek greater opportunities outside their national borders and has resulted in additional mergers and acquisitions.

meaningful secondary markets. Thirteen sub-Saharan African countries have issues of corporate bonds, often stocks of foreign banks, but there are no real markets and there is no secondary trading.

Except for South Africa and a few other sub-Saharan African countries (e.g., Botswana, Nigeria, and Tanzania), local equity and bond markets are dominated by domestic institutional investors—pension funds and insurance companies—whose main objective is to match the maturity of their liabilities with longer-term assets. This has often led to buy-and-hold strategies that slow the development of liquid markets. These investors have traditionally invested in real estate, term bank deposits, and treasury bills. Financial sector reforms in many sub-Saharan African countries have altered the landscape for investors by bringing into the market local asset management

firms, among others. This tends to increase trading activity and liquidity in local equity and bond markets.

Besides the limitations posed by the size of capital markets in sub-Saharan African countries, other factors complicate transactions in these markets. Although many countries have already strengthened the regulation and supervision of capital markets, much more needs to be done to adequately address investor needs:

- *In equity and corporate bond markets*, progress in enforcing accounting and auditing standards has been slow, undermining the value of disclosed information, and in most of the countries there are no rating agencies to provide information on the credit risk of corporate issuers.

Table 3.2. Private FDI and Portfolio Inflows and Capital Market Development

Capital inflows as a percent of GDP	Capital Market Structure ¹				
	All four markets	Treasury bill and treasury bond markets, and corporate bond or equity markets	Treasury bill and treasury bond markets	Treasury bill market	No markets
Less than 2		Benin Burkina Faso Mauritius Zimbabwe Rwanda ²	Senegal	Ethiopia ³ Guinea ³ Guinea-Bissau Madagascar Malawi	Burundi Cameroon Central African Rep. Comoros Gabon ³ Liberia Niger Eritrea
2–5	Botswana ³ Ghana Kenya South Africa Swaziland Tanzania	Cape Verde Mozambique	Côte d'Ivoire ^{3,4}	Congo, Democratic Rep. ³ Lesotho Sierra Leone Togo	Mali
5–10	Namibia ³ Nigeria ³ Uganda Zambia ³		Angola ³ Gambia, The Seychelles		São Tomé & Príncipe ³
Above 10					Chad ³ Congo, Republic of ³ Equatorial Guinea ³

Sources: Lukonga (forthcoming); IMF African Department database; and IMF staff calculations.

¹For each country, only well-developed markets have been considered.

²A market for treasury and corporate bonds was established in January 2008.

³Resource-intensive.

⁴Côte d'Ivoire does not have a treasury bill market, but it does have an equity market.

- Until recently domestic government securities markets have been dominated by short-term treasury bills that domestic banks purchase for liquidity management purposes. Development of long-term bond markets has intensified in the last few years but secondary trading is still limited or nonexistent.

Evidence from Country Case Studies

The case-study countries—Cameroon, Ghana, Nigeria, Senegal, Tanzania, Uganda, and Zambia—represent sub-Saharan Africa's main regions and cover francophone (Cameroon and Senegal) and anglophone countries, and resource-rich (Cameroon, Ghana, Nigeria, Senegal, and Zambia) and resource-poor countries (Tanzania

and Uganda).¹² They have also been chosen for the diversity of their experience in terms of type and volume of capital inflows, capital account liberalization, and financial market development. In most of them, capital flows have risen sharply in recent years although they are not always accurately captured in official data (Figure 3.6).¹³ This section first looks at the determinants of the size and composition of capital flows in the case-study countries, then discusses the policy challenges and policy responses, and concludes by

¹² Country case studies can be found in Appendix 3.1.

¹³ In Zambia portfolio flows picked up in late 2005 but leveled off in 2006 owing to uncertainty related to the September presidential elections. They took off again in the second quarter of 2007. In Cameroon, FDI inflows associated with the construction of the Chad-Cameroon pipeline peaked in 2002. In Nigeria, portfolio flows became significant in 2007.

drawing preliminary conclusions about their economic impact.

The case-study countries are at different stages of capital account liberalization (Table A3.2), ranging from significant restrictions (Cameroon and Senegal) to partial opening (Ghana, Nigeria, and Tanzania) to full openness (Uganda and Zambia). Ghana is in the midst of a gradual well-sequenced opening that started in the 1990s with partial liberalization of portfolio and FDI flows and continued in 2006 with the partial opening of the government securities market to foreigners. Nigeria's liberalization started in the mid-1980s with FDI flows and is now almost complete. Tanzania liberalized FDI flows in the 1990s but maintains restrictions on portfolio flows. In Cameroon and Senegal, capital account regulations have not changed in years and there are no plans for further opening. Among the liberalizers, Nigeria, Uganda, and Zambia opened their capital accounts in the mid-1990s—Uganda in a one-shot episode, and Nigeria and Zambia more gradually. In all the countries except Cameroon and Senegal capital account liberalization was part of a more comprehensive reform process.

The stages of financial market development also differ among the seven countries. Ghana, Nigeria, Tanzania, Uganda, and Zambia are developing their markets rapidly (Lukonga, forthcoming). They have, to varying degrees, made progress in building all segments of the financial market: government securities, corporate bonds, equity, and interbank money and foreign exchange markets. Secondary markets, however, are virtually nonexistent and instruments and trading are thin in some primary markets. All five countries have active government securities markets, offering both short- and medium-term maturities. Corporate bond markets are very thin in all countries, and equity markets tend to be concentrated, with little primary trading and no secondary markets. At the other extreme are Cameroon and Senegal, where a number of markets are missing and others are in their

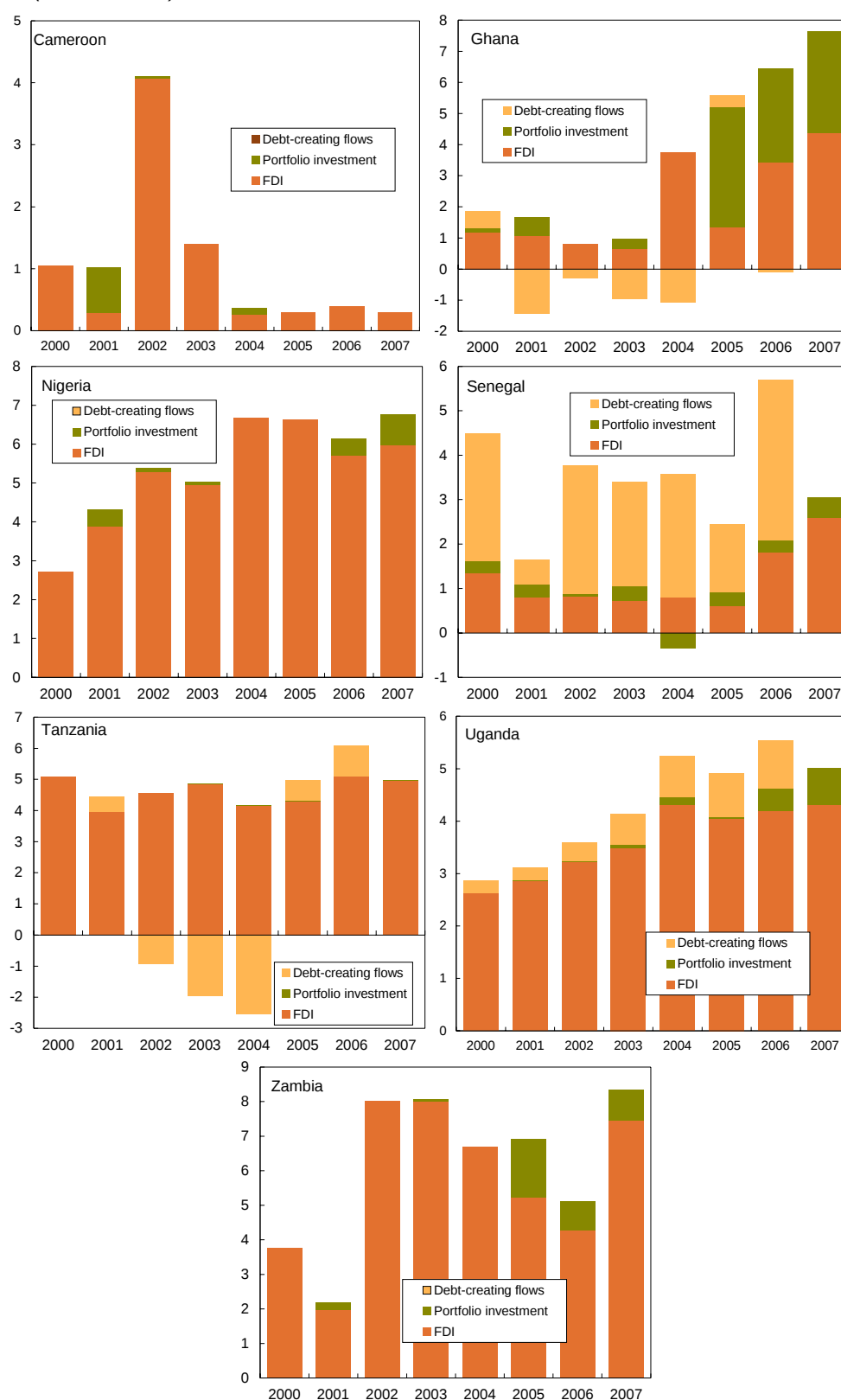
infancy. There is a functioning regional bond market in the WAEMU, of which Senegal is a part, but the CEMAC has no such market. There are also embryonic regional stock markets in both regions but both Senegal and Cameroon have minimal activity. Interbank money markets are equally embryonic, and there is no interbank foreign exchange market in either country.

Capital market infrastructure and, in some countries, the process of capital account liberalization seem to have affected the composition of inflows in the countries studied.

The bulk of FDI flows to sub-Saharan Africa were driven by the expectation of high returns from exploitation of natural resources, as was true to some extent in Cameroon, Ghana, Nigeria, Senegal, and Zambia. In Senegal, the combination of debt relief and a significant improvement in investors' perceptions of the business environment led both to a substantial increase in FDI volumes and to diversification of FDI to other sectors of the economy. By contrast, in Cameroon, the poor business environment and underdeveloped financial sector limited FDI to oil projects. In Nigeria, the sheer size of the oil sector explains why the country is the largest single FDI recipient in sub-Saharan Africa (Figure 3.1 above). In the two nonmineral exporters, Tanzania and Uganda, early efforts to improve the legal framework for private domestic and foreign investment, together with macroeconomic stability, were quite successful in attracting substantial amounts of broad-based FDI. Interestingly, a significant share of FDI appears to be directed to manufacturing, which has been associated empirically with a positive effect on economic growth (Aykut and Sayek, 2007).¹⁴

¹⁴ Recent survey data show that in 2005 the share of total FDI in manufacturing was about 30 percent of the total in Uganda and 13 percent in Tanzania. Martin and Rose Innes (2004) also find that FDI in other non-resource-intensive countries in sub-Saharan Africa (Ghana, Malawi, The Gambia) is benefiting a range of economic sectors.

Figure 3.6. Selected Sub-Saharan African Countries: Composition of Capital Flows
(Percent of GDP)



Source: IMF, African Department database.

Portfolio flows went to countries with better-developed financial markets. In particular, the availability of investment vehicles (mostly government securities), together with the expected return on such instruments has been important. In Tanzania, because nonresidents are not allowed to hold government securities, resources from foreign investors were invested in treasury bills and bonds indirectly, with commercial banks serving as intermediaries. In Ghana, the surge in portfolio inflows coincided with the opening of the government securities market to foreign investors, and in Zambia, with the introduction of longer maturities for government bonds. In Nigeria, portfolio flows followed large debt relief/debt restructuring operations and renewed confidence in the country's economic prospects. In Cameroon and Senegal, embryonic capital markets and capital account restrictions mean there is no investment outlet for portfolio flows.¹⁵

Private debt-creating flows are significant only in Senegal, where they amounted to 2–3 percent of GDP a year in the first half of the decade; they rose sharply in 2006 along with the increase in FDI.

In most case-study countries there are significant shortcomings in the capacity of the authorities to adequately monitor the private inflows, in particular portfolio and debt-creating flows. Foreign resources channeled through local intermediaries to purchase government securities cannot be monitored in Tanzania and Uganda, but the data are of reasonably good quality in Ghana (unlike other private flows), albeit available only

with long lags.¹⁶ Nigeria has only limited capacity to monitor portfolio inflows, while Zambia is the only country in the case-study group where private capital flow data are compiled, including for portfolio flows, by the central bank and the stock exchange on a monthly basis. All countries except Nigeria and Senegal have received assistance from the Foreign Private Capital Capacity Building Program (FCP CBP) to introduce broad-based enterprise and bank surveys in order to improve their capacity to monitor private flows (Box 3.5).

The policy challenges associated with private capital inflows have been similar across countries, but the policy responses have varied depending on the monetary and exchange rate regime (Table A3.2). In the countries with hard pegs—Senegal and Cameroon—the inflows did not have a substantial impact on inflation or the real exchange rate. Constrained by structural weaknesses, domestic credit growth has not responded and excess liquidity has increased, particularly in Cameroon. In Senegal, FDI flows appear to be financing a widening current account deficit, in part due to the high import content of FDI. A key policy challenge for the five countries with more flexible exchange rates has been to contain inflation while keeping the exchange rate in check. Because it was unclear at first whether the inflows would be temporary or permanent, the inflows were initially sterilized. As the costs of sterilization rose (and possibly attracted further inflows), some countries resorted to unsterilized intervention. Ultimately, these countries had to allow more flexibility in their monetary or exchange rate targets. The policy response was

¹⁵ In all case study countries except Cameroon, private capital inflows closely followed HIPC/MDRI and other debt relief, which itself was mostly conditional on strong economic policies. On the other hand, the timing of debt relief also coincided with a surge in commodity prices and global liquidity.

¹⁶ At this time, estimates of such flows can only be made based on commercial bank purchases of government securities. A study of commercial bank liabilities to nonresidents and foreign investment funds or possible intermediaries would be needed to more accurately identify portfolio flows.

Box 3.5. The Foreign Private Capital Capacity-Building Program

The Foreign Private Capital Capacity-Building Program helps developing country governments build capacity to monitor and analyze the effects of foreign private capital to facilitate the design of policy responses and promote sustainable development. The program, which is donor-financed and demand-driven, is implemented by Development Finance International, a small technical assistance organization based in London, in conjunction with regional institutions such as the Central Bank for West African States, the Macroeconomic and Financial Management Institute of East and Southern Africa, and the West African Institute for Financial and Economic Management.

Foreign private capital flow studies for Cameroon (2006), Ghana (2003), Tanzania (2004–05), Uganda (2003, 2004), and Zambia (2004) are available at www.fpc-cbp.org. Updated surveys for Ghana and Zambia are being launched in 2008, and surveys for Uganda and Tanzania are being finalized. Other countries in the region that have been covered so far are Burkina Faso, The Gambia, and Malawi. The surveys cover all banks and representative samples of enterprises in all sectors of the economy. They gather information on all types of foreign flows, broken down by origin, destination, and maturity, and on investors' assessment of the business climate.

further complicated by the fact that the surge in private capital inflows coincided with increases in commodity and oil prices (Cameroon, Ghana, Nigeria, Senegal, and Zambia) and with large official inflows (Uganda and Tanzania).

- In Tanzania, Uganda, and Zambia, the surge in portfolio inflows complicated the conduct of monetary and exchange rate policy. All three countries have a reserve money target and a managed exchange rate float. At the onset of the surge, Tanzania and Uganda fully sterilized the inflows, but this policy rapidly proved costly and may have attracted further inflows by keeping yields high.¹⁷ Reserve money growth targets were exceeded in all countries (though only by a small margin in Tanzania). Uganda allowed some nominal (and real) appreciation, but there were concerns about export competitiveness and the high costs of sterilization. A brief resort to unsterilized interventions led to higher-than-programmed reserve money expansion. In Zambia, inflows coincided with a large increase in copper prices, which led to a real appreciation. Subsequently, sterilization operations intensified but the limitations to

the monetary policy instruments complicated liquidity management. Tanzania, Uganda, and Zambia also used the inflows to build up foreign reserves.

- In Nigeria, the inflows occurred in the context of sharply rising oil prices, deepening financial markets, increasing intermediation, and shifting money demand, which made it difficult to focus on the reserve money target and led to nominal and real exchange rate appreciation. This eventually prompted further exchange rate flexibility and the beginning of a transition toward inflation targeting. The inflows also seem to have fostered a number of positive developments: interbank foreign exchange markets deepened and interest rates on government securities were reduced. Unlike in the other case-study countries, foreign inflows were also directed to the banking sector, where foreigners have invested over US\$11 billion (also see Box 3.4).
- In Ghana, the inflows coincided with a significant increase in imports, which dampened their impact on the real effective exchange rate but also, because of widening fiscal and current account deficits and relatively low reserves, increased vulnerability to a sudden reversal of the flows.

¹⁷ In Tanzania, the central bank aborted its planned sales of foreign exchange for mopping up domestic liquidity, which were aimed at relieving pressure on treasury bill yields.

For the case-study countries, the short-term evidence on the economic impact of the capital inflows is mixed. In Ghana, there are indications that the foreign purchases of government securities have helped finance the current account deficit (i.e., consumption). In Tanzania, Uganda, and Zambia, much of the inflows were initially sterilized, limiting their economic contribution.¹⁸ However, in Tanzania it was not possible to absorb the inflows in any other way because they coincided with large aid flows; and Zambia needed the additional reserves.

The success of Ghana in attracting foreign investors to medium-term instruments through the design of capital controls illustrates that institutional and financial sector policies can help tilt the composition of inflows toward longer-term flows. Tanzania, Uganda, and Zambia have also been able to lengthen the maturities held by foreign investors by issuing longer-term instruments—the result of financial sector reforms and the ability to maintain a credible, stable macroeconomic and political environment. Lengthening maturities helps reduce both rollover risks and maturity mismatches in the financial sector, because longer-term bonds better match the liability structure of domestic institutional investors.

Although the subprime crisis has so far had only a limited impact on the case-study countries (and on sub-Saharan Africa in general), this is as of now an untested risk. The lack of notable outflows partly reflects thin financial markets¹⁹ and the generally low degree of financial globalization, combined with solid fundamentals. It also reflects the (perceived) lack of correlation with risks in emerging markets. Nevertheless, portfolio inflows to Ghana, Uganda, and Tanzania all weakened in August 2007, and in Zambia they temporarily

reversed. Minimum holding periods for government securities for foreign investors in Ghana may have helped avert an immediate reversal of inflows. In Uganda, there are indications that foreign investors might be in for the longer term in anticipation of the forthcoming oil exploitation. In Nigeria the subprime crisis has so far had no measurable effect, as evidenced by the pickup in government securities trading in the third quarter of 2007. The situation may change, however, as the global financial crisis unfolds.

Lessons and Policy Agenda for Sub-Saharan Africa

The trend toward closer integration of sub-Saharan Africa into global financial markets is poised to continue. While FDI still largely flows to resource-rich countries, there are indications that non-resource-intensive countries are attracting FDI to a broad set of economic sectors. Portfolio inflows to a small group of “frontier” markets are also rising rapidly. Together, these flows are already larger than official aid. This investor interest brings tremendous opportunities, but sub-Saharan African policymakers also face particular challenges in managing the inflows.

Sound macroeconomic management, transparent capital account policies, and financial sector reforms will be needed to ensure that the inflows go to productive uses while avoiding macroeconomic instability and the buildup of vulnerabilities. Improving the capacity to monitor the inflows is critical: the authorities need accurate and timely data on the size, composition, and maturity of the inflows to design an appropriate policy response. Better data would also improve understanding of the economic impact of the inflows.

¹⁸ If the purchase of government securities was financing a fiscal expansion, then the composition of government spending would matter, but the expansion would be fueling inflation and a real appreciation.

¹⁹ The lack of secondary markets can prevent foreign investors from withdrawing investments on short notice.

Macroeconomic policy responses to private capital inflows

Monetary and exchange rate policy responses should reflect the nature of capital inflows and the authorities' policy objectives. Large inflows could lead to macroeconomic instability, higher inflation, and disruptive exchange rate movements, and therefore need to be managed carefully. Sterilized interventions could help preserve exchange rate and monetary stability in the short term while allowing the buildup of official reserves—an insurance against possible sudden reversals.²⁰

Monetary policy alone would have great difficulty in avoiding an appreciation associated with persistent large capital inflows, however. Sterilizing persistent large inflows is likely to raise interest rates. The fiscal cost of sterilization can thus rise rapidly and increase the public debt burden. Moreover, rising interest rates could be self-defeating insofar as they attract more inflows, and may work to suppress appreciation mainly through crowding out the private sector. Unsterilized intervention, on the other hand, may help fend off nominal currency appreciation, but it would likely lead to higher money growth and eventually inflation.

Persistent inflows would thus require the adoption of more flexible monetary and exchange rate policy frameworks. Some of the more mature sub-Saharan African countries are transitioning toward (or have even adopted) inflation-targeting-like regimes (see Chapter 2). Countercyclical fiscal policy can help mitigate the real appreciation pressures associated with the inflows. Keeping fiscal expenditures steady during episodes of large capital inflows—rather than ratcheting them up—has also been shown to foster better growth outcomes in the aftermath of these episodes (IMF, 2007f). However, there may be only limited room for fiscal restraint in low-income countries,

particularly post-MDRI/HIPC debt relief, where the additional fiscal space is dedicated to priority poverty-reduction spending. Where inflows are more permanent, enhanced public financial management would help ensure that the resources are allocated to productivity-enhancing investments.

Capital account policies

In the short term, countries should focus on implementing coherent, transparent, and even-handed capital account policies. At present, capital accounts across sub-Saharan Africa remain fairly closed (*de jure*) compared with other regions, and exchange controls are complex and difficult to implement. This results in poor information and creates scope for corruption and mismanagement. Existing capital account regulations should be carefully reviewed to enhance transparency, and inconsistencies and inefficiencies between regulations should be eliminated.

In the medium term, a gradual and well-sequenced liberalization strategy would help countries reap the benefits of capital market access while limiting the associated risks. In parallel with the progressive liberalization of capital flows, starting with more stable and long-term flows, countries need to implement supportive institutional and regulatory reforms that will strengthen their capacity to manage capital inflows and the associated vulnerabilities. The timing of the liberalization process should depend on the extent of financial market development and institutions in each country.

Controls on capital inflows may at times play a useful role in giving policymakers additional room for maneuver, but this space is very limited in practice. The international experience is that such measures have at best a short-term effect on the composition of capital flows (see, e.g., Magud and Reinhart, 2007). Reimposing capital controls in the face of a surge in inflows is not an appropriate management tool, for these reasons and because rapid regulatory changes can contribute to the disarray that well-implemented and sequenced

²⁰ If inflows are geared toward purchases of government securities, sterilization could also help meet the increased demand for such instruments.

reform strategies should avoid. In practice, no country in the case-study group reimposed capital controls as a response to capital inflow surges.

In response to sudden capital inflow surges, the authorities could even consider accelerating the pace of liberalization to better manage capital flows and support other policy responses (e.g., exchange rate and monetary policies). If inflows are occurring in spite of capital controls, removing the controls can improve monitoring. Selective liberalization of capital outflows could also ease inflation and appreciation pressures, provided that foreign reserves are at a comfortable level.

However, the impact of outflow liberalization in sub-Saharan Africa deserves further study: African policymakers have been mostly concerned by capital flight, but in emerging economies there is some evidence that outflows liberalization has attracted further inflows (IMF, 2007f).

Financial sector and other structural policies

Better financial sector supervision and regulation are critical to efficient intermediation of the inflows and reduced vulnerabilities to sudden reversals. This is particularly important for sub-Saharan African countries, where institutions tend to be weak and financial sectors shallow. Strengthened financial sector supervision and regulations and improved risk management capabilities of banks could help prevent the buildup of balance sheet vulnerabilities.

Increased government borrowing in foreign and domestic currency associated with private capital flows could affect medium-term debt sustainability. The access to private capital is a welcome sign of success and increases the scope for public investment. But it needs to be carefully monitored, and the risks associated with the costs and structure of such instruments (e.g. bullet payments on international sovereign bonds) should be fully analyzed within the framework of medium-term debt management strategies.

Government debt issuance strategies could support the development of the domestic yield

curve and help broaden the local investor base. Governments should aim at a progressive lengthening of maturities on domestic debt instruments, at reasonable cost. This would attract institutional fund managers, provide higher-yielding savings options to the residents (bank deposits in Africa often yield negative interest rates after adjusting for inflation), and allow pension funds and insurance companies to better match the maturity of their assets and liabilities. A broad local investor interest would also lower market volatility and the risk of sudden reversal of capital inflows.

In the long run, capital inflows can leverage domestic institutional improvements; they are not a substitute. The benefits they bring depend on strengthened governance, better infrastructure, and more human capital (IMF, 2007d). Improvements in the productive structure of the economy, the business environment, and institutional and governance reforms will reinforce the positive effects of capital flows on productivity and growth and help attract more stable inflows. Addressing structural obstacles to credit, including legal and judiciary reforms to strengthen contracts and creditor rights, credit registries, and accounting and auditing standards for corporations, would also facilitate intermediation of the inflows through the banking system.

Appendix 3.1. Country Experiences with Capital Inflows

Cameroon²¹

Cameroon belongs to the Central African Economic and Monetary Community (CEMAC), a customs and monetary union created in March 1994.²² Foreign exchange regulations of members were harmonized in 2000 and all controls were

²¹ This case study was prepared by Raju Singh.

²² The other members are Central African Republic, Chad, Republic of Congo, Equatorial Guinea, and Gabon.

lifted within the CEMAC zone. While capital flows to third countries related to the payment of loan principal or liquidation of FDI are free, other flows are subject to administrative controls. The remaining capital controls give the CEMAC's central bank, the BEAC, some degree of monetary independence. In practice, monetary policy has been passive. The interest rate structure, which does not reflect market conditions, has resulted in a negative differential with the euro area.

Financial integration within the CEMAC is limited mostly because the financial infrastructure is inappropriate. Efforts to encourage FDI have been hampered by the poor business environment. In March 2002, Cameroon's parliament approved an investment charter establishing a new framework for investments and integrating laws relating to forestry, mining, and petroleum. An investment promotion agency was created in September 2005.

Capital flows to Cameroon over the past five years have mainly been driven by developments in the oil sector. Construction of the Cameroon-Chad pipeline, which began in 2000, stimulated FDI inflows until it was completed in 2003. The FDI mainly originated in the United States and France and concentrated on transport and communication. Portfolio investments are marginal.

Capital inflows have contributed to the country's recent buildup in foreign reserves but they have been dwarfed by oil export earnings. Cameroon's net foreign assets have been steadily rising, reaching nearly CFA 900 billion in 2006. The increase in net foreign assets has had relatively little impact on liquidity because a significant portion of oil inflows has been saved. Large oil revenue inflows, debt relief, and expenditure restraint have improved the fiscal position in the past five years.

Given the obstacles to financial intermediation, credit growth has been subdued. Private sector credit growth was limited by government repayment of arrears to private operators. Credit is also hampered by ceilings on lending rates, a lack

of timely and reliable information on borrowers, a poorly functioning court system, and inadequate land registry systems.

Price and exchange rate developments seem not to have been affected by capital movements. Inflation over the past five years has been driven mainly by the pass-through of higher oil and food prices. The REER has appreciated by slightly more than 10 percent, due to the weakness of the dollar against the euro.

Ghana²³

Ghana's partial liberalization of the capital account, while still at an early stage, has so far yielded the expected benefits in terms of increased capital inflows and development of domestic capital markets. Recent liberalization began in late 2006 with the new Foreign Exchange Act, which for the first time allowed nonresidents to purchase domestic government securities. It was part of a coherent strategy for accelerated growth, financial sector development, and regional integration that the Ghanaian authorities started considering in 2003. In particular, the liberalization followed an appropriate sequencing, coming after success in stabilizing the economy (supported by a PRGF arrangement and considerable debt reduction from HIPC and MDRI debt relief). Capital account liberalization has been accompanied by a comprehensive institutional development and reform strategy, which includes reinforcing primary government debt and stock markets, financial sector supervision, and bank soundness.

Portfolio and direct investment inflows began to pick up in 2004 and surged in response to the liberalization in late 2006; nonresident purchases of government debt securities have strengthened the long end of the government debt market. Private FDI and portfolio inflows may have reached as much as 9 percent of GDP in 2007.

Continued success in attracting capital inflows could raise policy problems. In particular, a

²³ This case study was prepared by Marshall Mills.

sudden reversal of capital flows might disrupt the domestic government debt markets, given their depth and liquidity relative to inflows, though limits on the resale and maturities of foreign-owned securities are intended to mitigate the risk. Liberalized access to capital could eventually raise the question of the sustainability of external and public borrowing. After gross debt plummeted in 2006 thanks to MDRI, it rose again to 47 percent of GDP in 2007, and the proportion of nonconcessional debt rose to 40 percent of total debt. Strengthened debt management will be crucial in the future.

Furthermore, the macroeconomic policy framework and its credibility are important for managing risks from rapid capital inflows and possible reversals. While capital flows hold promise for Ghana's development, they place a premium on a sustainable policy stance. Over the medium term, strengthening fiscal policy would reduce the risks due to capital flow volatility. Since mid-2006, buoyant domestic demand, due in large part to expansionary fiscal policy, has contributed to exchange rate depreciation despite increasing capital inflows. Moreover, international reserves have fallen, often below 3 months of import cover.

Nigeria²⁴

Nigeria's economic fortunes in recent decades have been heavily influenced by developments in, and spillovers from, the oil sector. More recently however, improved economic performance (sustained growth, moderate inflation, falling debt, and rising reserves) has been underpinned by a strengthened economic policy framework. In turn, these stronger economic policies and performance have been crucial to bringing about a period of increased integration with the global economy.

After the period of increasing economic dislocation, in 1995 the authorities made a significant effort to liberalize capital account transactions.²⁵ While certain residual restrictions

(largely administrative) remain, the system is for economic purposes essentially free of restrictions on international current and capital transactions.

Capital account liberalization was part of a broader reform process. Efforts to liberalize the foreign exchange market were already under way with the creation of an interbank market; these culminated in 2006 with a wholesale Dutch auction and effective unification of the parallel and official exchange rates. The resulting exchange rate flexibility supported monetary policy and helped to dampen inflation pressures. Since 2004 the banking sector has also undergone considerable consolidation, which among other things has strengthened the capital adequacy of the sector. Risk-based banking sector supervision was initiated, and efforts are now under way to implement consolidated supervision. The creation of a debt management office in 2000 has helped with debt restructuring and expansion of the government's securities market.

Since 2005, private sector (including foreign) interest in naira assets has risen considerably, as evidenced by the expansion of the domestic government securities market, increased interest in Nigerian initial public offerings (on both Nigerian and international exchanges), and issuance of corporate bonds and global depository receipts. These flows could be as high as several billion U.S. dollars annually; most of the increase occurred in 2006 and 2007.

But policymaking is complicated by increased intermediation, new lending activities (both retail and cross border); and increased inflows (from both emigrants and international investors seeking yields). These developments were accompanied by appreciation pressures, culminating in notable naira appreciation in late in 2007. Money demand volatility has prompted the authorities to progressively abandon reserve money targeting in favor of a transition toward inflation targeting, while allowing more exchange rate flexibility. There is also potential for a sudden reversal of flows. However, in spite of the turbulence in

²⁴ This case study was prepared by Ben Kelmanson.

²⁵ See IMF (1998).

global financial markets, trading in government securities trading accelerated in the third quarter of 2007, and foreign interest in the banking sector is ongoing. The Nigerian stock market has been appreciating significantly, and price/earnings ratios are very high.

Senegal²⁶

Over the past decade Senegal has achieved considerable economic stability and robust growth, and debt relief has brought its debt indicators down. Although growth slowed in 2006, due in part to policy slippages, it rebounded in 2007, driven by the services and construction sectors, and the fiscal deficit lessened. Senegal is a member of the West African Economic and Monetary Union (WAEMU), which pegs its exchange rate to the euro. Senegal's macroeconomic and structural policies are supported by a three-year IMF Policy Support Instrument (PSI), approved in November 2007.²⁷

Like the other WAEMU members, Senegal maintains controls on capital outflows to non-WAEMU countries. These controls have not changed in recent years, except that in 1999 the WAEMU eliminated controls on inward FDI and foreign borrowing by residents.

Senegal's financial market is underdeveloped. There is no secondary bond market, only two Senegalese companies are listed on the regional stock exchange, and bank credit to the economy is less than 25 percent of GDP. The financial market has been held back by a lack of structural reforms and the persistence of excess liquidity in the banking system.

International capital flows into Senegal have generally been small, but FDI is on the rise. Portfolio flows, amounting to perhaps ½ percent of GDP in either direction, consist largely of bank purchases of government bonds issued by WAEMU countries. Foreign financing of the

private sector has amounted to 2–3 percent of GDP a year but rose markedly in 2006, in part owing to the rise of domestic investment.

FDI in Senegal is on track to rise from about 2 percent of GDP annually in the first half of the decade to 5–6 percent of GDP by the end due to investor interest in mining, telecommunications, the port of Dakar, and a special economic zone; a significant share of the investment is coming from Arab sources. Senegal's economic performance over the last decade has laid the basis for the increase in FDI. The Senegalese authorities are also actively pursuing investment opportunities, marketing Senegal as a stable, business-friendly location, and upgrading their ability to manage public investment.

The economy is absorbing the FDI flows smoothly within the WAEMU exchange rate and monetary framework. The potential fiscal benefits and costs of direct investment are being managed as part of a fiscal policy to keep debt sustainable.

Tanzania²⁸

The Tanzanian economy has sustained robust growth and low inflation for several years. For 2000–07 real GDP growth averaged 7 percent a year, and inflation averaged just over 5 percent. Sound financing of government operations through revenue growth and donor assistance has been the anchor for economic stability. Tanzania benefited from extensive debt relief from the HIPC Initiative (2001) and more recently MDRI (2006).

Increasing private investment, FDI in particular, has been a central focus of Tanzanian economic policy. However, Tanzania does not compare favorably worldwide as a location for doing business. In the 1990s, Tanzania partially liberalized capital account transactions, which coincided with privatization efforts, but retained restrictions on portfolio investment to limit short-term flows. FDI responded, increasing from about 1 percent of GDP in 1994 to 2 percent of GDP a

²⁶ This case study was prepared by Frank Lakwijk.

²⁷ The PSI is designed for “mature stabilizers”; Senegal is the first francophone country with a PSI.

²⁸ This case study was prepared by David Dunn.

year for 1995–97. Since further liberalization in 1999, FDI has amounted to about 4 percent of GDP a year.

Relatively high yields on Tanzanian government securities, low inflation, and a strong currency have attracted investment by hedge and other funds in search of higher returns. Investors saw little exchange rate risk because the country's external position remained strong. Between April and July 2007, purchases of government securities by local branches of major multinational banks were extraordinarily high. There is no evidence of capital outflows, in part because these investments are illiquid and Tanzania's secondary market for government securities is minimal.

There are lessons to be learned from Tanzania's experience in 2007. Sterilization of foreign capital inflows proved costly because yields on government securities remained high. If the exchange rate and monetary policy had been more flexible, these portfolio inflows could have generated more positive effects. Finding the right policy balance is difficult however, especially when data on foreign investment inflows are limited. More liberalization of the capital account for portfolio flows would also improve transparency.

The other major challenge for Tanzania is to ensure that sudden capital inflows do not reverse to similarly sudden capital outflows. Sound economic policies and healthy private sector demand for bank credit should help encourage longer-term portfolio investments. With respect to FDI, and long-term private investment more generally, eliminating major impediments to doing business and improving infrastructure could be effective—not only for attracting investment but also for accelerating economic growth and job creation.

Uganda²⁹

With its promarket emphasis yielding positive results, the Ugandan government moved as early as July 1997 to liberalize the capital account, even though the prevailing conditions—a shallow financial sector, limited regulatory capacity, and public debt restructuring—were considered less than ideal. Minimal capacity to enforce capital controls and the need to attract foreign capital to reduce reliance on foreign aid persuaded Uganda to open up its capital account. Comprehensive financial sector reforms, including more forceful supervision and recapitalization of a major insolvent bank, took place only later.

However, until very recently liberalization had had little impact on capital flows. In its wake, Uganda sustained strong growth and economic imbalances were reduced, but the volume of capital flows started to pick up substantially only in 2004; since late 2006 purchases of government securities by nonresidents has surged to about US\$100–150 million (1 percent of GDP).

The preponderance of evidence suggests that the inflows are driven by push rather than pull factors. It is difficult to discern recent step improvements in the quality of institutions, condition of the financial sector, or political developments that might have boosted investor confidence and led to higher capital inflows. If anything, developments at the point that capital flows picked up were more likely to sap confidence: the economy was going through a rough patch due to a drought-induced shortfall in energy production. MDRI-related debt relief and the consequently improved fiscal solvency have had limited effect on the liquidity position of the government and thus its near-term capacity to service debt.

The recent increase in private inflows has heightened the monetary and exchange rate policy challenges facing the government. Foreign aid to Uganda already totals about 10 percent of GDP

²⁹ This case study was prepared by Abebe Selassie and Dmitry Gershenson.

annually. Part of the aid is sterilized, which entails a large fiscal cost, but sterilization is not effective in the long run and keeps interest rates higher than they would otherwise be. The surge in private inflows has exacerbated aid-related pressures.

The authorities have addressed the tensions by making monetary policy more flexible and allowing some nominal exchange rate appreciation. However, policymakers attach great importance to an independent monetary policy, given the shocks the country is susceptible to, and have limited tolerance for nominal appreciation. The usefulness of fiscal policy in the face of surges in capital inflows, is also limited because of huge public spending needs. In this environment, finding an appropriate policy response will require hard choices and, perhaps, changes in policy priorities.

Zambia³⁰

In the early 1990s Zambia began to dismantle controls on prices and economic activity generally to address prolonged economic contraction and mounting instability after copper prices collapsed.³¹ The severe terms of trade shock and the inefficiency of parastatals made a shift in economic policies necessary to diversify the economy away from copper, create a stable financial environment, and establish a basis for normalizing relations with creditors. Progress on economic reform since has been accompanied by substantial capital inflows, mainly into government securities since 2005, after Zambia was granted HIPC and MDRI debt relief. Although the policy reforms created an environment more conducive to foreign capital flows and eased restrictions on such flows, the reforms were largely directed to stabilizing the economy, increasing international competitiveness, and addressing Zambia's considerable foreign debt.

The shift toward reliance on market forces to guide economic activity was accompanied by

measures to build financial market infrastructure. With interest rates liberalized, in 1993 an auction system for treasury bills was introduced and later extended to government bonds. Open market operations, mainly deposit auctions, were introduced about two years later. Recently repurchase agreements have increasingly been used in the conduct of monetary policy. However, the interbank market still lacks depth, and interest rates have been highly volatile.

A lack of liquidity characterizes government securities markets. Trading on the stock exchange, which opened in 1994, has increased and market capitalization has risen markedly. Private bond issues varying in maturity from 3 to 12 years were sold in 2004 and a few more recently. However, listings are still limited, and only a small proportion of listed stocks are available for trading. The foreign exchange market in 2003 was transformed into an interbank market.

Portfolio flows into government securities have recently gained momentum. In December 2007 foreign investment inflows reached K 830 billion (US\$216 million). Foreign investors have mainly opted for short-term securities, but their interest in medium- and longer-term maturities has been significant. Foreign demand for government securities, reduced domestic borrowing by the government, and a decline in inflation to its lowest level in three decades have brought market interest rates down considerably, especially in 2006. However, an abrupt reversal in portfolio inflows is a risk, as was demonstrated in 2006 before the general elections.

The authorities are committed to limiting intervention in the exchange rate market and have built up international reserves to prepare for a sudden reversal of capital flows. They have also increased the instruments available for conducting monetary policy. Liquidity management remains a problem; however, the authorities need to build the interbank market to allow banks manage their liquidity more actively and efficiently.

³⁰ This case study was prepared by Patrick Akatu.

³¹ In the 1970s and 1980s per capita income had declined by about 30 percent.

Table A3.1. Controls on Portfolio Investments and FDI in Selected African Countries

Country	Debt		Equity and FDI	
	Inflows	Outflows	Inflows	Outflows
Botswana	<i>Bonds</i> : nonresidents max 20% of government bonds	<i>Bonds</i> : no controls, listing requirements	<i>Shares</i> : controls	<i>Shares</i> : no controls
	<i>Money market securities</i> : nonresidents not allowed to purchase central bank securities	<i>Money market securities</i> : no controls	<i>FDI</i> : no controls	<i>FDI</i> : no controls
	<i>Derivatives</i> : no controls	<i>Derivatives</i> : no controls		
Cameroon ¹	<i>Bonds</i> : controls	<i>Bonds</i> : controls	<i>Shares</i> : controls on issuing, advertising, and sale of foreign securities of more than CFAF 10 million	<i>Shares</i> : controls
	<i>Money market securities</i> : controls	<i>Money market securities</i> : controls	<i>FDI</i> : no controls if below CFAF 100 million	<i>FDI</i> : no controls if below CFAF 100 million
	<i>Derivatives</i> : not applicable	<i>Derivatives</i> : not applicable		
Chad ¹	<i>Bonds</i> : not regulated	<i>Bonds</i> : controls	<i>Shares</i> : not regulated	<i>Shares</i> : controls
	<i>Money market securities</i> : controls on sale or issue by residents abroad	<i>Money market securities</i> : controls	<i>FDI</i> : no controls if below CFAF 100 million	<i>FDI</i> : no controls if below CFAF 100 million
	<i>Derivatives</i> : controls on sale or issue by residents abroad	<i>Derivatives</i> : controls		
Ghana	<i>Bonds</i> : nonresidents allowed to invest in securities with more than three years maturity	<i>Bonds</i> : controls, except for residents purchasing bonds abroad	<i>Shares</i> : no controls	<i>Shares</i> : controls for nonresidents' sale or issue locally
	<i>Money market securities</i> : controls on nonresidents purchasing domestically	<i>Money market securities</i> : controls on nonresident sale or issue domestically	<i>FDI</i> : controls	<i>FDI</i> : no controls
	<i>Derivatives</i> : no controls	<i>Derivatives</i> : controls on nonresident sale or issue domestically		
Mauritius	<i>Bonds</i> : no controls	<i>Bonds</i> : no controls	<i>Shares</i> : controls on shares not listed on the stock exchange	<i>Shares</i> : no controls
	<i>Money market securities</i> : no controls	<i>Money market securities</i> : no controls	<i>FDI</i> : sectoral control in the sugar industry	<i>FDI</i> : no controls
	<i>Derivatives</i> : no controls	<i>Derivatives</i> : no controls		
Mozambique	<i>Bonds</i> : controls	<i>Bonds</i> : controls	<i>Shares</i> : controls	<i>Shares</i> : controls
	<i>Money market securities</i> : controls	<i>Money market securities</i> : controls	<i>FDI</i> : controls	<i>FDI</i> : controls
	<i>Derivatives</i> : controls	<i>Derivatives</i> : controls		
Namibia	<i>Bonds</i> : controls on resident sale or issue abroad	<i>Bonds</i> : controls on resident purchase abroad of more than N\$2 million	<i>Shares</i> : controls on resident sale or issue abroad	<i>Shares</i> : control on resident purchase abroad of more than N\$2 million
	<i>Money market securities</i> : controls on resident sale or issue abroad	<i>Money market securities</i> : controls on resident purchase abroad of more than N\$2 million	<i>FDI</i> : no controls	<i>FDI</i> : controls
	<i>Derivatives</i> : controls on resident sale or issue abroad	<i>Derivatives</i> : controls on resident purchase abroad of more than N\$2 million		

Country	Debt		Equity and FDI	
	Inflows	Outflows	Inflows	Outflows
Nigeria ²	<i>Bonds</i> : no controls ²	<i>Bonds</i> : no controls	<i>Shares</i> : no controls	<i>Shares</i> : no controls
	<i>Money market securities</i> : controls ²	<i>Money market securities</i> : controls on resident purchases abroad		
	<i>Derivatives</i> : no controls	<i>Derivatives</i> : no controls		
Seychelles ³	<i>Bonds</i> : no controls	<i>Bonds</i> : controls	<i>Shares</i> : no controls	<i>Shares</i> : no controls
	<i>Money market securities</i> : no controls	<i>Money market securities</i> : no controls		
	<i>Derivatives</i> : no controls	<i>Derivatives</i> : no controls		
South Africa	<i>Bonds</i> : controls on resident sale or issue abroad	<i>Bonds</i> : controls	<i>Shares</i> : controls on resident sale or issue abroad	<i>Shares</i> : limits on resident purchases abroad
	<i>Money market securities</i> : controls on resident sale or issue abroad	<i>Money market securities</i> : controls		
	<i>Derivatives</i> : controls on resident sale or issue abroad	<i>Derivatives</i> : controls		
Tanzania	<i>Bonds</i> : nonresidents must purchase domestically for local currency; controls on resident sale or issue abroad	<i>Bonds</i> : controls on nonresidents; residents may purchase abroad from external sources	<i>Shares</i> : nonresidents may purchase 60% of total securities by an issuer; controls on resident sale or issue abroad	<i>Shares</i> : only nonresidents from certain countries may sell or issue locally; residents may purchase abroad from external sources
	<i>Money market securities</i> : controls	<i>Money market securities</i> : controls on nonresidents; residents may purchase abroad from external sources		
	<i>Derivatives</i> : controls	<i>Derivatives</i> : controls		
Togo ⁴	<i>Bonds</i> : controls on resident sale or issue abroad	<i>Bonds</i> : controls	<i>Shares</i> : no controls	<i>Shares</i> : controls on resident purchases abroad
	<i>Money market securities</i> : no controls	<i>Money market securities</i> : controls		
	<i>Derivatives</i> : no controls	<i>Derivatives</i> : controls on certain derivatives for resident purchase abroad		
Uganda	<i>Bonds</i> : no controls	<i>Bonds</i> : no controls	<i>Shares</i> : no controls	<i>Shares</i> : no controls
	<i>Money market securities</i> : no controls	<i>Money market securities</i> : no controls		
	<i>Derivatives</i> : no controls	<i>Derivatives</i> : no controls		
Zambia	<i>Bonds</i> : no controls	<i>Bonds</i> : no controls	<i>Shares</i> : no controls	<i>Shares</i> : no controls
	<i>Money market securities</i> : no controls	<i>Money market securities</i> : no controls		
	<i>Derivatives</i> : no controls	<i>Derivatives</i> : no controls		

Source: IMF, *Annual Report on Exchange Arrangements and Exchange Restrictions* (AREAER) (2007).

¹Movements of capital within the CEMAC are not subject to exchange controls.

²This information is not based on the AREAER, but on reporting from other sources.

³Even though there are no legal controls, the country does not have free availability of foreign exchange for capital account items.

⁴Capital transactions between WAEMU countries are unrestricted.

Table A3.2. Capital Account Liberalization Process in Case-Study Countries

Status/ Sequencing	Fully Open	Partially Open	Fairly Closed
One-step opening	Uganda (1997) Liberalization part of a broad package of market-oriented reforms, privatization and trade liberalization		
Sequenced opening	Zambia (1990–95) 1993–94: liberalization of capital transactions 1995: banks allowed to accept foreign currency deposits Liberalization part of broad reforms focused on economic stabilization, competitiveness, and debt restructuring, accompanied by financial market reforms	Ghana (1995–2006) Mid-1990s: partial liberalization of portfolio and direct investment 2006: Foreign Exchange Act, allowing nonresidents to buy government securities with maturities of three years or longer; minimum holding period of one year Liberalization following economic stabilization and debt restructuring: parallel reforms in the primary government debt and stock markets; efforts to develop interbank money and foreign exchange markets and to strengthen financial sector supervision and soundness	Cameroon (2000 to present) 2000: Harmonization of national foreign exchange regulations and liberalization of capital flows within CEMAC Prudential limits on banks' net open foreign positions Residents' foreign exchange deposits prohibited Continued administrative restrictions remain on most capital outflows No immediate plans for further opening
		Nigeria (1985–2006) Economic reforms initiated in the mid-1980s and subsequently reinvigorated in the mid-1990s, starting with treatment of dividends and profit repatriation, then later removal of controls in other areas such as derivatives and real estate; some remaining administrative restrictions Foreign exchange market reformed at various points from the mid-1980s onward: establishment of an interbank forex market initially supplied by the central bank, and later through a Dutch auction (1986); subsequent autonomous forex market (1996); wholesale Dutch auction system initiated in 2006, along with growing importance of interbank market, and the effective unification of the parallel and official exchange rates	
		Tanzania (1990) 1990: start of FDI liberalization 1997: full liberalization of FDI flows 1998: supporting foreign exchange regulations Continuing restrictions on portfolio investments (government securities) FDI liberalization coinciding with privatization program, creation of one-stop shop, and investment promotion policy	Senegal (1999 to present) 1999: elimination of controls on inward FDI and foreign borrowing by residents Continuing administrative restrictions remain on capital outflows to non-WAEMU countries

Sources: IMF, African Department country teams, and AREAER database.

Table A3.3. Case Study Countries: Challenges and Policy Responses

Country and Exchange Rate System	Impact of Inflows/Policy Challenges	Policy Responses/Recommendations
Cameroon Hard peg	Oil export receipts dominate private debt inflows Inflows have helped build international reserves, but have had little impact on money growth and inflation The REER appreciated in line with the euro With low and stagnant private sector credit and high excess liquidity, challenge is to improve financial intermediation	Responsibility for monetary policy rests with regional central bank IMF staff recommendations: – maintain fiscal sustainability – strengthen the financial sector – improve the business environment, including the legal framework and the judicial system
Senegal Hard peg	FDI inflows help finance the current account deficit In the context of excess liquidity, FDI inflows have so far had little or no impact on inflation, and a significant portion is likely to lead to higher imports, limiting domestic impact	Responsibility for monetary policy rests with regional central bank The authorities are actively seeking FDI and they are working to reduce fiscal and governance risks
Ghana Managed float Inflation target	The surge in inflows is too recent to have had much macroeconomic impact, but fiscal policy became expansionary, and the current account deficit is widening The REER depreciated somewhat in 2006 because of excess demand Rapid credit growth driven by a rise in deposits, with no contribution from foreign capital flows so far Capacity to monitor private capital inflows is weak	There has been no specific response to the inflows, which are welcome by the authorities, but the policy mix has become less consistent and vulnerabilities are increasing IMF staff recommends fiscal consolidation and further strengthening financial markets, improving capacity to monitor the inflows and enhancing debt management capacity
Nigeria Managed float Reserve money target	Oil export receipts dominate inflows, though FDI and particularly portfolio flows are becoming more important The interbank foreign exchange market is deeper and has become the primary measure of exchange rate developments. Forward foreign exchange contracts are now offered Interest rates on government paper have been reduced Bank capital increases prompted inflows The REER has appreciated Capacity to monitor private capital inflows is limited	The authorities should maintain a prudent fiscal stance to avoid additional domestic demand pressures The exchange rate has become more flexible, and short-term movements in the naira rate should ensure that investors perceive two-sided exchange rate risk The country is in transition to an inflation targeting regime Strengthening banking supervision and monitoring of flows is recommended
Tanzania Managed float Reserve money target	Portfolio inflows complicate monetary and exchange rate policy Inflows create appreciation pressures Difficulty in monitoring them adds to the challenge for the Bank of Tanzania (BoT) There is a risk of sudden outflows, but it has not materialized yet	Inflows were nearly fully sterilized when the surge began (reserve money target narrowly missed). BoT's sales of foreign exchange for mopping up domestic liquidity were abandoned owing to appreciation pressures. Treasury-bill/bond sales increased sharply and the interest cost of government debt surged. When inflows abated, authorities returned to selling foreign exchange Less sterilization and more flexibility with reserve money program, allowing some appreciation and downward pressures on treasury-bill yields recommended

Country and Exchange Rate System	Impact of Inflows/Policy Challenges	Policy Responses/Recommendations
		To improve capacity to monitor flows, further liberalization might help by increasing transparency Sound macro policies to avoid risks of outflows Eliminate impediments to doing business to attract more FDI and private investment
Uganda Managed float Reserve money target	Surge in inflows since 2004 has been causing appreciation pressures Policy trilemma with constraints on how much fiscal contraction can be implemented: if inflows persist, tensions between open capital account, monetary policy independence, and a competitive exchange rate will be heightened	Response was a mix of sterilized intervention, increase in base money and nominal appreciation Sterilized intervention was the first line of defense, but was incomplete, leading to a large increase in base money Some appreciation was allowed, but concerns about high sterilization costs and export competitiveness prompted, for a short period, unsterilized intervention. This caused a temporary but large increase in reserve money
Zambia Managed float Reserve money target	Inflows have complicated the conduct of monetary and exchange rate policy. Their onset coincided with a surge in copper prices that led to a large initial appreciation, in the absence of sterilization Temporary reversals in inflows, associated first with the uncertainty before the 2006 elections and then with the subprime crisis in August 2007 caused a sharp depreciation Challenges arise from the cost of sterilization, the limited availability of monetary policy instruments, and the difficulty of selling foreign exchange when the currency is appreciating In spite of good capital flows data, the authorities have difficulty forecasting the government's cash flow	Policy response after large appreciation has been to intensify sterilization operations (to meet reserve money target), but is costly Monetary policy helped by – underexecution of the budget in 2007 – transfer of government funds in commercial banks to the Bank of Zambia – steps to increase monetary policy instruments, though liquidity management remains a problem – an active interbank market to manage liquidity should be developed

Source: IMF, African Department country teams.

IV. Africa's Power Supply Crisis: Unraveling the Paradoxes

Africa's Power Sector in International Perspective

Sub-Saharan Africa faces major infrastructure challenges, the most severe of which are arguably those in the power sector. Not only is the region's energy infrastructure meager compared with other regions but electricity service is costly and unreliable. Indeed, in recent years more than 30 of the 48 countries in the region have suffered acute energy crises. This chapter presents preliminary findings from the Africa Infrastructure Country Diagnostic (see Box 4.1 for further details), which aims to unravel the paradoxes of sub-Saharan Africa's troubled power sector.

The entire generation capacity of the 48 countries of sub-Saharan Africa, at 63 gigawatts (GW), is comparable to that of Spain. If South Africa is

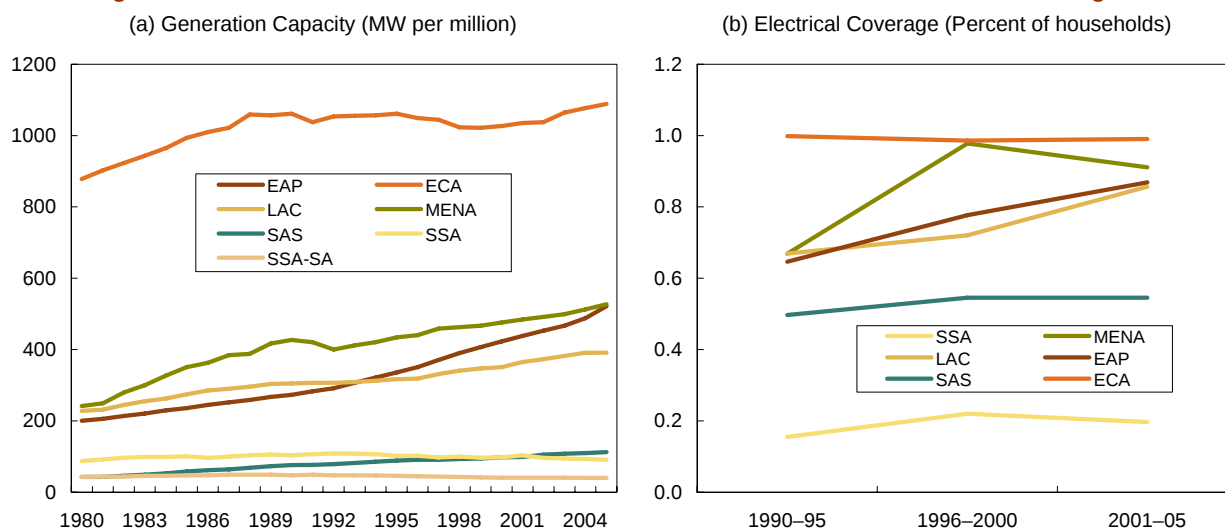
excluded, sub-Saharan African generation capacity falls to 28 GW, about the same as Argentina's. Normalizing for population, and subtracting South Africa, the installed capacity of sub-Saharan Africa is only one-third of South Asia's, and about a tenth of that of other developing regions (Figure 4.1a). Moreover, the region's generating capacity has been stagnant for many years; its growth rates are barely half those in other developing regions (Yepes, Pierce, and Foster, 2008). To make matters worse, as much as one-fourth of sub-Saharan Africa's plant is currently not in operating condition.

Rates of electrification are correspondingly low. Some 24 percent of the sub-Saharan African population has access to electricity versus 40 percent in other low-income countries, and electrification is proceeding more slowly than in other low-income countries (Figure 4.1b). Electricity consumption in

Box 4.1. Introducing the Africa Infrastructure Country Diagnostic

Comparatively little is known about Africa's infrastructure sectors, with sparse coverage of information in most standard international databases. The Africa Infrastructure Country Diagnostic (AICD) aims to reverse this situation by creating a comprehensive infrastructure database for the continent and an associated body of analytical work. AICD is a two-year multistakeholder knowledge program—currently nearing completion—that is sponsored by the Infrastructure Consortium for Africa as well as the African Union, the New Partnership for Africa's Development (NEPAD) and Regional Economic Communities (for example, EAC, WAEMU, and the Southern African Development Community). The project covers all major economic infrastructure—energy, information and communication technologies, irrigation, transport, and water and sanitation—in 24 countries that together account for 85 percent of the gross domestic product, population, and infrastructure aid flows of Sub-Saharan Africa. The scope of data collection and analysis for each sector and country include public expenditure, investment needs, and sector performance. The underlying data and associated studies will be made available to the public through an interactive Web site. It is expected that AICD will provide a baseline against which future improvements in infrastructure services can be measured, as well as a more solid empirical foundation for prioritizing investments and designing policy reforms in the infrastructure sectors in Africa. Phase II of the AICD project will extend the coverage to additional African countries.

Note: This chapter was prepared by the World Bank's Africa Region Sustainable Development Department. The team consisted of Vivien Foster, Tjaarda Storm van Leeuwen, Cecilia Briceno-Garmendia, Daniel Camos, John Gabriel Goddard, Rob Mills, and Karlis Smits. The research draws on the Africa Infrastructure Country Diagnostic (AICD), a multistakeholder knowledge program supported by the Infrastructure Consortium for Africa. The AICD will include a much more extensive power sector review, to be published later in 2008. This work represents the views of the authors. David Dunn contributed from the IMF.

Figure 4.1. Evolution of Power Infrastructure in Sub-Saharan Africa Relative to Other Regions

Source: Yepes, Pierce, and Foster (2008).

the region is a fraction of consumption in other regions (Figure 4.2) and, excluding South Africa, is only about 124 kilowatt hours (kwh) a year, less than one-tenth of China's. Although electricity tariffs in some sub-Saharan African countries have been kept low, the cross-country average tariff is rather high at US\$0.13 per kwh—about double those in other parts of the developing world and almost as high as in OECD countries. Nevertheless, the prices fail to cover costs.

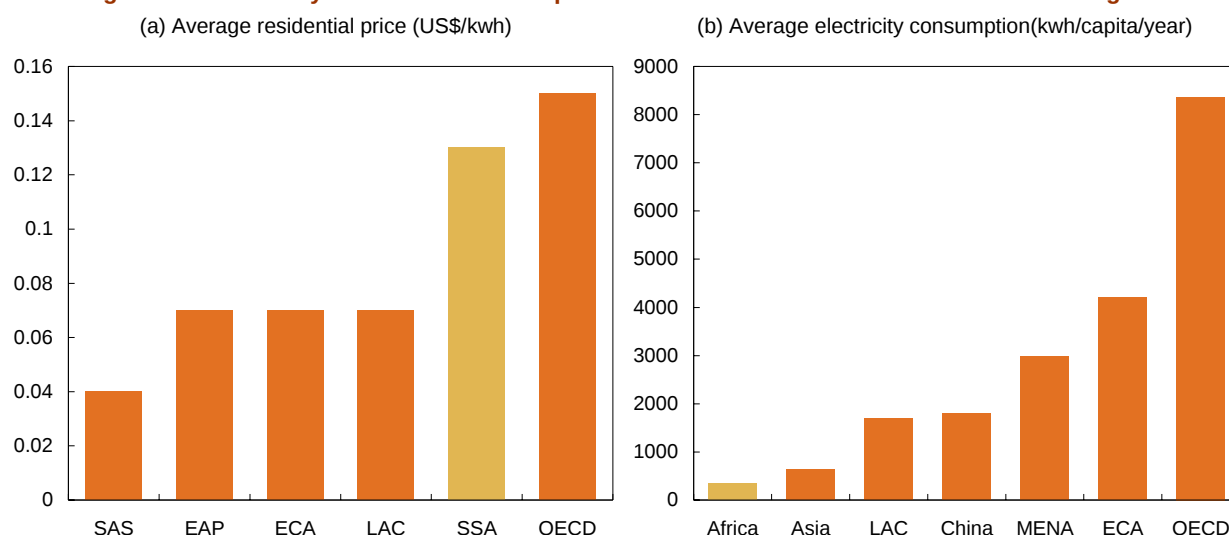
As a result of such low power consumption, the contribution of sub-Saharan Africa's power sector to global carbon dioxide emissions is no more than 520 million tons a year, with South Africa being by far the major contributor. In all other sub-Saharan African countries, the bulk of greenhouse gas emissions come from land use and deforestation. While power consumption in the region will need to grow substantially to meet unsatisfied demands, a significant share of the increment could be met from hydropower, thereby mitigating the climate change impact. For example, in Southern Africa alone, it has been estimated that more regional trade could reduce incremental carbon emissions by 40 million tons a year.

Unreliable supply adds to the cost. African manufacturing enterprises report power outages on

an average of 56 days a year,¹ costing firms 5–6 percent of revenues. That is why many firms operate their own diesel generators, at a cost of about US\$0.40/kwh. In the informal sector, where firms rarely have the capital for backstop generation, lost revenues from power outages can be as high as 20 percent.

Deficient power infrastructure dampens economic growth and weakens competitiveness, for example, through the detrimental effect on productivity. Escribano, Guasch, and Pena (2008) estimate the impact of infrastructure on firm productivity relative to other variables and also decompose the contribution of various components of infrastructure. They find that in most sub-Saharan African countries infrastructure accounts for 30–60 percent of the adverse impact on firm productivity, well ahead of factors like red tape and corruption. Moreover, in half the countries analyzed, power accounted for 40–80 percent of the infrastructure effect. In another study (Calderon, 2008), simulations based on panel data show that if the quantity and quality of power infrastructure in all sub-Saharan African countries were improved to

¹ World Bank (2008).

Figure 4.2. Electricity Prices and Consumption in Sub-Saharan Africa Relative to Other Regions

Source: Eberhard and others (2008).

that of a better performer (Mauritius), long-term per capita growth rates would be 2 percentage points higher.

The scarcity of power in sub-Saharan Africa also affects both the delivery of social services and the quality of life. Without electricity clinics cannot safely deliver babies at night or refrigerate essential vaccines. Lack of illumination restricts the ability of children to study at night and fosters crime in peri-urban areas.

Africa's Acute Power Problems

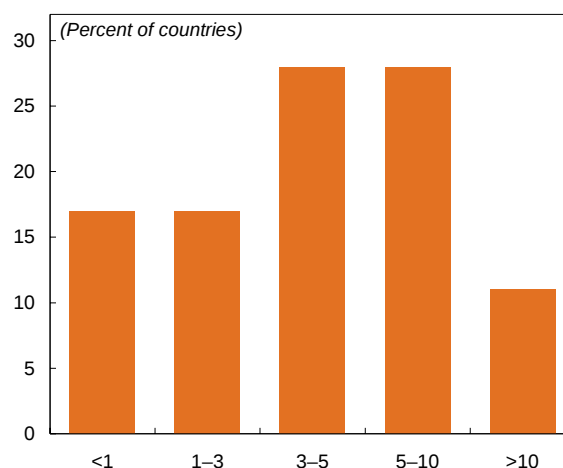
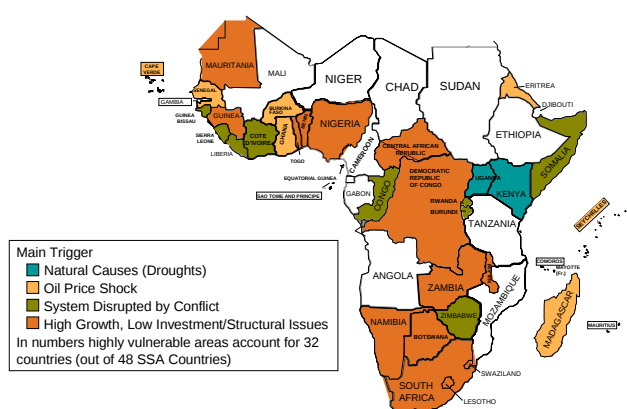
Africa's overstretched electricity systems have become exceedingly vulnerable to supply shocks, resulting in widespread outages and load shedding (Figure 4.3). With economic growth in the past decade raising demand for electricity, the lackluster expansion of generation and transmission facilities has stripped away any cushion from excess capacity that may have existed previously. In recent years,

Figure 4.3. Countries Affected by Acute Power Sector Crises in 2007

(a) Countries affected by power sector crises, by cause

(b) Frequency distribution for load shedding, as percentage demand

Areas of Ongoing or Imminent Power Shortfalls in Sub-Saharan Africa



World Bank AFTEG-AFTSN

Sources: Briceno-Garmendia (2006); Eberhard and others (2008).

when droughts reduced power in the hydro-dependent countries of East Africa, prolonged blackouts became commonplace. In countries like South Africa, plant outages for maintenance—in a context of low reserve margins—have had serious consequences (Box 4.2). Countries whose power infrastructure has been damaged by conflict have also suffered severe shortages. And high petroleum prices have created enormous cost pressure in countries like those of West Africa that depend on imported oil products for generation.

An increasingly common response to the crisis has been short-term leases for emergency power generation by a handful of global operators (Table 4.1). Though this capacity can be put in place within a few weeks, it is expensive. The costs of

small-scale diesel units, for example, are typically about US\$0.35/kwh. The equipment is typically leased for up to two years, after which it reverts to the private provider. An estimated 700 megawatts (MW) of emergency generation are currently operating in sub-Saharan Africa; this represents more than 20 percent of installed capacity. The total price tag ranges from 0.5 percent of GDP in Gabon to 4.3 percent in Sierra Leone.

The recent energy crises are symptoms of a deeper malaise, the causes of which need to be understood and addressed. Four paradoxes shed light on the complex challenges that need to be faced: abundant energy but little power; high prices but even higher costs; widespread but ineffective reform; and high expenditure yet inadequate financing.

Box 4.2. Regional and Economic Effects of South Africa's Power Supply Crisis

South Africa has long been a sizable producer of low-cost electricity, reflecting its abundant coal reserves. It is by far the region's biggest producer and consumer of electricity, accounting for over half of electricity production in sub-Saharan Africa. Electricity prices for both households and industry are exceptionally low; this has been an important factor in the development of South Africa's energy-intensive mining and mineral processing sectors.

South Africa's electricity supply has remained stagnant in recent years but demand has continued to increase, resulting in power shortages. Attempts to encourage greater investment in generation by the private sector proved unsuccessful (partly because South Africa's low electricity tariffs were unattractive to independent power producers) and at the same time resulted in delays in investment by the state-owned electricity provider, Eskom. As a result, the spare capacity ("reserve margin") in the system to cope with peaks in demand has declined, leaving the country prone to periodic rounds of rolling power cuts, sometimes with very little warning.

This has resulted in gridlock on the roads as traffic lights fail; millions of rand lost because businesses cannot operate; and houses regularly without power for up to 12 hours. Electricity supply to large industrial users was also reduced in January, resulting in a temporary shutdown of production in the mining sector, causing global prices for gold and platinum to spike. South Africa exports about 5 percent of its electricity production to neighboring countries—such as Botswana, Namibia, and Swaziland—that import at least half of their electricity needs from South Africa. These countries have been affected by a similar regime of rolling blackouts; moreover, some South African opposition and union groups have called for a complete halt on power exports.

The government's response to the crisis was a series of measures to manage demand in the short and medium term until new capacity comes on stream. This will involve power rationing, modeled on Brazil's response to its energy crisis in 2001, with a view to reducing demand for electricity by 12.5 percent. Large mines have already been rationed to 90 percent of their normal electricity supply. Eskom also plans to increase its generating capacity by some 50 percent over the next 9–10 years. Electricity prices are likely to increase substantially over the next several years to help finance investment (and reduce demand). Nevertheless, the supply-demand balance is likely to remain tight for the next few years.

Source: Clément and Shanaka (2008).

Table 4.1. Emergency Power Generation in Sub-Saharan Africa

Country	Date	Contract Duration	Emergency Capacity	Percent Total Installed Capacity	Estimated Annual Cost as % of GDP
Angola	2006	2 years	150	18.1	1.04
Gabon			14	3.4	0.45
Ghana	2007	1 year	80	5.4	1.90
Kenya	2006	1 year	100	8.3	1.45
Madagascar	2004	Several years	50	35.7	2.79
Rwanda	2005	2 years	15	48.4	1.84
Senegal	2005	2 years	40	16.5	1.37
Sierra Leone	2007	1 year	20	133.3	4.25
Tanzania	2006	2 years	180	20.4	0.96
Uganda	2006	2 years	100	41.7	3.29

Source: Eberhard and others (2008).

Paradox 1: Abundant energy but little power

Ironically, sub-Saharan Africa is richly endowed with both renewable and exhaustible energy resources. At present, for instance, it exploits only 8 percent of its gross hydropower potential of 3.3 million gigawatt-hours (gwh) annually. The countries on the Gulf of Guinea hold 4.9 percent of the world's proven oil reserves (some 60 billion barrels) and 7.8 percent of proven natural gas reserves (some 14 trillion cubic feet); if converted to electricity, the natural gas currently flared during oil production could itself meet a substantial share of Africa's power needs. Southern Africa is rich in coal; Botswana, South Africa, and Zimbabwe hold 5.6 percent of the world's proven reserves (more than 50 billion tons). There is also significant geothermal potential in the Rift Valley.

However, the continent's energy resources tend to be concentrated in a handful of countries where physical and political barriers to trade make it difficult for them to access centers of power demand—and their economies are too small to for them to develop their own resources. For example, the Democratic Republic of Congo (DRC) alone accounts for about 40 percent of sub-Saharan Africa's hydroelectric potential, and Ethiopia accounts for another 20 percent. But both are far from the economic centers in southern, western, and northern Africa, and the multi-billion-dollar

investments needed to exploit hydro potential are too big for their economies.

Moreover, in most sub-Saharan African countries energy markets are too small to take advantage of efficiencies from large-scale electricity production. With today's technology, full economies of scale in thermal power generation kick in at about 400 MW; in only 14 countries in sub-Saharan Africa do national power systems meet this threshold. In another 14, power systems have only 100 MW of capacity. With relatively little cross-border trade, many sub-Saharan African countries use technically inefficient forms of generation (Figure 4.4). In eastern and western Africa, about one-third of installed capacity is diesel-based generators. These countries have few domestic energy resources of their own, even though there are sufficient hydro and gas resources in neighboring countries to support much lower-cost forms of generation.

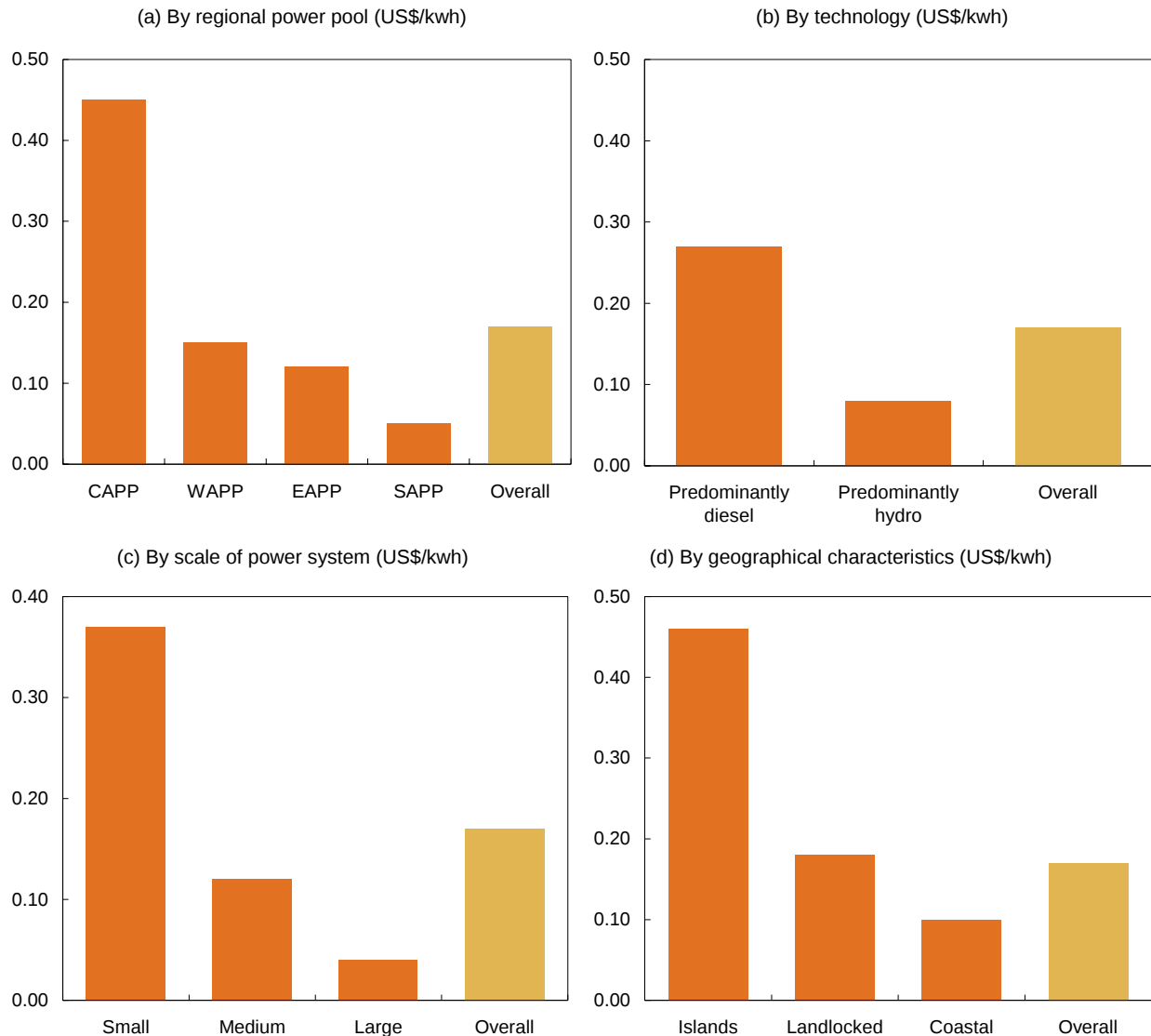
The consequences of this technically inefficient pattern of power generation become evident when average operating costs of different types of power systems are compared (Figure 4.4b). The average for predominantly diesel-based power systems is as much as US\$0.20/kwh more expensive than the cost of hydro-based systems. Similarly, the operating cost penalty for countries with national power systems of less than 200 MW installed capacity can run up to US\$0.30/kwh relative to countries with power systems above 500 MW. An additional

penalty for landlocked and island states relative to coastal nations is the much higher cost of importing fossil fuels.

That is why regional power pools have been formed in Central (CAPP), East (EAPP), Southern (SAPP), and West (WAPP) Africa. The pools are at very different stages of development, both technically and institutionally. The political process is most advanced in the WAPP, supported by political

agreements at the head of state level through the ECOWAS. The pools, particularly the WAPP and SAPP, have facilitated significant cross-border exchanges of power. A number of countries, such as Botswana and Niger, rely on imported power; others, such as Nigeria and Mozambique, are major exporters of power. However, none of the pools is yet at the point where the arrangements are fully competitive.

Figure 4.4. Drivers of Operating Costs for Sub-Saharan African Power Systems



Source: Eberhard and others (2008).

Paradox 2: high prices but even higher costs

The variation in electricity charges across sub-Saharan African countries is huge, and spans some of the cheapest power in the world (at less than US\$0.05/kwh in hydro-based systems and in South Africa based on cheap coal) to some of the most expensive power in the world (at over US\$0.30/kwh in countries with diesel-based systems and landlocked or island locations, such as Chad and Madagascar). Nevertheless, across countries the average charges today look high by international standards and have increased recently, reflecting higher oil prices and tightening supply conditions worldwide. Average revenue has risen from US\$0.07/kwh in 2001 to US\$0.13/kwh in 2005. In countries reliant on diesel-based power generation systems, average revenues have risen from US\$0.08 to US\$0.17/kwh.

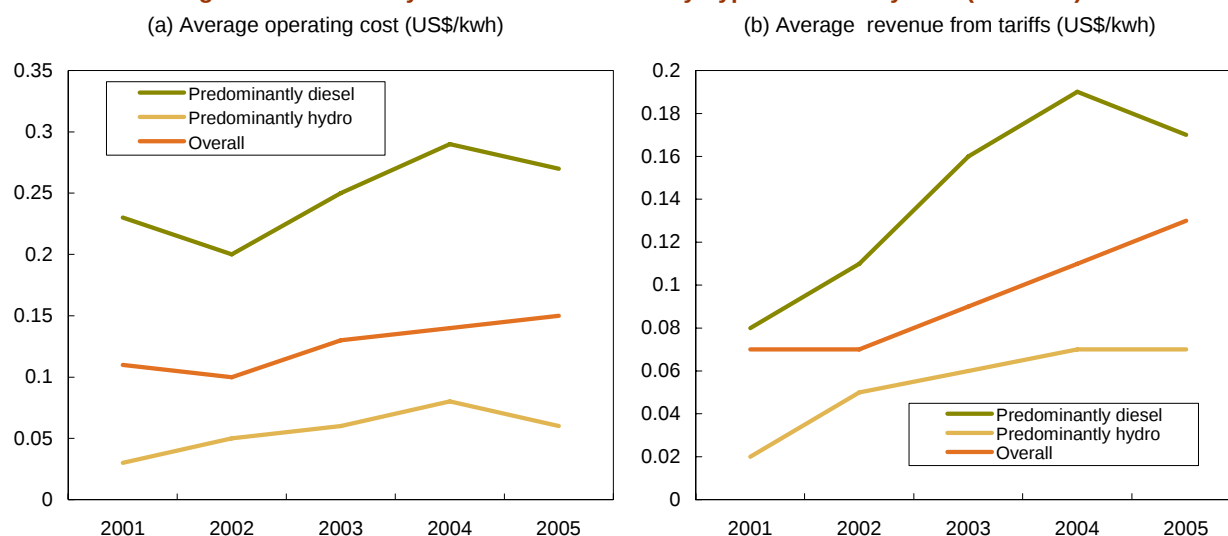
Yet the average revenue in sub-Saharan African countries reliant on diesel-based generation still falls significantly short of the average operating costs of US\$0.27/kwh (Figure 4.5), even though average revenue in these countries has risen dramatically during the last five years, from US\$0.08 to US\$0.17/kwh.

Despite such comparatively high average revenues, the vast majority of sub-Saharan African

countries are doing little more than covering average operating costs (Figure 4.6). The correlation between average revenue and average operating cost is as high as 90 percent, indicating that operating cost recovery is usually the driving principle behind power pricing. Nevertheless, once average operating costs exceed US\$0.20/kwh, there is a tendency to price below the 45 degree line in Figure 4.6a. The implication is that past capital costs of power sector development have historically been almost entirely subsidized by the state.

Nevertheless, a comparison of current average revenues and average operating costs misrepresents the long-term cost recovery situation for two critical reasons. First, because of major inefficiencies in revenue collection, the average revenue collected per unit of electricity sold is substantially lower than the average effective tariff that is being charged. Second, owing to major inefficiencies in generation technology and the growing trend toward regional trade, the average incremental cost of power in sub-Saharan Africa for many countries is somewhat lower than the average historic cost of power production (including both operating and capital costs). Thus, a truer picture of the long-term cost recovery situation is gained by comparing the average effective tariff with the

Figure 4.5. Electricity Costs and Revenues by Type of Power System (US\$/kwh)



Source: Banerjee and others (2008).

average incremental cost as in Figure 4.6b. The result shows that for many (though certainly not all) countries, even the current tariff would be adequate for cost recovery purposes if only revenues could be fully collected, and the power system could transition toward a more efficient structure of production.

The presence of large historical capital subsidies to the sector raises questions about the distributional incidence of these. In a recent study, Wodon and others (2008) use evidence from household surveys to establish the distribution of such subsidies in 18 sub-Saharan African countries. In all the countries, power sector subsidies are found to be highly regressive. Across the bottom half of the income distribution, barely 10 percent of households have access to electricity; because the poor are almost entirely excluded from service, they cannot possibly benefit directly from subsidies (Figure 4.7).

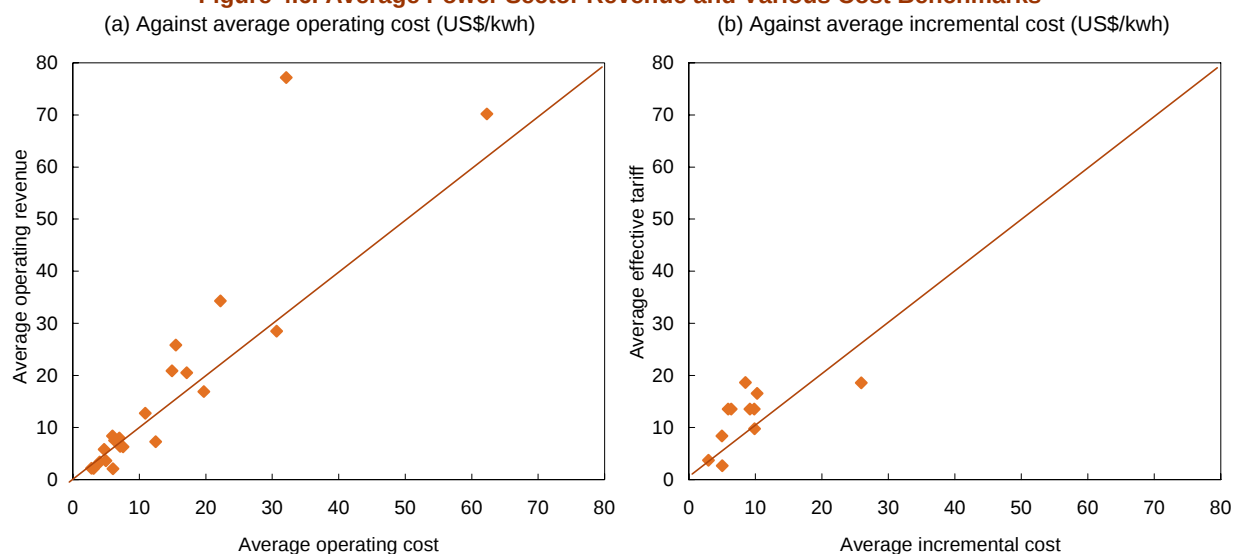
In urban areas of low-income countries, about a third of households lack access to electricity. At least half of this unserved urban population areas lives close to an electricity grid, suggesting that demand-side barriers—such as connection charges or household tenure—are contributing to restrict access (Banerjee and others, 2008).

In rural areas of low-income countries, only 12 percent of the population on average has access to electricity, and for at least 17 countries the figure is below 5 percent. The dispersed nature of the rural population means that grid extension does not always prove economical, although a handful of countries—most notably Ghana and South Africa—have had successful large-scale grid-based electrification programs, based on technically and financially strong utilities and careful policies to address affordability.

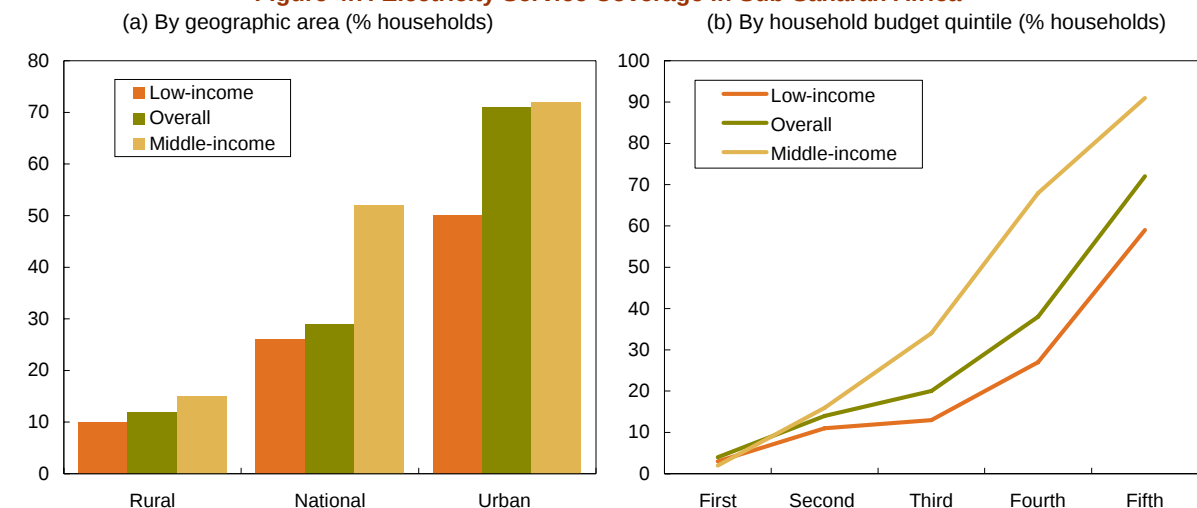
The concentration of power services in upper-income echelons might suggest that full cost recovery pricing is feasible. However, the reality is more complex. In low-income sub-Saharan African countries, even households in the highest income quintile have monthly budgets of only US\$260 to support families typically comprising five people.

Banerjee and others (2008) estimated the electricity affordability problems of sub-Saharan African households in different pricing scenarios, assuming modest consumption of 50 kwh/month. Bills are considered affordable if they do not absorb more than 5 percent of household budgets. With cost recovery prices of about US\$0.25, as is currently the case in high-cost countries, a

Figure 4.6. Average Power Sector Revenue and Various Cost Benchmarks



Source: Eberhard and others (2008).

Figure 4.7. Electricity Service Coverage in Sub-Saharan Africa

Source: Banerjee and others (2008).

subsistence monthly bill would be US\$12. Except in a relatively small group of middle-income and better-off low-income countries (Cameroon, Cape Verde, Côte d'Ivoire, Republic of Congo, Senegal, and South Africa), a substantial share of the population would be unable to afford cost-recovery tariffs. Today, household spending on electricity service is significantly below this level (Figure 4.8). However, if costs could be reduced to US\$0.12/kwh—in line with sub-Saharan Africa's average incremental cost of power—the monthly bill of US\$6 would be affordable to most of the population, except in the lowest-income countries like Burundi, Democratic Republic of Congo, Ethiopia, Malawi, and Uganda.

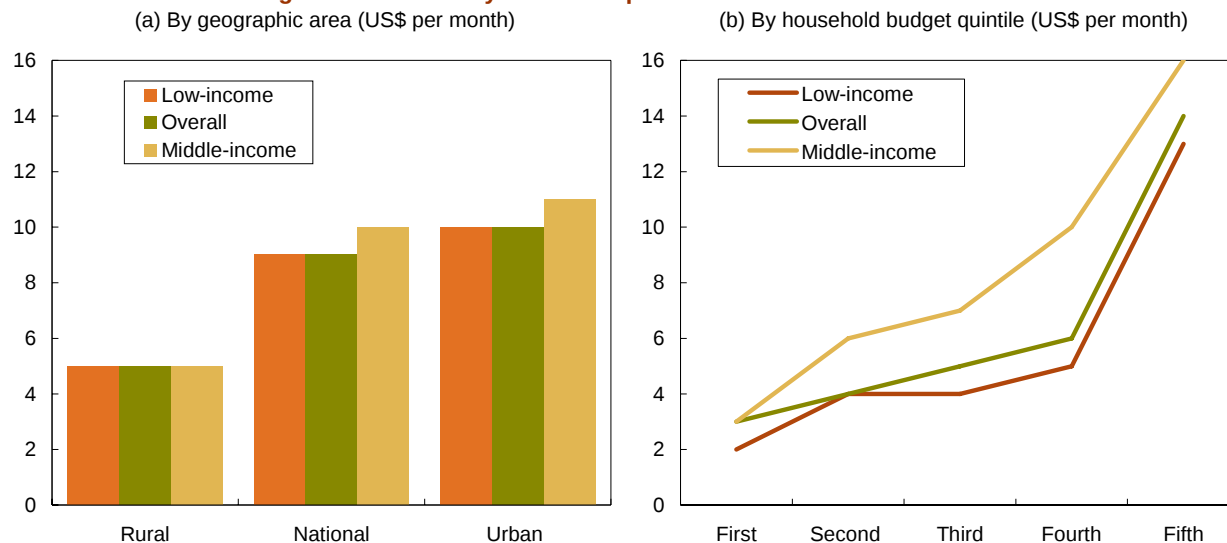
Although residences account for 95 percent of power utility customers in Africa, they contribute only about 50 percent of revenue. Thus, the pricing of power to commercial and industrial consumers is just as important to cost recovery. The average revenue raised from low- and medium-voltage customers seems to be similar, but high-voltage customers tend to pay only about half as much. Globally this relative price differential is not unusual. It reflects the fact that high-voltage customers do not use as much of the distribution network and hence do not create such high costs for the utility. Nevertheless, it suggests that in absolute terms neither residential nor

commercial and industrial customers are close to paying full cost-recovery prices. Moreover, a number of sub-Saharan African countries have historically sold power at highly discounted rates to large-scale industrial and mining customers like the aluminum smelting industry in Cameroon and Ghana and the mining industry in Zambia. These arrangements were initially justified as ways of locking in base load demand to support large-scale power projects that went beyond the immediate demands of the country, but they are increasingly questionable as demand has grown to absorb capacity.

Given the problems of sub-Saharan African power systems, cost recovery needs to be discussed along with measures to reduce costs, improve revenue collection, and increase reliability.

Paradox 3: Widespread but ineffective reform

Although they are somewhat behind the reform programs in other regions of the world, sub-Saharan African countries also embarked upon the path of power sector reform orthodoxy, which included reform legislation and sector restructuring to pave the way for competition in generation and private sector participation across

Figure 4.8. Electricity Service Expenditure in Sub-Saharan Africa

Source: Banerjee and others (2008).

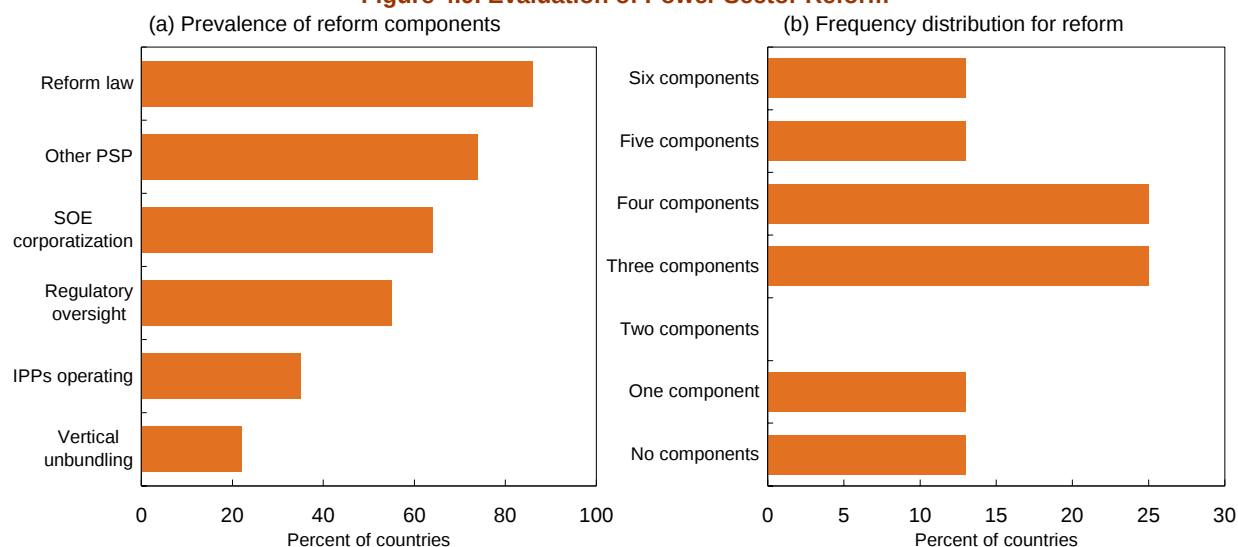
the electricity supply chain. As of 2006 more than 80 percent of sub-Saharan African countries had enacted a power sector reform law, 75 percent had experienced private participation in power, about 66 percent had corporatized their state-owned utilities, more than half had established a regulator, and more than a third had independent power producers (Figure 4.9a). Yet few countries have adopted the full range of reform measures (Figure 4.9b).

The lack of results has forced a rethinking of whether certain reform principles and programs apply in sub-Saharan Africa. One reform that has not been widely adopted in sub-Saharan Africa is unbundling generation, transmission, and distribution functions to create competition in generation and supply. Besant-Jones (2006) in his global review concluded that restructuring the power sector to advance competition only made sense in countries large enough to support several generators above minimum efficient scale. The power systems in most sub-Saharan African countries are so small that this prescription is largely irrelevant for them. Nevertheless, even in the largest countries, where unbundling could work, there has not been much progress.

There have been nearly 60 medium- to longer-term power sector transactions with the private

sector in sub-Saharan Africa, not counting emergency power generation leases (Table 4.2). Almost half of these have been independent projects, with the utility signing Power Purchase Agreements with the private sector to build green field generation plants. With more than US\$2 billion of private investment, these have provided nearly 3,000 MW of new capacity—a substantial contribution to available capacity. An independent assessment concluded that these projects can be relatively costly owing to technology choices, procurement problems, and currency devaluation, and are often subject to renegotiation (Gratwick and Eberhard, 2007). A poorly documented issue is the extent to which Power Purchase Agreements are creating contingent liabilities for the state.

The rest of the transactions have been concession, lease, or management contracts, typically for the operation of the entire national power system. These have had a relatively high failure rate; about one-third of the contracts are currently in distress or already cancelled. However, in the more successful transactions performance has improved noticeably. The usual reasons for failure are the lack of financial viability or creditworthiness of the utilities—governments have been unwilling or unable to adjust tariffs to enable cost recovery or

Figure 4.9. Evaluation of Power Sector Reform

Source: Eberhard and others (2008).

Table 4.2. Private Participation Power Sector Transactions in Sub-Saharan Africa

Type of Private Participation	Countries Affected	Number of Transactions	Number of Problem Transactions	Total Value of Transactions (US\$m)
Management or lease contract	Chad, Gambia, Gabon, Ghana, Guinea-Bissau, Kenya, Lesotho, Madagascar, Malawi, Mali, Namibia, Rwanda, São Tomé and Príncipe, Tanzania, Togo	17	4	5
Concession contract	Cameroon, Comoros, Côte d'Ivoire, Gabon, Guinea, Mali, Mozambique, Nigeria, São Tomé and Príncipe, Senegal, South Africa, Togo, Uganda	12	5	1,598
Independent power project	Angola, Burkina Faso, Congo, Côte d'Ivoire, Ethiopia, Ghana, Kenya, Mauritius, Nigeria, Senegal, Tanzania	24	2	2,293
Divestiture	Cape Verde, South Africa, Zambia, Zimbabwe	4	...	938
Overall		57	11	4,834

Source: World Bank Private Participation in Infrastructure database (2007).

Note: Problem transactions are defined as projects that are now distressed or were prematurely cancelled.

pay subsidies to make up the difference—and the lack of access to funding for priority investments to improve efficiency or expand services. The fundamental factors to make private participation work were absent.

Perhaps the single most relevant institutional consideration is the governance of the national power utility. It is possible to rate sub-Saharan African power utilities by the extent to which they are managed on sound commercial principles (IMF, 2004a). The rating is based on whether utilities have managerial autonomy with respect to (i) labor policy and (ii) market decisions relating to production and sales; whether utilities are financially viable, measured in terms of (iii) the absence of subsidies; and (iv) tax breaks and the requirement to be (v) profitable and pay (vi) market rates for debt; and whether utilities are accountable, producing (vii) published audited accounts and being (viii) publicly listed on the stock exchange to protect the rights of (ix) minority shareholders.

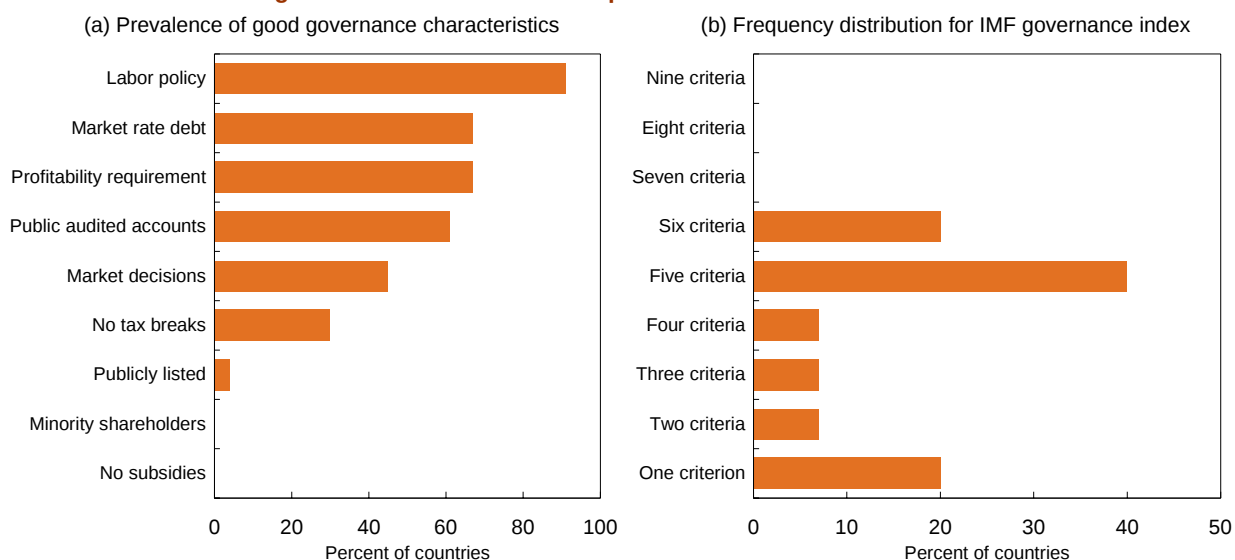
These good governance practices are not widespread in sub-Saharan African utilities (Figure 4.10), though the majority do report freedom with respect to labor policies, and a sizable minority can make their own market decisions. While most utilities report that they are

required to be profitable and pay market rates for debt, in practice the vast majority benefit from sizable subsidies and tax breaks and are not in a position to borrow at all. Only 60 percent publish audited accounts, and stock exchange listing is unheard of. The typical utility in the sample meets only about half the criteria (Figure 4.10b).

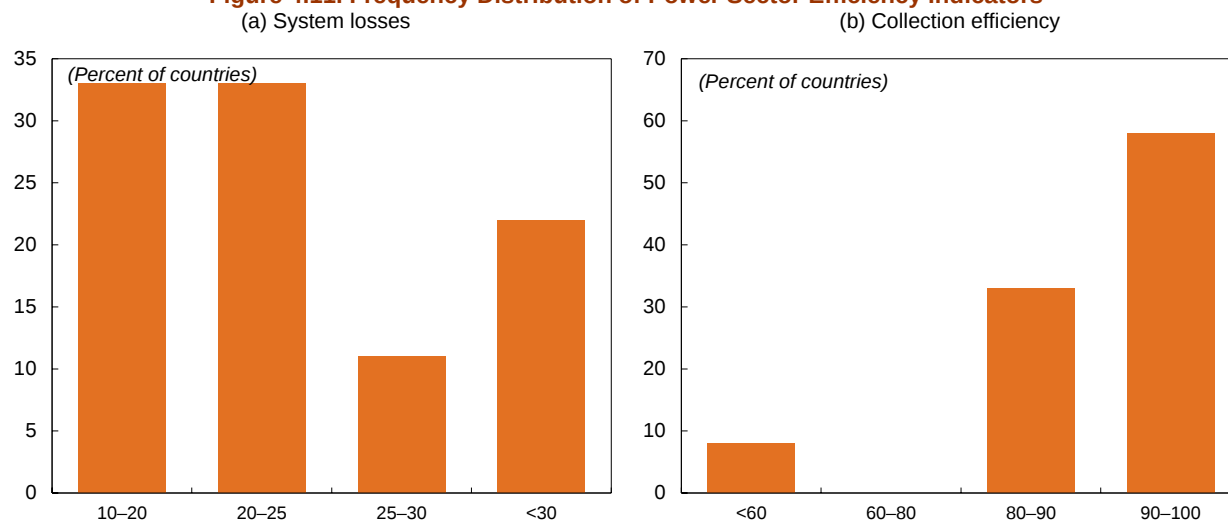
Poor governance is reflected in deficient performance. In well-performing utilities around the world, system losses can be as low as 10 percent; two-thirds of sub-Saharan African utilities report losses of more than 20 percent. Similarly, well-run utilities collect close to 100 percent of what is owed them, while 40 percent of sub-Saharan African utilities collect less than 90 percent (Figure 4.11).

The inefficiency of sub-Saharan African utilities generates substantial hidden costs. These hidden costs can be quantified (Ebinger, 2006) by comparing the revenues a utility raises against those raised by an ideal utility that prices at full economic cost and keeps distribution and collection losses to best practice levels. In many sub-Saharan African countries, hidden costs can be as high as 2 percent of GDP (Figure 4.12a). About 50 percent of the costs stem from collection losses and another 30 percent from distribution losses (Figure 4.12b). The dividend

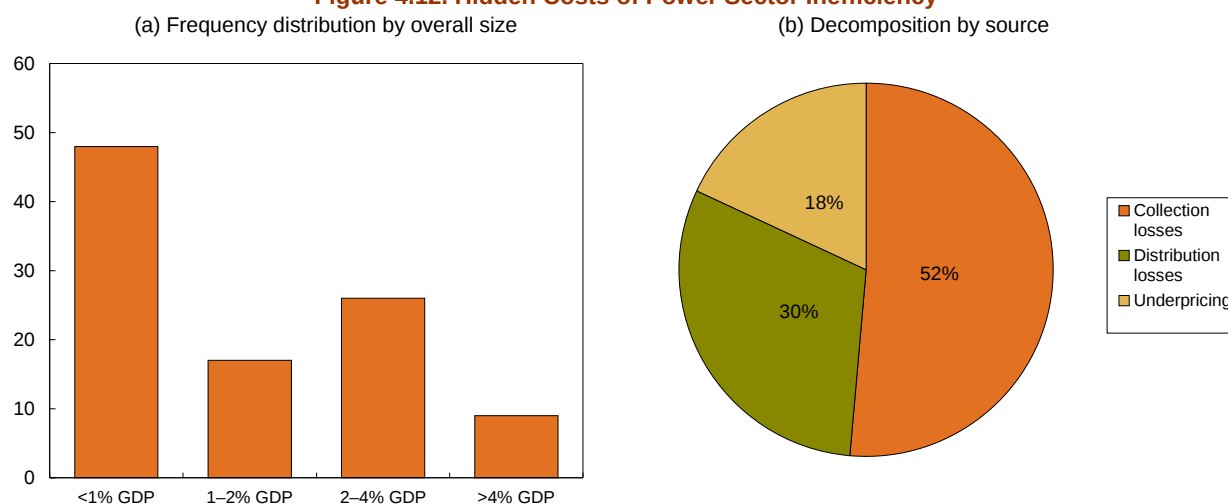
Figure 4.10. State-Owned Enterprise Governance Characteristics



Source: Eberhard and others (2008).

Figure 4.11. Frequency Distribution of Power Sector Efficiency Indicators

Source: Eberhard and others (2008).

Figure 4.12. Hidden Costs of Power Sector Inefficiency

Source: Eberhard and others (2008).

from improving utility performance is often very high. The contribution of under-pricing to these hidden losses is relatively small, although it varies by country.

Given the large scale, long lead times, and extensive preparation required to build power infrastructure, careful planning is crucial. However, many sub-Saharan African countries lack ministerial capability for long-term power sector planning. The current power shortages were to a large extent foreseeable, but action was not taken far enough ahead to avert them. Even

today—notwithstanding the strong case for power sector development—there is a shortage of bankable electricity generation projects because of bottlenecks in project preparation. To some extent power sector planning has been a casualty of the 1990s reform model that emphasized market-led infrastructure development and allocation of human resources to regulatory rather than planning functions.

Effective power sector planning recognizes critical upstream linkages with fuel supply industries. Security of supply is subject to interrelated

infrastructure and incentive problems. For countries with access to natural gas, lack of pipeline capacity and vandalism have been a growing concern. In Nigeria, for example, these problems have reduced the gas available for domestic electricity generation by independent power producers and limited gas trade in the WAPP. Inadequate incentives in gas pricing have also deterred private investment in infrastructure to gather natural gas and in pipelines. For countries that rely on imported diesel fuel, deficient port facilities and transport links add greatly to their costs. The lack of competition and transparency in fuel procurement also exacerbates costs. The OECD Competition Committee has flagged collusive tendering of oil and price fixing as major issues in a number of African countries.

Paradox 4: High expenditure but inadequate finance

Sub-Saharan African countries on average spend 2.7 percent of GDP on power; a significant number spend more than 4 percent (Table 4.3). Typically, more than 90 percent of this spending is channeled through the national state-owned utility; less than 10 percent appears on the central government budget. Operating costs absorb 75 percent of total spending. As a result, public investment in the sector is very low—on average only 0.7 percent of GDP.

The contribution of official development assistance (ODA) to public investment in power has been modest, averaging only US\$700 million a year for the last decade. Support has been highly volatile: only a few hundred million dollars a year in the late 1990s but rising toward US\$1 billion a

year in recent years. Despite the substantial number of private transactions, their value has averaged only about US\$300 million a year for the last decade, and once again the flows have been highly volatile because these investments are lumpy. Thus total external capital flows to the power sector in sub-Saharan Africa amount to no more than 0.1 percent of the region's GDP (Figure 4.13).

In recent years, the China Ex-Im Bank has emerged as a major new financier of power infrastructure in sub-Saharan Africa. Between 2001 and 2006 Chinese commitments averaged US\$1.7 billion a year, more than ODA and Private Participation in Infrastructure (PPI) combined and equivalent to about 0.2 percent of the region's GDP. Most of the Chinese financing has gone to six large hydropower projects with a combined generating capacity of over 7,000 MWs. Once completed, these projects will increase sub-Saharan Africa's installed hydropower capacity by 40 percent. China is also financing 2,500 MW of thermal power, and the India Ex-Im Bank has financed major thermal generation projects in Nigeria and Sudan.

Numerous econometric analyses show that the elasticity of power sector demand with respect to economic growth is close to unity. With GDP growth rates in sub-Saharan Africa averaging above 5 percent a year in recent years, power generation capacity should be growing at a similar rate to keep pace with demand. However, since 1980 annual growth in generating capacity has averaged only 2.9 percent.

A recent study constructs a series of optimization models for each of Africa's major regional power

Table 4.3. Power Sector Expenditure
(Percent of GDP)

	Total	Central Government	State-Owned Enterprise	Public Investment	Operating Costs
Average	2.72	0.21	2.51	0.67	2.05
Lower quartile	1.90	0.04	1.83	0.20	1.70
Upper quartile	3.45	0.36	3.29	0.79	2.65

Source: Briceno-Garmendia and Smits (2008).

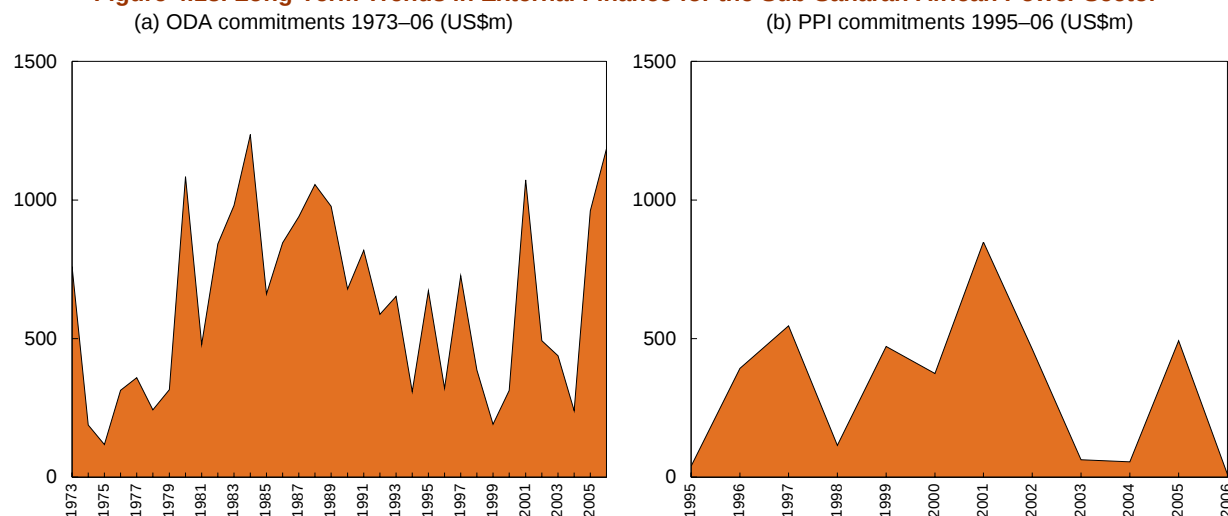
pools to simulate the expenditures required (Econ Analysis, 2008). The model is flexible enough to consider different assumptions about the extent of regional power trade, the pace of economic growth, the extent of political ambitions for universal access, and the price of inputs like oil and gas.

Table 4.4 reports baseline results for a scenario in which full advantage is taken of regional power trade and all countries aim for an access rate of 35 percent by 2015. Each year sub-Saharan Africa would thus need to add about 3,000 MW of new generation capacity and connect about 3 million new households. This scenario costs 6–7 percent of sub-Saharan African GDP, equivalent to US\$47 billion annually, split almost evenly between investment and operations and with about two-thirds of the cost coming from power generation needs. Current spending on power averages less

than 3 percent of GDP. Investment accounts for more than half that, equivalent to at least 2 percent of GDP, compared with current power sector investment amounting to less than 1 percent of GDP on average. Despite significant expansion in access, the bulk of the expenditure is associated with generation.

The regional averages conceal huge variations between countries. As power trade grows, the burden of investment falls disproportionately on countries with abundant resources. In a handful of cases the annualized expenditure requirement exceeds 10 percent of GDP, mostly for investment in generation for export. The most prominent examples are Ethiopia and the Democratic Republic of Congo, which would each become major exporters of hydropower in their pools. The financing would not necessarily need

Figure 4.13. Long-Term Trends in External Finance for the Sub-Saharan African Power Sector



Sources: OECD (2006); Infrastructure Consortium for Africa (2007); and World Bank Private Participation in Infrastructure Database (2007).

Table 4.4. Annualized Power Sector Expenditure Requirements to 2015
(Percent of GDP)

	Total	Investment	Operating Expenditure	Generation	Transmission and Distribution
CAPP	...	...	...	...	...
EAPP	4.9	2.5	2.4	3.7	1.2
SAPP	3.8	2.0	1.8	2.3	1.5
WAPP	...	...	...	...	...
Overall ¹	6.7	3.4	3.3	4.5	2.2

Source: Africa Infrastructure Country Diagnostic database.

¹ Preliminary estimate for the whole of sub-Saharan Africa based on results currently available for EAPP and SAPP.

to be raised from domestic resources but could be underwritten to some degree by importing countries.

There is major potential for expansion of cross-border power trade. For example, in the SAPP alone, the volume traded internationally could rise from the current 45 terrawatt hours (TWh) to 141 TWh a year if trade were exploited to its full economic potential.

Trade necessitates investments in cross-border transmission links but also allows for significant savings from accessing lower-cost power sources. It is therefore possible to calculate the gains from trade as the rate of return on cross-border investments. These have been estimated at 20 percent in Eastern Africa to 167 percent in Southern Africa, in both cases exceeding typical hurdle rates for public investment (Econ Analysis, 2008). While such trade would still only represent about 8 percent of total power demand, in such trading scenarios some smaller countries would depend on imports to meet more than 50 percent of domestic demand.

The savings in the annualized cost of the power sector from trade are relatively small at less than 10 percent, but the gains for individual countries in terms of cheaper power can be substantial. Most countries would reduce the average cost of power by a few cents/kwh—a 20–60 percent saving. For a handful of countries power costs would be reduced by more than 60 percent, or US\$0.10/kwh.

The main effect of trade in power is to support development of more large-scale hydropower schemes that would not be viable for a single nation. As a result, the composition of the generation portfolio shifts toward hydropower by 10–15 percentage points relative to the case without expanded trade. The additional hydropower would displace natural gas generation in Eastern Africa and coal generation in Southern Africa. It would also increase the share of power production coming from export countries like Ethiopia and the Democratic Republic of Congo.

Irrespective of trade development, however, the major power consumers—Egypt, Nigeria, and South Africa—continue to be by far the main producing countries in their regional power pools.

The Way Forward

The power sector in Africa is characterized by a set of paradoxes. There are abundant sources of power, significant levels of government funding, and notable efforts at reform. Yet electricity access rates are very low compared with other developing regions, prices are high, and the power supply insufficient and unreliable.

The policy choices that best address these paradoxes are not clear-cut. The traditional model that predominates in the sub-Saharan African power sector—vertically integrated, state-owned monopolist utilities—has yielded disappointing results. Yet reform to increase efficiency and boost competition through private participation has in many cases failed to deliver the expected results: unbundling is limited, failures of transactions and projects have been frequent, and there has been minimal additional investment.

The lesson that emerges is that success in tackling the challenges is not a simple function of the model adopted. The power sector in Africa needs to move to a “mixed economy,” characterized by a range of structures, regulation, and technologies adapted to each country’s context. Successful interventions will tackle several problems simultaneously to put the sector on a positive trajectory of improved sector and utility management, financial viability, new investment, and better customer service. This means recognizing that the power sector has quasi-monopolistic characteristics—particularly in grid-based distribution and to a lesser extent in transmission—and that incumbent utilities will continue to be the largest players in the sector for the foreseeable future. But interventions also need to be innovative and ambitious, recognizing that meeting customer needs means multiple providers, financial viability, and new forms of

external financial assistance. Where certain preconditions are in place—including appropriate regulatory frameworks for public-private partnerships, reformed tariff frameworks, and sufficient security of investment for investors—sector reforms can do much to facilitate the entry of strategic private partners.

Consequently, the starting point is sustained and concerted action on three strategic priorities: (i) regional scaling-up of generation capacity, (ii) improving the effectiveness and governance of utilities, and (iii) expanding access through sector-wide engagement. The three are interdependent and must be tackled together. Efforts to boost generation and regional power trade will stumble if the utilities, which will continue to be central actors in the sector, remain inefficient and insolvent. Expanding electricity distribution systems without taking measures to tackle the shortages in generation and to improve transmission capacity would clearly be futile. And focusing exclusively on utility reform would be fruitless unless a start is made on substantial, long-gestation investments in both generation and access to improve quality of service and render the utilities viable. In short, these strategic priorities must progress together. At the same time, the time required to yield results from these actions is such that they need to be complemented by such short-term measures, including demand-side management (for example, the introduction of energy-efficient bulbs) and loss-reduction programs (such as enhanced bill collection and initiatives to tackle electricity theft).

Regional scaling up of generation capacity

The first strategic priority is to tackle the generation capacity deficit head-on. Africa's considerable hydro, gas, and coal resources remain under exploited. The best way to scale up generation at the lowest unit cost is to develop a new generation of large-scale generation projects. An initial wave of projects could include candidates like Inga III in the Democratic

Republic of Congo, which is expected to add about 3,800 MW in capacity, the Temane gas-powered plant in Mozambique (750 MW), Gilbe Gibe III hydropower in Ethiopia (1,800 MW), and further development of generation capacity based on natural gas from Nigeria. However, individual countries do not have the necessary investment capital, or even the electricity demand, to move forward with these large projects. A project finance approach predicated on regional power off-take, in which private sector participation and donor funding are blended, is needed.

Expanded generation capacity is redundant unless the power can be transmitted to users. This is where regional power pools play a critical enabling role. Challenges common to all the pools are rehabilitation and expansion of the cross-border transmission infrastructure to increase the potential for trade, and harmonization of regulations and system operating agreements. Equally important is the formulation of market trading mechanisms so that the additional energy generated from large projects can be priced and hence allocated in an efficient and fair way (for example, via competitive pool arrangements). While the economics of regional large-scale generation projects are convincing, they may give rise to significant political challenges. The gains from trade are much larger for some countries than for others, and considerations of self-sufficiency sometimes have more political weight than access to low-cost power. These factors need to be addressed early in the project development cycle.

Large-scale regional energy schemes have deep financing requirements. Capital expenditure for Inga III, for example, is estimated at US\$4–5 billion. This is beyond the capacity of concessional financing from development partners, even after significant increases in aid. Private participation will be pivotal. Yet successful private investments in energy projects have been rare in Africa, and increased private investment will not materialize simply because of large infrastructure financing gaps. The lessons learned from past failures need

to be addressed, as private investment will only flow where rewards demonstrably outweigh risks. Large-scale regional generation projects would have several attractions in this respect:

- Large investments benefit from economies of scale: for a given amount of generation capacity, the total costs (design, engineering, capital items, civil works, safeguards and others) for one large plant are lower than for several smaller plants with the same aggregate capacity. All else being equal, investments in larger projects are therefore likely to be more profitable.
- The investments would primarily be in stand-alone generation projects that present fewer risks than investments in vertically integrated utilities whose operational and regulatory risks (organizational inefficiency, lack of financial transparency, geographical distribution of personnel and assets, governance risks, political interference, and contingent risks like an uncertain legal framework) are far harder to price.
- There is increasing realization that investment in new generation capacity cannot be undertaken in isolation from other efforts in the sector. Capital is more likely to be forthcoming in an environment where other factors—such as the tariff structure, power purchase agreements, and reliable transmission interconnections—have been addressed. Utilities that are better run will eventually be able to move beyond covering operating expenses to invest in system expansion, making the whole sector more viable. Public sector financiers like the World Bank are also becoming more nimble in their deployment of tools to help crowd in the private sector, such as risk-mitigation instruments.

There are early but encouraging signs that scaling up generation capacity through large private-sector-led projects is starting to gather speed. A prominent example is the privately owned

250 MW Bujagali hydro plant in Uganda, supported by World Bank Group guarantees and funded by a private consortium. At the same time, ambitious regional projects undoubtedly present technical, financing, and political risks, and will continue to be complemented by investments at the national level.

Improving the effectiveness and governance of utilities

Shortcomings in how the power sector operates lead directly to many of the suboptimal outcomes detailed in this chapter. Tackling these shortcomings will require improvements in the regulatory and tariff framework at the sector level, as well as better management in utilities.

The lack of strategic policy and planning for the electricity sector at the central government level is a critical weakness. Interventions have been piecemeal rather than integrated; for example, many countries have focused on generation without investing in efficient transmission and delivery of power. A well-articulated plan for the sector will allow governments to move beyond the “firefighting” that has reduced their ability to plan for exogenous shocks, such as drought or high oil prices.

Financial viability of incumbent utilities—and hence creditworthiness and access to domestic and international private capital—is important for the overall development of the sector. It demands that utility revenues allow at least the recovery of operating costs and ideally some contribution to capital costs. That means that in many cases tariffs need to be gradually adjusted to levels that will allow these goals to be met, while remaining sensitive to the needs and capacity to pay of poorer households. The corollary of tariff adjustments is the need to significantly reduce operating costs to lessen the financial burden on consumers of efforts to recover costs. Operational efficiency programs are needed to reduce the high rates of technical, nontechnical (electricity theft), and collection losses. These can include capacity-

building and technical assistance to improve management, business practices, and planning. Priority areas are improved load management (to better match supply with priority customer needs), theft reduction initiatives, and increased revenue collection (through enhanced metering and better-run customer service units). Capital expenditure can also be driven down by using low-cost technology standards, as undertaken in Mali and Guinea. Innovations have included adjusting technical design standards to meet the reduced requirements of low-load systems, maximizing the use of material provided by local communities (such as locally sourced wooden poles), and the use of local employees and supervisors recruited from the community.

Past efforts at improving utility management focused too heavily on technical issues to the exclusion of governance and accountability. Good governance practices in sub-Saharan African utilities are often observed in the breach. Transparency and accountability depend on solid financial management, procurement, and management information systems—for example, requiring the auditing and publication of financial accounts and the use of comprehensive cost-based accounting systems that allow functional unbundling of costs and a clearer sense of cost centers. Oversight and transparency also need to be enhanced by better corporate governance (for example, by reforming how senior managers are appointed, insisting on conflict of interest disclosures, and making staffing practices more transparent and effective). Many of sub-Saharan Africa's newly established energy regulators can play an important role in this area, even in the absence of private participation in the sector. Reforms to ensure financial and managerial autonomy from state interference in commercial decisions are also needed in some countries.

In practical terms, even with appropriate tariffs, reduced operating costs, and better governance, the combination of expensive, maintenance-intensive equipment and the inability of even moderately wealthy households to pay for the full

capital cost of domestic grid extension means that full cost recovery in Africa is not yet possible.

Often capital subsidies will still be needed, whether from governments or donors.

Governments must therefore be able to articulate, in their strategic policy framework, the economic benefits of subsidies to the sector, as well as the path to eventual full cost recovery. They must also recognize that some households connected to the grid cannot afford even the variable costs of their service; carefully targeted and calibrated lifeline subsidies may be a vital part of power sector strategy.

Expanding access to electricity through sectorwide engagement

The fact that power is often unavailable to lower-income groups means that those who do not have access are not benefiting from government or external financing. From a social, poverty reduction, and political perspective, it is therefore imperative to expand access. Yet financing expansion to lower-income households will further strain the financial viability of the power sector.

Tackling this dilemma will require both significantly higher concessional financing from development partners for access programs, and tariff increases and operating cost reductions. Given the scale of investments needed, a systematic approach to planning and financing new investments is critical. The current project-by-project, ad hoc approach in development partner financing has led to fragmented planning, volatile and uncertain financial flows, and duplication of efforts. Engagement across the sector in multiyear programs of access roll-out supported by multiple development partners as part of a coherent national strategy will channel resources in a more sustained and cost-effective way to the distribution subsector. Coordinated action by development partners will also reduce the unit costs of increasing access, as well as creating new sources of demand that will further

make the case for large generation projects at the supranational level.

Since universal household electrification is still decades away in many countries, it is equally important that sector-wide programmatic approaches ensure that the benefits of electrification touch the poorest households, particularly deep in rural areas. While grid extension is often not economical for dispersed populations, off-grid models based on innovative renewable technologies can be cost-effective. For example, low-cost portable solar lanterns are one consumer product that could be accessible and affordable to the rural public, and the “Lighting Africa” initiative is supporting the development of the market. Solar-powered electrification of clinics and schools that provide essential public services to low-income communities is another way of bringing the benefits of investment in electrification directly to these communities.

Finally, it is important to recognize that most of the measures described above are medium term in

nature, and cannot be implemented overnight. As strong economic performance continues to escalate power demand, many sub-Saharan African countries will continue to face a very tight demand-supply balance in the coming years. It is therefore critical that longer-term efforts to redress the underlying structural causes of sub-Saharan Africa's current power supply crisis be complemented by shorter-term measures to soften the economic and social impact of power scarcity. Recent experiences from countries such as Brazil show that well-designed demand-side management measures (for example, a quota system with price signals, combined with a public energy efficiency campaign) can go a considerable way toward trimming peak demand, thereby substantially reducing the extent of power rationing at a relatively low economic and social cost.

Statistical Appendix

Estimates and projections used in this report are based on data provided by IMF country desks as of March 31, 2008. Projections are IMF staff estimates. The database covers 44 countries of the IMF's African Department; Eritrea, Liberia, and Zimbabwe are not included in aggregate groupings because of data limitations. The rest of the data are consistent with those underlying the April 2008

World Economic Outlook (WEO). While data follow established international statistical methodologies to the extent possible, variable choice may be determined by country-specific definitions. The coverage and definitions of data for different countries are therefore not always comparable. Moreover, many countries are not yet able to compile high-quality data.

Sub-Saharan Africa: Country Groupings

Resource-Intensive		Non-Resource-Intensive	
Oil	Non-oil	Coastal	Landlocked
Angola	Botswana	Benin *	Burkina Faso *
Cameroon *	Côte d'Ivoire	Cape Verde	Burundi
Chad	Guinea	Comoros	Central African Republic
Congo, Rep. of	Namibia	Gambia	Congo, Dem. Rep. of
Equatorial Guinea	São Tomé and Príncipe	Ghana *	Ethiopia *
Gabon	Sierra Leone *	Guinea-Bissau	Lesotho
Nigeria	Zambia *	Kenya	Malawi *
		Madagascar *	Mali *
		Mauritius	Niger *
		Mozambique *	Rwanda *
		Senegal *	Swaziland
		Seychelles	Uganda *
		South Africa	Zimbabwe
		Tanzania *	
		Togo	

Note: These groupings follow Collier and O'Connell (2006), who show that the effect of being resource rich is independent of location and thus classify all sub-Saharan African economies by both endowment and location. A country is classified as resource-rich if primary commodity rents exceed 10 percent of GDP (South Africa is not classified as resource-intensive, using this criterion). In terms of location, countries are classified by whether they have ocean access (coastal) or are landlocked.

Asterisk (*) marks countries that have reached the completion point under the enhanced HIPC Initiative and have qualified for MDRI relief.

Data and Conventions

For Tables SA1–2, SA7, SA21, and SA22, country group composites are calculated as the arithmetic average of data for individual countries, weighted by GDP valued at purchasing power parity (PPP) as a share of the total group GDP. The source of PPP weights is the WEO database.

For Tables SA3–4, SA6, SA8–12, SA14–20, and SA23–25, country group composites are calculated

as the arithmetic average of data for individual countries, weighted by GDP in U.S. dollars at market exchange rates as a share of total group GDP.

For Table SA5, country group composites are calculated as the geometric average of data for individual countries, weighted by GDP valued at PPP as a share of the total group GDP. The source of PPP weights is the WEO database.

For Table SA13, country group composites are calculated as the geometric average of data for individual countries, weighted by GDP in U.S. dollars at market exchange rates as a share of total group GDP.

WAEMU is the West African Economic and

Monetary Union. CEMAC is the Central African Economic and Monetary Community. EAC-5 is the East African Community.¹ SADC is the Southern African Development Community. COMESA is the Common Market of Eastern and Southern Africa.

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¹ Historical data for EAC-5 include Rwanda and Burundi, which joined in 2007.

REGIONAL ECONOMIC OUTLOOK: SUB-SAHARAN AFRICA

Table SA1. Real GDP Growth (Percent)							
	1997–2002	2003	2004	2005	2006	2007	2008
Oil-exporting countries	6.3	8.1	11.0	7.7	7.3	8.8	9.9
Excluding Nigeria	5.7	4.8	11.6	10.9	8.8	12.0	10.9
Angola	4.9	3.3	11.2	20.6	18.6	21.1	16.0
Cameroon	4.5	4.0	3.7	2.3	3.2	3.3	4.5
Chad	5.2	14.7	33.6	7.9	0.2	0.6	1.8
Congo, Rep. of	2.7	0.8	3.5	7.8	6.2	-1.6	9.2
Equatorial Guinea	50.3	13.1	32.2	6.9	-5.6	12.4	10.1
Gabon	0.0	2.4	1.1	3.0	1.2	5.6	4.2
Nigeria	6.8	10.3	10.6	5.4	6.2	6.4	9.1
Middle-income countries	3.0	3.3	4.9	4.9	5.2	5.1	4.0
Excluding South Africa	5.4	4.4	5.3	4.0	4.0	4.8	5.2
Botswana	7.8	6.0	6.3	4.7	3.6	5.4	5.0
Cape Verde	7.8	4.7	4.4	5.7	10.8	6.9	7.7
Lesotho	1.8	2.7	4.2	2.9	7.2	4.9	5.2
Mauritius	5.0	3.8	4.7	3.1	3.6	4.6	7.0
Namibia	3.9	3.5	6.6	4.8	4.1	4.4	4.7
Seychelles	3.3	-5.9	-2.9	1.2	5.3	5.3	4.6
South Africa	2.7	3.1	4.9	5.0	5.4	5.1	3.8
Swaziland	2.3	3.9	2.5	2.2	2.8	2.4	2.0
Low-income countries	4.0	4.4	5.9	7.0	6.6	6.9	6.1
Benin	5.1	3.9	3.1	2.9	3.8	4.2	5.4
Burkina Faso	5.7	8.0	4.6	7.1	5.5	4.2	4.0
Ethiopia	3.4	-3.5	9.8	12.6	11.6	11.4	8.4
Ghana	4.3	5.2	5.6	5.9	6.4	6.4	6.9
Kenya	1.9	2.8	4.6	5.8	6.1	7.0	2.5
Madagascar	1.7	10.8	5.3	4.4	5.0	6.3	6.8
Malawi	1.6	4.2	5.0	2.3	7.9	7.4	7.1
Mali	5.0	7.2	2.4	6.1	5.3	2.5	4.3
Mozambique	9.0	6.5	7.9	8.4	8.0	7.0	7.0
Niger	4.1	7.7	-0.8	7.4	5.2	3.2	4.4
Rwanda	8.5	0.3	5.3	7.1	5.5	6.0	6.0
Senegal	4.0	6.7	5.8	5.3	2.1	5.0	5.4
Tanzania	4.8	6.9	7.8	7.4	6.7	7.3	7.8
Uganda	5.7	4.7	5.4	6.8	5.1	6.5	7.1
Zambia	2.6	5.1	5.4	5.2	6.2	5.3	6.3
Fragile countries	0.8	1.2	3.3	3.7	2.6	3.3	5.0
Including Zimbabwe	0.7	0.8	3.1	3.4	2.3	3.0	4.8
Burundi	1.6	-1.2	4.8	0.9	5.1	3.6	5.9
Central African Republic	2.7	-7.6	1.0	2.4	4.0	4.2	4.9
Comoros	2.7	2.5	-0.2	4.2	1.2	-1.0	1.6
Congo, Dem. Rep. of	-2.8	5.8	6.6	7.9	5.6	6.3	8.8
Côte d'Ivoire	1.0	-1.7	1.6	1.8	-0.3	1.6	2.9
Eritrea	1.6	-2.7	1.5	2.6	-1.0	1.3	1.2
Gambia, The	4.3	6.9	7.0	5.1	6.5	7.0	6.5
Guinea	4.2	1.2	2.7	3.3	2.2	1.5	4.9
Guinea-Bissau	-2.1	-0.6	2.2	3.2	1.8	2.5	3.2
Liberia	...	-31.3	2.6	5.3	7.8	9.4	9.5
São Tomé and Príncipe	3.5	5.4	6.6	5.7	6.7	6.0	6.0
Sierra Leone	3.8	9.5	7.4	7.3	7.4	6.8	6.5
Togo	0.0	5.2	2.4	1.3	4.1	2.1	3.0
Zimbabwe	-2.7	-10.4	-3.6	-4.0	-5.4	-6.1	-6.6
Sub-Saharan Africa	4.1	4.9	6.9	6.2	6.1	6.6	6.5
Including Zimbabwe	4.0	4.8	6.9	6.2	6.1	6.6	6.5
Excluding Nigeria and South Africa	4.1	4.1	7.0	7.3	6.5	7.7	7.3
Oil-importing countries	3.1	3.5	5.1	5.6	5.5	5.6	4.9
Excluding South Africa	3.6	3.8	5.4	6.1	5.6	6.1	5.8
CFA franc zone	4.5	4.6	7.2	4.5	2.2	3.6	4.8
WAEMU	3.2	4.0	2.9	4.3	2.8	3.2	4.1
CEMAC	6.0	5.3	11.5	4.6	1.6	4.0	5.5
EAC-5	3.8	4.2	5.8	6.4	6.0	6.9	5.3
SADC	3.1	3.9	5.8	6.7	6.9	7.4	6.3
SACU	2.9	3.3	4.9	4.9	5.3	5.1	3.9
COMESA	3.2	2.9	7.1	10.0	9.7	11.0	9.1
Resource-intensive countries	5.7	6.9	9.6	6.9	6.5	7.9	9.0
Oil	6.3	8.1	11.0	7.7	7.3	8.8	9.9
Non-oil	3.5	2.5	4.2	3.7	2.8	3.7	4.5
Non-resource-intensive countries	3.1	3.6	5.3	5.8	5.8	5.8	4.9
Coastal	3.0	3.8	5.1	5.2	5.5	5.5	4.4
Landlocked	3.4	2.7	5.9	8.0	7.3	7.1	6.8
MDRI	4.5	4.7	5.9	6.6	6.3	6.5	6.5
Fixed exchange rate regime	4.7	4.6	6.8	4.4	2.6	3.8	4.8
Floating exchange rate regime	3.9	4.9	6.9	6.7	6.9	7.3	6.9

Sources: IMF, African Department database, March 31, 2008; and World Economic Outlook (WEO) database, March 31, 2008.

Table SA2. Real Non-Oil GDP Growth
(Percent)

	1997–2002	2003	2004	2005	2006	2007	2008
Oil-exporting countries	16.5	6.3	10.7	9.3	11.7	12.0	11.3
Excluding Nigeria	9.2	7.0	7.2	10.3	14.7	15.0	14.1
Angola	5.9	10.3	9.0	14.1	27.5	20.4	19.4
Cameroon	5.2	4.9	4.9	3.2	2.9	3.9	4.6
Chad	4.6	6.0	2.1	11.0	4.7	3.7	2.0
Congo, Rep. of	2.8	5.4	5.0	5.4	5.9	6.6	6.9
Equatorial Guinea	28.5	11.7	20.0	23.1	12.1	42.9	31.2
Gabon	2.4	0.9	2.3	4.3	4.9	6.4	4.7
Nigeria	9.7	5.8	13.2	8.6	9.4	9.6	9.0
Middle-income countries	3.0	3.3	4.9	4.9	5.2	5.1	4.0
Excluding South Africa	5.4	4.4	5.3	4.0	4.0	4.8	5.2
Botswana	7.8	6.0	6.3	4.7	3.6	5.4	5.0
Cape Verde	7.8	4.7	4.4	5.7	10.8	6.9	7.7
Lesotho	1.8	2.7	4.2	2.9	7.2	4.9	5.2
Mauritius	5.0	3.8	4.7	3.1	3.6	4.6	7.0
Namibia	3.9	3.5	6.6	4.8	4.1	4.4	4.7
Seychelles	3.3	-5.9	-2.9	1.2	5.3	5.3	4.6
South Africa	2.7	3.1	4.9	5.0	5.4	5.1	3.8
Swaziland	2.3	3.9	2.5	2.2	2.8	2.4	2.0
Low-income countries	4.0	4.4	6.4	6.9	6.6	6.9	6.0
Benin	5.1	3.9	3.1	2.9	3.8	4.2	5.4
Burkina Faso	5.7	8.0	4.6	7.1	5.5	4.2	4.0
Ethiopia	3.4	-3.5	13.1	12.6	11.6	11.4	8.4
Ghana	4.3	5.2	5.6	5.9	6.4	6.4	6.9
Kenya	1.9	2.8	4.6	5.8	6.1	7.0	2.5
Madagascar	1.7	10.8	5.3	4.4	5.0	6.3	6.8
Malawi	1.6	4.2	5.0	2.3	7.9	7.4	7.1
Mali	5.0	7.2	2.4	6.1	5.3	2.5	4.3
Mozambique	9.1	7.9	7.5	6.2	8.5	7.0	7.0
Niger	4.1	7.7	-0.8	7.4	5.2	3.2	4.4
Rwanda	8.5	0.3	5.3	7.1	5.5	6.0	6.0
Senegal	4.0	6.7	5.8	5.3	2.1	5.0	5.4
Tanzania	4.8	6.9	7.8	7.4	6.7	7.1	7.5
Uganda	5.7	4.7	5.4	6.8	5.1	6.5	7.1
Zambia	2.6	5.1	5.4	5.2	6.2	5.3	6.3
Fragile countries	0.8	1.0	3.3	3.4	2.3	3.5	5.0
Including Zimbabwe	0.6	0.5	3.1	3.2	2.1	3.2	4.8
Burundi	1.6	-1.2	4.8	0.9	5.1	3.6	5.9
Central African Republic	2.7	-7.6	1.0	2.4	4.0	4.2	4.9
Comoros	2.7	2.5	-0.2	4.2	1.2	-1.0	1.6
Congo, Dem. Rep. of	-2.8	5.8	6.6	7.9	5.6	6.3	8.8
Côte d'Ivoire	0.9	-2.2	1.6	1.2	-1.0	2.2	2.9
Eritrea	1.6	-2.7	1.5	2.6	-1.0	1.3	1.2
Gambia, The	4.3	6.9	7.0	5.1	6.5	7.0	6.5
Guinea	4.2	1.2	2.7	3.3	2.2	1.5	4.9
Guinea-Bissau	-2.1	-0.6	2.2	3.2	1.8	2.5	3.2
Liberia	...	-31.3	2.6	5.3	7.8	9.4	9.5
São Tomé and Príncipe	3.5	5.4	6.6	5.7	6.7	6.0	6.0
Sierra Leone	3.8	9.5	7.4	7.3	7.4	6.8	6.5
Togo	0.1	5.2	2.4	1.3	4.1	2.1	3.0
Zimbabwe	-2.7	-10.4	-3.6	-4.0	-5.4	-6.1	-6.6
Sub-Saharan Africa	7.3	4.3	6.9	6.7	7.4	7.7	7.0
Including Zimbabwe	7.2	4.3	6.9	6.6	7.4	7.6	7.0
Excluding Nigeria and South Africa	5.1	4.6	6.1	7.1	8.1	8.6	8.3
Oil-importing countries	3.1	3.5	5.3	5.5	5.5	5.6	4.8
Excluding South Africa	3.6	3.8	5.7	5.9	5.6	6.1	5.8
CFA franc zone	5.7	4.2	4.4	5.9	3.9	6.7	6.2
WAEMU	3.2	3.8	2.9	4.1	2.6	3.4	4.1
CEMAC	9.1	4.7	6.0	7.7	5.2	10.2	8.4
EAC-5	3.8	4.2	5.8	6.4	6.0	6.8	5.2
SADC	3.2	4.5	5.6	6.0	7.9	7.3	6.8
SACU	2.9	3.3	4.9	4.9	5.3	5.1	3.9
COMESA	3.4	4.3	7.2	8.5	11.8	10.8	10.2
Resource-intensive countries	13.6	5.5	9.4	8.2	10.0	10.5	10.2
Oil	16.5	6.3	10.7	9.3	11.7	12.0	11.3
Non-oil	3.4	2.3	4.2	3.5	2.5	3.9	4.5
Non-resource-intensive countries	3.1	3.6	5.4	5.7	5.8	5.8	4.9
Coastal	3.0	3.9	5.1	5.2	5.5	5.5	4.4
Landlocked	3.4	2.7	6.9	8.0	7.3	7.1	6.8
MDRI	5.0	4.8	6.5	6.6	6.3	6.5	6.5
Fixed exchange rate regime	5.5	4.3	4.6	5.6	3.9	6.4	5.9
Floating exchange rate regime	4.6	4.3	7.5	6.9	8.3	8.0	7.2

Sources: IMF, African Department database, March 31, 2008; and World Economic Outlook (WEO) database, March 31, 2008.

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**Table SA3. Real Per Capita GDP Growth
(Percent)**

	1997-2002	2003	2004	2005	2006	2007	2008
Oil-exporting countries	3.3	5.0	8.0	4.8	4.4	5.9	7.0
Excluding Nigeria	2.5	1.4	8.5	7.9	5.8	8.9	7.9
Angola	1.9	0.4	8.0	17.2	15.2	17.7	12.7
Cameroon	1.5	1.2	0.9	-0.5	0.4	0.5	1.7
Chad	2.6	4.8	30.4	5.3	-2.3	-1.8	-0.7
Congo, Rep. of	-0.1	-2.0	0.6	4.7	3.2	-4.4	6.1
Equatorial Guinea	40.2	9.9	28.4	3.9	-8.2	9.3	7.0
Gabon	-2.4	-0.1	-1.4	0.5	-1.3	3.0	2.6
Nigeria	3.9	7.4	7.6	2.6	3.4	3.5	6.2
Middle-income countries	1.5	2.2	3.9	4.0	4.0	4.4	3.0
Excluding South Africa	3.9	3.4	4.5	3.4	3.6	4.5	5.0
Botswana	6.6	5.9	6.4	5.1	4.3	6.3	6.0
Cape Verde	5.4	2.8	2.5	3.7	8.8	5.0	5.7
Lesotho	0.1	0.9	1.9	1.0	5.2	3.0	3.3
Mauritius	3.9	2.8	3.8	2.2	2.8	3.8	6.1
Namibia	1.5	2.1	5.4	3.7	3.2	3.5	3.9
Seychelles	2.8	-7.7	-3.7	1.1	3.4	5.2	5.0
South Africa	1.2	2.1	3.8	4.0	4.1	4.3	2.8
Swaziland	-0.3	1.5	0.3	0.2	1.1	0.8	0.6
Low-income countries	1.3	1.9	4.2	4.4	4.1	4.3	3.6
Benin	1.7	2.0	0.1	0.0	0.8	1.0	2.1
Burkina Faso	2.9	4.6	1.4	4.6	3.1	1.8	1.7
Ethiopia	0.4	-6.1	6.8	9.6	8.5	8.4	5.7
Ghana	1.7	2.6	3.0	3.2	3.7	3.7	4.2
Kenya	-0.3	0.7	2.6	3.8	4.3	5.1	0.7
Madagascar	-1.2	7.7	18.8	1.6	2.2	3.5	4.0
Malawi	-1.1	1.9	2.8	0.3	5.7	5.3	5.0
Mali	2.5	4.8	0.1	3.7	2.9	0.2	1.9
Mozambique	6.8	4.5	6.0	5.8	5.5	4.6	4.6
Niger	0.8	4.4	-3.8	4.2	2.0	0.1	1.3
Rwanda	2.8	-1.4	3.8	5.2	3.6	3.8	3.8
Senegal	1.4	4.2	3.3	2.8	-0.3	2.6	2.9
Tanzania	2.3	4.8	5.5	5.1	4.8	5.2	5.7
Uganda	2.5	1.2	1.8	3.1	1.4	2.8	3.4
Zambia	0.3	2.7	2.9	2.7	3.7	2.8	3.8
Fragile countries	-1.6	-1.1	1.0	1.2	0.3	1.0	2.7
Including Zimbabwe	-1.6	-1.5	0.9	1.1	0.1	0.8	...
Burundi	-0.7	-4.0	2.8	-1.1	3.1	1.6	3.8
Central African Republic	0.8	-9.4	-1.0	0.4	2.0	2.2	2.8
Comoros	0.7	0.4	-2.3	2.1	-0.8	-3.0	-0.5
Congo, Dem. Rep. of	-5.0	2.8	3.5	4.7	2.5	3.2	5.7
Côte d'Ivoire	-1.3	-3.2	0.1	0.0	-1.8	0.1	1.4
Eritrea	-1.9	-6.9	-2.8	-1.4	-3.9	-1.7	-1.8
Gambia, The	0.9	4.2	4.3	2.5	3.8	4.3	3.8
Guinea	1.5	-2.3	-0.5	0.1	-1.0	-1.7	1.8
Guinea-Bissau	-6.5	-3.4	-0.7	0.3	-1.1	-0.4	0.3
Liberia	...	-32.2	0.8	2.4	3.7	4.4	4.1
São Tomé and Príncipe	1.5	3.0	4.1	3.3	4.3	3.7	3.7
Sierra Leone	1.1	6.7	4.6	4.5	4.7	4.1	3.8
Togo	-3.2	2.4	-0.3	-1.3	1.5	-0.4	0.5
Zimbabwe	-2.4	-11.3	-3.3	-4.0	-5.4	-6.1	...
Sub-Saharan Africa	1.8	2.7	5.1	4.2	3.9	4.6	4.4
Including Zimbabwe	1.8	2.7	5.0	4.1	3.9	4.6	...
Excluding Nigeria and South Africa	1.4	1.5	5.0	4.8	4.1	5.3	4.9
Oil-importing countries	1.1	1.8	3.8	3.9	3.7	4.1	3.2
Excluding South Africa	1.1	1.5	3.7	3.7	3.4	3.8	3.6
CFA franc zone	1.6	1.7	4.5	1.9	-0.2	1.1	2.3
WAEMU	0.5	1.6	0.5	1.9	0.6	0.9	1.8
CEMAC	2.8	1.7	8.5	1.9	-1.0	1.3	2.9
EAC-5	1.1	1.8	3.3	4.0	3.8	4.5	3.0
SADC	1.4	2.4	4.8	5.3	5.2	6.0	4.8
SACU	1.4	2.2	4.0	4.0	4.0	4.4	2.9
COMESA	0.5	0.4	5.5	7.3	7.0	8.3	6.5
Resource-intensive countries	2.9	4.1	7.0	4.3	3.9	5.3	6.3
Oil	3.3	5.0	8.0	4.8	4.4	5.9	7.0
Non-oil	1.4	0.9	2.7	2.3	1.5	2.5	3.4
Non-resource-intensive countries	1.1	1.9	3.9	4.1	4.0	4.2	3.2
Coastal	1.3	2.4	4.1	3.8	3.9	4.2	3.0
Landlocked	0.5	-0.2	3.0	5.1	4.5	4.3	4.0
MDRI	1.6	2.0	4.0	3.9	3.6	3.7	3.8
Fixed exchange rate regime	2.0	2.0	4.5	2.2	0.5	1.7	2.7
Floating exchange rate regime	1.7	2.9	5.2	4.6	4.8	5.3	4.8

Sources: IMF, African Department database, March 31, 2008; and World Economic Outlook (WEO) database, March 31, 2008.

Table SA4. Real Per Capita GDP*(U.S. dollars, at 2000 prices, using 2000 exchange rates)*

	1997–2002	2003	2004	2005	2006	2007	2008
Oil-exporting countries	493	589	631	656	681	715	761
Excluding Nigeria	747	791	842	897	938	1,009	1,079
Angola	700	766	828	970	1,117	1,315	1,481
Cameroon	649	673	679	675	678	682	693
Chad	197	224	293	308	301	296	294
Congo, Rep. of	1,109	1,114	1,120	1,173	1,211	1,158	1,229
Equatorial Guinea	1,475	2,582	3,317	3,445	3,162	3,455	3,695
Gabon	4,475	4,097	4,040	4,061	4,009	4,128	4,237
Nigeria	405	517	556	571	590	611	648
Middle-income countries	2,842	3,046	3,163	3,286	3,416	3,562	3,667
Excluding South Africa	2,141	2,367	2,459	2,529	2,606	2,706	2,823
Botswana	4,168	5,036	5,359	5,634	5,874	6,244	6,616
Cape Verde	1,195	1,375	1,409	1,462	1,590	1,668	1,764
Lesotho	411	411	419	423	445	459	474
Mauritius	3,584	3,978	4,130	4,220	4,336	4,501	4,776
Namibia	1,805	1,944	2,049	2,125	2,193	2,271	2,358
Seychelles	7,669	7,118	6,854	6,931	7,164	7,536	7,914
South Africa	2,971	3,174	3,296	3,429	3,569	3,723	3,827
Swaziland	1,504	1,497	1,502	1,506	1,522	1,535	1,544
Low-income countries	248	261	272	283	294	306	317
Benin	374	394	394	394	397	401	410
Burkina Faso	231	254	257	269	277	283	287
Ethiopia	125	120	128	141	153	166	175
Ghana	269	287	296	305	317	329	342
Kenya	413	413	424	440	459	482	486
Madagascar	232	226	268	272	278	288	299
Malawi	151	144	148	148	157	165	173
Mali	252	281	281	292	300	301	306
Mozambique	240	291	308	326	344	360	377
Niger	161	172	166	173	176	176	179
Rwanda	232	237	246	259	268	278	289
Senegal	446	474	490	504	502	515	530
Tanzania	304	344	363	382	400	421	445
Uganda	239	257	262	270	274	281	291
Zambia	315	334	343	353	366	376	390
Fragile countries	232	216	217	219	219	220	225
Including Zimbabwe	284	252	250	249	246	243	...
Burundi	111	104	107	105	109	110	115
Central African Republic	253	225	222	223	228	233	239
Comoros	374	380	371	379	376	364	363
Congo, Dem. Rep. of	92	85	88	92	94	97	103
Côte d'Ivoire	639	574	575	575	564	565	573
Eritrea	223	191	185	183	175	172	169
Gambia, The	235	243	254	260	270	282	293
Guinea	388	388	386	387	383	376	383
Guinea-Bissau	165	134	133	134	132	132	132
Liberia	...	118	119	122	126	132	137
São Tomé and Príncipe	562	622	648	669	698	724	751
Sierra Leone	151	202	212	221	232	241	250
Togo	245	227	227	224	227	226	227
Zimbabwe	720	577	558	536	507	476	...
Sub-Saharan Africa	542	580	604	624	644	667	691
Including Zimbabwe	546	580	604	622	641	664	...
Excluding Nigeria and South Africa	328	342	356	370	382	398	415
Oil-importing countries	561	576	595	612	630	649	664
Excluding South Africa	284	293	303	312	321	331	342
CFA franc zone	465	473	486	494	493	498	510
WAEMU	360	356	357	363	364	366	372
CEMAC	708	738	779	791	785	795	818
EAC-5	303	319	330	343	356	372	384
SADC	911	955	998	1,035	1,077	1,123	1,159
SACU	2,831	3,033	3,151	3,275	3,405	3,551	3,653
COMESA	257	261	274	291	307	329	347
Resource-intensive countries	524	602	638	660	681	710	750
Oil	493	589	631	656	681	715	761
Non-oil	640	652	666	676	681	692	709
Non-resource-intensive countries	552	568	587	605	624	644	659
Coastal	974	1,017	1,061	1,095	1,132	1,171	1,199
Landlocked	162	164	168	176	183	190	198
MDRI	251	267	278	288	298	308	320
Fixed exchange rate regime	555	572	588	598	600	609	623
Floating exchange rate regime	540	582	608	630	654	681	707

Sources: IMF, African Department database, March 31, 2008; and World Economic Outlook (WEO) database, March 31, 2008.

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Table SA5. Consumer Prices
(Annual average percent change)

	1997–2002	2003	2004	2005	2006	2007	2008
Oil-exporting countries	24.9	20.4	14.9	14.7	8.2	5.7	8.1
Excluding Nigeria	50.3	30.2	14.6	10.6	8.0	6.0	7.5
Angola	193.9	98.3	43.6	23.0	13.3	12.2	11.4
Cameroon	3.5	0.6	0.3	2.0	5.1	0.9	3.0
Chad	3.8	-1.8	-5.4	7.9	7.9	-8.8	3.0
Congo, Rep. of	3.7	1.5	3.8	2.5	4.7	2.6	3.0
Equatorial Guinea	5.4	7.3	4.2	5.7	4.5	4.6	5.5
Gabon	1.4	2.1	0.4	1.2	-1.4	5.0	4.0
Nigeria	10.6	14.0	15.0	17.8	8.3	5.5	8.6
Middle-income countries	6.9	5.9	1.8	3.7	5.0	7.2	8.7
Excluding South Africa	7.4	7.0	5.3	5.7	7.7	7.9	8.7
Botswana	7.7	9.2	7.0	8.6	11.6	7.1	8.0
Cape Verde	3.4	1.2	-1.9	0.4	5.4	4.4	3.3
Lesotho	8.4	7.3	5.0	3.4	6.1	8.0	9.6
Mauritius	6.1	3.9	4.7	4.9	5.6	10.7	9.5
Namibia	8.9	7.2	4.1	2.3	5.1	6.7	7.5
Seychelles	3.7	3.3	3.9	0.8	-1.4	5.7	23.3
South Africa	6.8	5.8	1.4	3.4	4.7	7.1	8.7
Swaziland	8.0	7.4	3.4	4.8	5.3	8.2	9.8
Low-income countries	7.3	8.7	7.7	8.8	9.1	8.6	9.4
Benin	3.4	1.5	0.9	5.4	3.8	2.0	2.4
Burkina Faso	2.2	2.0	-0.4	6.4	2.4	-0.2	6.4
Ethiopia	-0.7	15.1	8.6	6.8	12.3	17.0	20.1
Ghana	21.6	26.7	12.6	15.1	10.9	9.6	8.9
Kenya	7.0	9.8	11.6	10.3	14.5	9.8	12.3
Madagascar	8.8	-1.1	14.0	18.4	10.8	10.3	9.0
Malawi	26.3	9.6	11.4	15.5	13.9	8.1	6.9
Mali	2.0	-1.3	-3.1	6.4	1.9	2.5	2.5
Mozambique	8.4	13.5	12.6	6.4	13.2	7.9	5.7
Niger	2.5	-1.8	0.4	7.8	0.1	0.1	4.5
Rwanda	4.2	7.4	12.0	9.2	8.8	9.4	7.1
Senegal	1.6	0.0	0.5	1.7	2.1	5.9	4.5
Tanzania	8.9	4.4	4.1	4.4	7.3	7.0	7.1
Uganda	3.7	5.7	5.0	8.0	6.6	6.8	5.9
Zambia	24.3	21.4	18.0	18.3	9.0	10.7	6.6
Fragile countries	28.9	6.1	4.6	12.0	10.4	8.6	7.6
Including Zimbabwe	30.0	12.3	9.9	15.9	18.0	22.5	...
Burundi	13.2	10.7	8.0	13.4	2.8	8.4	11.8
Central African Republic	1.3	4.4	-2.2	2.9	6.7	0.9	2.7
Comoros	3.1	3.7	4.5	3.0	3.4	3.0	3.0
Congo, Dem. Rep. of	240.9	12.8	4.0	21.4	13.2	16.7	10.1
Côte d'Ivoire	3.6	1.3	0.6	4.2	5.0	2.1	4.7
Eritrea	12.2	22.7	25.1	12.5	15.1	9.3	11.0
Gambia, The	3.6	17.0	14.3	5.0	2.1	5.0	5.0
Guinea	4.4	12.9	17.5	31.4	34.7	22.9	13.2
Guinea-Bissau	11.7	-3.5	0.8	3.4	2.0	3.8	3.3
Liberia	...	10.3	3.6	6.9	7.2	11.2	9.0
São Tomé and Príncipe	25.4	9.8	13.3	17.2	23.1	19.9	14.1
Sierra Leone	13.8	7.5	14.2	12.1	9.5	11.7	12.4
Togo	2.5	-0.9	0.4	6.8	2.2	1.0	4.1
Zimbabwe ¹	61.7	365.0	350.0	237.8	1,016.7	10,452.6	...
Sub-Saharan Africa	13.3	10.8	7.3	8.8	7.3	7.2	8.6
Including Zimbabwe	13.4	11.2	7.6	9.0	7.8	7.9	...
Excluding Nigeria and South Africa	19.3	13.2	8.8	9.4	8.8	7.8	8.5
Oil-importing countries	9.0	6.9	4.2	6.2	7.0	7.8	8.8
Excluding South Africa	11.1	8.0	6.8	9.0	9.1	8.5	9.0
CFA franc zone	2.9	1.0	0.2	4.1	3.6	1.6	3.9
WAEMU	2.8	0.5	0.0	4.8	3.0	2.2	4.3
CEMAC	3.1	1.6	0.3	3.3	4.2	0.9	3.5
EAC-5	6.9	7.3	7.9	8.0	10.0	8.3	9.1
SADC	19.9	12.4	6.3	6.8	6.8	8.2	8.9
SACU	6.9	6.0	1.8	3.6	5.0	7.1	8.6
COMESA	37.7	23.9	15.7	13.2	11.3	11.6	11.6
Resource-intensive countries	21.0	17.7	13.3	13.9	8.6	6.1	8.0
Oil	24.9	20.4	14.9	14.7	8.2	5.7	8.1
Non-oil	8.1	8.1	7.4	10.3	10.5	7.7	7.4
Non-resource-intensive countries	9.1	6.8	3.8	5.8	6.6	7.9	9.0
Coastal	7.3	6.5	3.5	5.0	6.2	7.4	8.5
Landlocked	17.1	7.9	4.9	9.0	8.2	9.7	10.8
MDRI	6.8	7.4	6.1	7.8	7.7	7.5	8.1
Fixed exchange rate regime	3.8	2.2	1.1	4.4	4.4	2.5	4.7
Floating exchange rate regime	15.8	13.1	9.0	9.9	8.1	8.3	9.5

Sources: IMF, African Department database, March 31, 2008; and World Economic Outlook (WEO) database, March 31, 2008.

¹Zimbabwe 2007 data is an estimate. No projection for 2008 is shown since Zimbabwe is in hyperinflation and inflation can no longer be forecasted in a meaningful way.

Table SA6. Total Investment
(Percent of GDP)

	1997–2002	2003	2004	2005	2006	2007	2008
Oil-exporting countries	24.3	24.4	21.8	20.5	21.5	21.9	20.4
Excluding Nigeria	23.5	22.9	19.3	17.2	18.0	18.4	16.1
Angola	21.5	12.7	9.1	8.1	11.3	12.0	10.6
Cameroon	18.3	17.5	18.9	19.1	16.8	16.7	17.3
Chad	27.8	55.6	25.8	21.4	21.4	19.8	15.6
Congo, Rep. of	24.8	26.1	22.5	21.6	22.9	26.2	21.8
Equatorial Guinea	70.4	59.4	45.1	38.2	41.7	45.1	37.7
Gabon	27.6	23.8	24.4	21.3	23.9	25.4	24.2
Nigeria	24.7	25.4	23.5	22.8	23.9	24.4	23.5
Middle-income countries	17.5	17.7	19.9	19.8	22.1	22.5	23.2
Excluding South Africa	29.3	30.7	30.1	28.9	28.2	30.8	33.2
Botswana	35.2	41.0	40.5	35.2	32.7	34.5	37.3
Cape Verde	34.6	31.0	37.4	36.9	38.0	43.3	47.5
Lesotho	46.2	33.2	31.4	28.0	24.3	27.8	30.5
Mauritius	25.6	24.9	22.8	23.4	22.5	26.4	29.6
Namibia	22.0	29.8	26.1	26.1	27.5	28.3	29.8
Seychelles	31.4	10.4	12.7	30.2	42.5	61.5	66.4
South Africa	15.9	16.1	18.6	18.7	21.3	21.5	22.0
Swaziland	18.0	18.8	18.4	18.0	16.9	19.5	17.8
Low-income countries	17.6	20.0	22.0	22.9	24.2	25.5	25.8
Benin	19.2	19.6	19.0	19.6	18.1	22.1	22.3
Burkina Faso	20.5	17.4	15.3	19.8	16.3	18.7	18.8
Ethiopia	17.1	21.6	25.5	23.0	24.2	25.0	23.7
Ghana	23.3	22.9	28.4	29.0	30.4	32.8	32.3
Kenya	13.4	13.1	15.2	18.1	21.8	19.5	19.3
Madagascar	15.1	17.9	24.5	22.9	23.0	31.1	35.8
Malawi	14.4	20.6	25.3	21.5	22.1	28.1	24.4
Mali	21.4	21.1	21.7	22.3	22.4	23.1	23.7
Mozambique	26.0	28.2	23.4	22.3	28.4	32.5	32.5
Niger	12.6	16.3	14.6	23.1	21.6	21.7	25.5
Rwanda	16.7	18.6	20.4	15.1	14.2	16.7	23.0
Senegal	18.8	25.9	26.6	29.8	29.3	31.8	31.9
Tanzania	15.3	19.2	22.6	25.1	27.9	28.9	28.8
Uganda	18.5	20.5	22.3	21.5	23.4	24.5	26.1
Zambia	18.2	25.6	24.3	23.5	23.5	25.0	23.6
Fragile countries	13.2	10.7	11.3	11.7	11.8	12.3	15.8
Including Zimbabwe	11.6	4.3	10.5	10.8	12.0	14.8	...
Burundi	6.3	10.6	13.3	10.8	16.3	17.5	19.9
Central African Republic	9.5	6.1	6.2	8.9	9.2	8.2	10.3
Comoros	11.9	10.3	9.4	9.3	9.8	9.7	10.4
Congo, Dem. Rep. of	14.6	12.2	12.8	13.9	13.3	18.2	25.0
Côte d'Ivoire	12.1	10.1	10.8	9.7	9.4	8.7	10.4
Eritrea	31.3	26.5	20.3	20.3	13.7	11.5	10.9
Gambia, The	20.0	19.2	29.0	26.8	27.9	23.6	25.1
Guinea	18.1	10.2	11.3	14.0	13.7	14.7	19.3
Guinea-Bissau	14.5	12.6	13.2	14.6	12.2	14.1	15.8
Liberia	...	...	...	...	...	...	...
São Tomé and Príncipe ¹	...	...	...	...	...	...	...
Sierra Leone	6.2	14.3	10.8	17.4	15.5	13.4	15.8
Togo	12.0	10.9	11.1	11.8	16.8	11.0	13.7
Zimbabwe	11.5	-13.0	5.1	4.3	13.7	23.6	...
Sub-Saharan Africa	18.7	19.5	20.3	20.2	21.8	22.3	22.2
Including Zimbabwe	18.2	18.7	20.1	20.0	21.7	22.4	...
Excluding Nigeria and South Africa	19.4	20.4	20.7	20.4	21.1	22.1	21.7
Oil-importing countries	17.1	17.7	19.7	20.0	21.9	22.6	23.4
Excluding South Africa	18.5	19.7	21.2	21.8	22.6	23.9	25.0
CFA franc zone	19.3	21.2	20.2	20.6	20.6	21.7	21.3
WAEMU	15.8	16.5	16.6	18.2	17.6	18.5	19.7
CEMAC	23.9	27.0	24.1	22.9	23.5	24.8	22.8
EAC-5	15.0	16.7	19.2	20.7	23.3	22.7	23.5
SADC	17.6	17.7	19.3	19.0	21.0	21.5	21.6
SACU	17.2	17.5	19.7	19.6	22.0	22.2	22.8
COMESA	17.4	17.8	18.0	17.2	18.6	19.5	19.0
Resource-intensive countries	22.9	23.6	21.8	20.6	21.4	21.7	20.7
Oil	24.3	24.4	21.8	20.5	21.5	21.9	20.4
Non-oil	19.7	20.8	21.5	21.0	20.8	20.8	22.2
Non-resource-intensive countries	16.8	17.3	19.5	19.9	22.0	22.8	23.5
Coastal	16.6	17.1	19.4	19.8	22.4	22.9	23.5
Landlocked	17.6	18.6	19.9	20.1	20.1	22.1	23.5
MDRI	18.3	20.7	22.4	23.0	23.5	25.4	25.7
Fixed exchange rate regime	21.6	23.2	22.5	22.5	22.4	23.6	23.5
Floating exchange rate regime	18.0	18.5	19.7	19.6	21.6	22.1	21.9

Sources: IMF, African Department database, March 31, 2008; and World Economic Outlook (WEO) database, March 31, 2008.

¹ São Tomé and Príncipe is not included in the aggregate grouping because of data limitations.

REGIONAL ECONOMIC OUTLOOK: SUB-SAHARAN AFRICA

Table SA7. Domestic Saving (Percent of GDP)							
	1997–2002	2003	2004	2005	2006	2007	2008
Oil-exporting countries	28.2	28.5	35.5	39.7	41.2	37.1	41.5
Excluding Nigeria	28.8	29.8	33.9	41.8	45.1	42.5	46.7
Angola	24.3	19.2	25.1	37.9	47.2	45.6	49.1
Cameroon	19.1	17.8	18.5	18.1	18.9	15.6	16.4
Chad	-3.0	19.1	17.0	27.6	27.3	25.7	23.2
Congo, Rep. of	45.0	52.7	56.1	58.5	47.5	28.9	50.6
Equatorial Guinea	63.5	79.8	83.5	87.3	86.0	85.7	83.3
Gabon	48.6	48.0	54.6	59.6	57.8	54.3	58.2
Nigeria	27.8	27.7	36.5	38.3	38.7	33.3	37.7
Middle-income countries	19.5	19.5	19.4	19.1	19.6	19.8	19.7
Excluding South Africa	25.8	28.3	28.8	29.1	31.9	31.8	30.7
Botswana	48.1	49.7	50.4	52.4	55.2	55.7	54.7
Cape Verde	-5.3	-6.5	-1.5	4.0	4.8	7.0	10.4
Lesotho	-23.9	-20.0	-16.3	-21.3	-22.8	-22.2	-19.0
Mauritius	24.4	25.8	23.3	19.0	15.6	15.5	18.6
Namibia	13.8	22.6	22.1	22.6	30.3	31.3	28.2
Seychelles	18.8	15.1	8.0	7.8	25.3	24.9	23.4
South Africa	18.6	18.4	18.2	17.9	18.0	18.4	18.4
Swaziland	4.8	20.8	15.9	9.0	9.2	7.9	1.6
Low-income countries	7.0	8.8	9.7	9.3	10.5	11.4	9.7
Benin	7.1	6.7	6.7	9.8	6.6	10.6	11.3
Burkina Faso	6.1	4.3	1.8	4.7	3.4	4.3	3.5
Ethiopia	6.6	3.6	5.0	3.0	3.7	5.6	3.4
Ghana	6.4	10.9	7.3	3.4	4.5	9.4	6.1
Kenya	6.0	6.2	7.5	9.2	9.5	9.1	6.7
Madagascar	8.3	8.9	9.5	8.5	11.8	13.7	6.4
Malawi	2.2	3.9	7.2	-5.2	-1.5	7.2	5.9
Mali	13.4	14.0	13.5	13.7	19.4	16.7	16.3
Mozambique	6.0	5.0	8.9	7.6	12.0	14.8	11.7
Niger	4.1	6.3	3.6	8.7	8.4	10.5	13.0
Rwanda	1.5	7.1	10.2	3.3	3.2	4.2	0.6
Senegal	11.1	13.8	14.0	14.2	11.2	15.6	14.0
Tanzania	7.6	14.9	16.2	16.2	14.0	15.7	15.4
Uganda	7.0	6.3	8.7	7.6	8.1	5.6	7.7
Zambia	6.8	13.1	19.8	21.4	31.8	27.9	26.1
Fragile countries	15.0	12.8	11.9	9.3	11.7	10.3	11.9
Including Zimbabwe	11.9	3.6	9.9	7.4	11.3	13.2	...
Burundi	-4.4	-8.7	-11.0	-17.4	-20.9	-17.5	-11.2
Central African Republic	4.8	1.6	0.0	0.1	1.4	0.8	1.6
Comoros	-7.2	-5.0	-9.7	-12.7	-14.4	-8.9	-12.2
Congo, Dem. Rep. of	15.5	10.0	8.8	2.3	8.1	12.6	15.4
Côte d'Ivoire	21.2	21.0	20.0	17.2	19.9	16.0	16.8
Eritrea	-22.5	-34.6	-33.8	-28.4	-17.8	-18.0	-16.6
Gambia, The	12.1	9.9	8.0	4.1	10.6	5.4	5.2
Guinea	14.6	7.8	7.0	10.9	9.1	6.1	9.1
Guinea-Bissau	-7.8	-1.6	-3.0	-2.3	-19.0	-4.4	-4.9
Liberia	...	...	...	...	...	...	...
São Tomé and Príncipe ¹	...	...	...	...	...	...	...
Sierra Leone	-3.9	-3.3	-0.4	4.2	7.8	6.1	6.1
Togo	-1.0	-3.1	-3.9	-5.0	-2.7	-9.5	-9.9
Zimbabwe	9.0	-21.1	-3.7	-6.6	9.1	23.3	...
Sub-Saharan Africa	18.2	19.1	21.5	23.0	24.9	23.8	25.9
Including Zimbabwe	17.6	18.1	21.3	22.8	24.8	23.8	...
Excluding Nigeria and South Africa	15.1	16.6	18.8	21.2	24.1	23.7	25.5
Oil-importing countries	15.3	15.7	16.1	15.6	16.3	16.5	15.9
Excluding South Africa	11.6	12.5	13.3	12.6	14.2	14.2	13.0
CFA franc zone	20.4	22.4	24.2	27.7	27.7	25.5	28.2
WAEMU	13.4	13.3	12.3	12.3	12.9	12.4	12.5
CEMAC	29.4	33.6	37.4	43.2	42.0	38.1	42.5
EAC-5	6.3	8.9	10.4	10.3	9.6	9.5	8.8
SADC	18.0	18.3	19.0	19.8	22.3	23.1	24.2
SACU	19.4	19.4	19.4	19.2	19.7	20.0	19.7
COMESA	11.0	11.7	14.2	17.1	23.2	23.7	25.9
Resource-intensive countries	26.8	27.4	33.3	37.2	39.4	35.6	39.4
Oil	28.2	28.5	35.5	39.7	41.2	37.1	41.5
Non-oil	23.2	23.6	25.4	26.6	31.3	28.2	27.4
Non-resource-intensive countries	14.2	14.8	15.0	14.3	14.4	15.0	14.5
Coastal	15.6	16.2	16.4	16.0	15.9	16.6	16.1
Landlocked	6.8	6.4	6.5	4.1	5.7	6.8	6.6
MDRI	8.8	10.5	11.3	10.5	11.9	12.4	11.1
Fixed exchange rate regime	21.5	23.5	25.3	28.4	29.2	27.3	29.1
Floating exchange rate regime	17.4	18.0	20.6	21.8	23.9	23.0	25.2

Sources: IMF, African Department database, March 31, 2008; and World Economic Outlook (WEO) database, March 31, 2008.

¹ São Tomé and Príncipe is not included in the aggregate grouping because of data limitations.

Table SA8. Overall Fiscal Balance, Including Grants
(Central government; percent of GDP)

	1997–2002	2003	2004	2005	2006	2007	2008
Oil-exporting countries	-3.1	-0.7	4.5	8.1	11.7	2.9	7.9
Excluding Nigeria	-4.2	-0.2	1.9	7.9	17.8	5.7	8.2
Angola	-13.0	-6.4	-0.5	7.3	14.8	2.2	6.8
Cameroon	-0.8	1.2	-0.5	3.6	33.1	4.5	3.3
Chad	-5.1	-6.3	-3.0	-0.4	2.4	3.5	1.9
Congo, Rep. of	-7.1	0.4	3.6	15.6	17.1	11.1	22.1
Equatorial Guinea	5.5	11.7	12.5	19.6	23.5	22.5	15.0
Gabon	1.2	7.4	8.3	8.6	9.2	8.7	12.6
Nigeria	-2.3	-1.1	6.3	8.1	7.7	0.9	7.6
Middle-income countries	-2.2	-2.2	-1.7	-0.4	0.9	1.2	0.9
Excluding South Africa	-2.4	-3.7	-2.1	1.3	4.9	3.3	1.4
Botswana	1.4	-1.0	0.9	6.7	10.7	8.2	4.4
Cape Verde	-10.6	-4.3	-3.8	-6.4	-5.0	-3.2	-3.7
Lesotho	-3.5	-0.4	5.6	4.8	13.4	15.1	11.2
Mauritius	-5.1	-6.2	-5.3	-5.0	-5.4	-4.2	-2.0
Namibia	-3.3	-6.5	-4.3	-1.2	2.5	2.8	0.6
Seychelles	-12.3	2.1	-1.0	2.1	-7.7	-7.2	-8.8
South Africa	-2.2	-2.0	-1.6	-0.6	0.4	0.9	0.8
Swaziland	-1.3	-2.9	-4.7	-1.6	10.4	-0.4	-1.3
Low-income countries	-3.2	-3.1	-2.5	-2.6	3.8	-3.6	-4.1
Benin	-0.2	-1.9	-1.0	-2.5	-0.4	-0.4	-1.7
Burkina Faso ¹	-3.5	-2.9	-4.3	-4.9	15.8	-6.1	-5.4
Ethiopia	-5.9	-7.0	-3.0	-4.4	-3.9	-3.1	-3.4
Ghana	-7.4	-3.3	-3.1	-1.7	-7.1	-6.9	-8.8
Kenya	-1.3	-1.7	-0.1	-1.7	-2.5	-3.2	-3.8
Madagascar	-4.0	-4.2	-5.0	-4.7	37.9	-3.9	-4.4
Malawi	-6.2	-4.7	-4.8	-1.1	-1.3	-2.8	0.0
Mali ¹	-3.4	-1.3	-2.6	-3.2	32.0	-3.8	-3.9
Mozambique	-3.9	-4.2	-4.4	-2.2	-1.4	-5.6	-6.4
Niger ¹	-3.7	-2.8	-3.6	-2.0	41.1	-0.9	-3.3
Rwanda	-2.0	-2.1	-0.2	0.6	-0.4	-0.6	-1.2
Senegal	-0.5	-1.6	-2.9	-3.2	-6.2	-4.4	-4.7
Tanzania	-0.9	-1.2	-2.7	-2.8	-4.7	-3.9	-3.7
Uganda	-3.4	-4.3	-1.7	-0.6	-0.8	-2.3	-3.4
Zambia ¹	-4.5	-6.0	-2.9	-2.7	19.8	-1.7	-2.1
Fragile countries	-2.9	-3.4	-2.9	-2.4	-1.1	1.0	-0.3
Including Zimbabwe	-4.2	-2.5	-3.5	-2.9	-1.9	0.7	...
Burundi	-4.2	-6.2	-4.9	-5.1	-1.4	1.5	0.1
Central African Republic	-1.0	-3.3	-2.2	-4.5	9.0	1.6	-0.1
Comoros	-3.1	-3.4	-1.7	0.1	-2.6	-3.6	-0.7
Congo, Dem. Rep. of	-4.6	-4.7	-4.9	-3.6	-1.2	-0.6	1.2
Côte d'Ivoire	-1.4	-2.2	-1.7	-1.7	-1.8	-0.4	-0.6
Eritrea	-30.6	-13.5	-16.6	-20.8	-11.7	-10.0	-8.3
Gambia, The	-5.4	-4.7	-5.7	-8.6	-6.3	2.9	-4.1
Guinea	-3.1	-6.2	-4.9	-1.5	-2.9	0.3	-0.7
Guinea-Bissau	-11.1	-12.9	-15.0	-11.9	-9.7	-9.7	0.7
Liberia	...	1.0	0.0	0.0	1.2	5.3	0.0
São Tomé and Príncipe	-16.1	-10.4	-15.8	37.5	-14.0	125.8	11.6
Sierra Leone ¹	-8.9	-6.7	-3.5	-2.7	9.3	26.1	-3.2
Togo	-2.5	2.4	1.0	-3.5	-3.8	-1.9	-2.4
Zimbabwe ²	-7.7	-0.2	-7.6	-11.4	-4.3	-10.2	...
Sub-Saharan Africa	-2.6	-2.1	-0.2	1.7	5.1	0.8	2.6
Including Zimbabwe	-2.8	-2.0	-0.3	1.6	5.0	0.8	...
Excluding Nigeria and South Africa	-3.2	-2.5	-1.4	1.0	7.8	0.7	1.4
Oil-importing countries	-2.6	-2.5	-2.0	-1.2	1.6	-0.3	-0.8
Excluding South Africa	-3.0	-3.2	-2.5	-1.9	3.1	-1.8	-2.7
CFA franc zone	-1.4	0.1	0.2	2.6	13.7	3.5	3.8
WAEMU	-1.9	-1.9	-2.4	-2.8	6.9	-2.4	-2.8
CEMAC	-0.9	2.5	3.0	8.0	20.2	9.2	9.7
EAC-5	-1.7	-2.1	-1.3	-1.8	-2.7	-3.0	-3.5
SADC	-2.8	-2.6	-1.9	0.0	3.3	0.8	1.5
SACU	-2.1	-2.1	-1.6	-0.3	1.1	1.3	1.0
COMESA	-4.8	-4.7	-2.3	0.2	6.8	-0.7	1.2
Resource-intensive countries	-2.6	-1.4	3.1	6.6	10.7	2.9	6.8
Oil	-3.1	-0.7	4.5	8.1	11.7	2.9	7.9
Non-oil	-1.8	-3.6	-2.0	0.4	6.5	2.8	0.3
Non-resource-intensive countries	-2.7	-2.4	-2.0	-1.3	0.9	-0.7	-0.9
Coastal	-2.4	-2.1	-1.9	-1.1	-0.1	-0.4	-0.6
Landlocked	-4.1	-4.1	-3.0	-2.7	6.8	-2.1	-2.2
MDRI	-3.3	-2.7	-2.6	-1.8	9.1	-2.2	-3.2
Fixed exchange rate regime	-1.4	-0.5	-0.1	2.6	12.4	3.8	3.5
Floating exchange rate regime	-2.9	-2.5	-0.2	1.5	3.4	0.2	2.4

Sources: IMF, African Department database, March 31, 2008; and World Economic Outlook (WEO) database, March 31, 2008.

¹ The fiscal balance has been particularly distorted by MDRI relief in 2006/07.

² Ratios represent the sum of deflated monthly flows divided by annual real GDP. Conventionally calculated annual flows in relation to nominal GDP become distorted in a hyperinflation environment.

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Table SA9. Overall Fiscal Balance, Excluding Grants
(Central government; percent of GDP)

	1997-2002	2003	2004	2005	2006	2007	2008
Oil-exporting countries	-3.5	-1.1	4.4	7.9	9.5	2.7	7.7
Excluding Nigeria	-5.2	-1.2	1.4	7.5	12.4	5.3	7.9
Angola	-15.0	-7.2	-1.0	7.1	14.8	2.1	6.8
Cameroon	-1.0	0.7	-0.8	3.0	4.7	3.3	2.5
Chad	-10.5	-14.0	-6.0	-3.7	0.5	1.6	-0.3
Congo, Rep. of	-7.4	-0.1	3.3	15.4	16.9	10.7	21.5
Equatorial Guinea	5.2	11.7	12.5	19.6	23.5	22.5	15.0
Gabon	1.2	7.4	8.2	8.6	9.2	8.7	12.6
Nigeria	-2.3	-1.1	6.3	8.1	7.7	0.9	7.6
Middle-income countries	-2.3	-2.2	-1.8	-0.5	0.8	1.1	0.8
Excluding South Africa	-3.1	-4.3	-3.0	0.6	4.2	2.5	0.5
Botswana	1.0	-1.2	0.3	6.4	10.1	7.8	4.0
Cape Verde	-19.2	-9.8	-12.7	-12.8	-10.6	-9.9	-8.7
Lesotho	-6.5	-3.1	3.0	2.7	12.3	12.3	6.4
Mauritius	-5.2	-6.5	-5.7	-5.3	-5.6	-4.4	-3.1
Namibia	-3.4	-6.6	-4.5	-1.3	2.4	2.5	0.4
Seychelles	-12.8	2.1	-1.2	0.8	-9.4	-7.6	-9.1
South Africa	-2.2	-2.0	-1.6	-0.6	0.4	0.9	0.8
Swaziland	-2.2	-3.9	-5.4	-2.6	9.6	-1.2	-1.9
Low-income countries	-7.0	-7.9	-7.5	-7.4	-8.0	-8.6	-9.2
Benin	-2.8	-3.7	-3.7	-4.6	-2.6	-3.7	-4.1
Burkina Faso	-10.2	-8.3	-8.6	-9.4	-10.7	-13.3	-12.2
Ethiopia	-9.0	-13.6	-7.6	-8.7	-7.4	-9.5	-9.0
Ghana	-10.2	-8.0	-9.5	-6.9	-12.4	-11.6	-13.7
Kenya	-2.2	-3.6	-1.3	-3.0	-3.6	-4.1	-4.8
Madagascar	-7.7	-9.3	-13.3	-10.6	-10.3	-9.0	-9.0
Malawi	-12.2	-12.6	-15.1	-12.8	-14.2	-16.1	-12.4
Mali	-7.9	-5.7	-6.6	-7.3	-7.7	-9.3	-8.3
Mozambique	-13.2	-13.9	-12.3	-8.8	-12.7	-18.7	-20.5
Niger	-8.7	-7.7	-9.4	-9.6	-6.9	-6.9	-11.6
Rwanda	-9.2	-9.8	-11.3	-12.1	-11.3	-13.0	-14.6
Senegal	-2.6	-3.5	-5.0	-4.9	-7.7	-6.6	-6.4
Tanzania	-4.1	-6.4	-7.7	-9.2	-9.9	-8.6	-10.8
Uganda	-9.4	-10.9	-10.7	-8.5	-7.3	-8.6	-7.7
Zambia	-11.1	-13.0	-8.4	-8.3	-6.2	-6.7	-7.0
Fragile countries	-4.3	-5.1	-4.9	-5.3	-5.6	-3.0	-4.1
Including Zimbabwe	-5.3	-3.8	-5.3	-5.3	-5.8	-2.4	...
Burundi	-6.9	-13.8	-19.7	-16.8	-19.3	-21.0	-22.3
Central African Republic	-6.7	-4.8	-5.6	-8.7	-4.4	-1.6	-4.7
Comoros	-9.0	-5.7	-4.5	-4.2	-7.6	-9.1	-5.3
Congo, Dem. Rep. of	-4.7	-6.7	-6.8	-8.7	-9.2	-4.1	-5.1
Côte d'Ivoire	-2.0	-2.8	-2.6	-2.8	-2.4	-1.0	-2.1
Eritrea	-41.7	-32.4	-31.7	-30.1	-16.1	-12.5	-10.3
Gambia, The	-7.6	-7.2	-10.2	-10.3	-8.0	-3.3	-8.0
Guinea	-5.7	-8.9	-5.9	-2.1	-4.3	-1.8	-2.1
Guinea-Bissau	-21.4	-23.3	-32.2	-24.6	-21.6	-25.3	-20.8
Liberia	...	0.2	-0.3	0.0	1.1	5.1	-0.7
São Tomé and Príncipe	-36.7	-29.7	-34.9	20.3	-30.2	-0.1	-2.8
Sierra Leone	-13.9	-14.4	-12.4	-12.8	-11.0	-6.0	-9.4
Togo	-3.4	1.9	0.2	-4.6	-5.2	-3.6	-4.7
Zimbabwe ¹	-8.4	-0.4	-7.6	-11.4	-4.3	-10.2	...
Sub-Saharan Africa	-3.7	-3.4	-1.4	0.5	1.8	-0.5	1.4
Including Zimbabwe	-3.9	-3.3	-1.4	0.5	1.7	-0.5	...
Excluding Nigeria and South Africa	-5.6	-5.5	-4.2	-1.8	0.1	-2.2	-1.4
Oil-importing countries	-4.0	-4.2	-3.6	-2.8	-2.3	-2.2	-2.7
Excluding South Africa	-5.8	-6.8	-6.2	-5.7	-5.6	-6.0	-6.9
CFA franc zone	-3.1	-1.7	-1.4	0.9	2.2	1.5	1.8
WAEMU	-4.3	-4.3	-4.8	-5.4	-5.7	-5.5	-6.1
CEMAC	-1.8	1.5	2.4	7.2	9.7	8.4	9.0
EAC-5	-4.7	-6.3	-5.9	-6.7	-6.8	-6.9	-7.9
SADC	-3.6	-3.5	-2.7	-0.9	1.1	-0.1	0.5
SACU	-2.1	-2.1	-1.7	-0.3	1.0	1.3	1.0
COMESA	-7.2	-7.9	-5.4	-2.9	0.7	-3.4	-1.2
Resource-intensive countries	-3.3	-2.1	2.6	6.1	7.8	2.3	6.4
Oil	-3.5	-1.1	4.4	7.9	9.5	2.7	7.7
Non-oil	-3.4	-5.4	-3.6	-1.3	0.1	0.1	-1.6
Non-resource-intensive countries	-4.0	-4.0	-3.6	-2.9	-2.6	-2.5	-2.8
Coastal	-3.2	-3.1	-2.8	-2.0	-1.7	-1.4	-1.7
Landlocked	-8.1	-9.2	-8.3	-8.5	-7.4	-8.4	-8.5
MDRI	-7.1	-7.4	-7.5	-6.7	-7.1	-7.9	-8.4
Fixed exchange rate regime	-3.0	-2.1	-1.6	1.1	3.0	2.0	1.7
Floating exchange rate regime	-3.9	-3.7	-1.3	0.4	1.5	-1.0	1.3

Sources: IMF, African Department database, March 31, 2008; and World Economic Outlook (WEO) database, March 31, 2008.

¹ Ratios represent the sum of deflated monthly flows divided by annual real GDP. Conventionally calculated annual flows in relation to nominal GDP become distorted in a hyperinflation environment.

Table SA10. Government Revenue, Excluding Grants
(Percent of GDP)

	1997–2002	2003	2004	2005	2006	2007	2008
Oil-exporting countries	23.3	21.3	24.0	27.4	28.0	23.0	26.5
Excluding Nigeria	26.6	26.3	27.1	31.5	37.6	32.6	33.6
Angola	42.4	37.2	37.5	40.4	46.4	35.2	37.0
Cameroon	14.6	16.1	15.2	17.6	19.3	18.9	19.5
Chad	7.8	7.8	8.5	9.4	16.9	22.3	20.2
Congo, Rep. of	26.9	29.7	30.0	38.6	44.3	42.7	44.2
Equatorial Guinea	22.5	27.3	31.9	37.9	45.7	46.0	39.5
Gabon	32.5	30.1	30.8	31.3	31.7	30.2	30.1
Nigeria	20.9	18.1	21.9	24.7	21.8	16.2	21.5
Middle-income countries	24.4	24.0	24.9	26.4	27.5	28.0	27.9
Excluding South Africa	31.6	30.6	31.5	33.2	35.4	34.5	34.3
Botswana	39.2	38.2	37.4	39.1	40.0	38.1	37.1
Cape Verde	20.6	21.3	22.8	23.7	24.2	23.9	24.1
Lesotho	43.1	42.2	46.7	48.7	58.4	63.8	65.3
Mauritius	19.4	20.1	19.9	19.8	19.9	19.1	20.7
Namibia	32.1	29.2	29.9	31.7	33.8	35.7	34.7
Seychelles	42.1	47.2	50.0	50.2	52.5	49.3	44.9
South Africa	23.5	23.2	24.1	25.6	26.5	27.2	27.2
Swaziland	26.1	27.4	30.8	32.1	41.7	37.9	39.7
Low-income countries	14.6	15.4	16.3	16.3	16.6	16.9	17.4
Benin	15.2	17.0	16.4	16.5	16.8	19.0	18.5
Burkina Faso	12.1	12.1	12.8	12.3	12.3	13.3	13.4
Ethiopia	15.1	16.2	16.1	14.6	14.8	12.8	13.4
Ghana	17.7	20.8	23.8	23.8	21.9	22.7	24.4
Kenya	20.2	19.7	21.2	20.8	20.8	20.2	20.9
Madagascar	10.2	10.3	12.2	11.1	11.3	11.6	12.6
Malawi	16.3	16.0	16.8	18.5	17.5	19.1	18.5
Mali	13.9	16.4	17.4	17.9	17.7	17.9	18.6
Mozambique	11.1	13.3	13.1	14.1	15.9	16.5	17.1
Niger	9.7	10.2	11.4	10.8	13.2	15.5	12.8
Rwanda	10.9	12.8	12.8	13.6	12.9	12.4	13.7
Senegal	16.5	18.1	18.3	19.3	20.1	20.3	20.3
Tanzania	10.0	10.1	10.4	11.1	12.0	13.5	14.9
Uganda	11.5	12.2	12.7	12.8	13.1	13.4	13.9
Zambia	18.8	18.0	18.2	17.4	16.9	19.1	19.2
Fragile countries	13.5	13.7	14.5	15.1	16.0	16.8	17.7
Including Zimbabwe	16.2	16.8	17.0	18.5	20.7	34.5	...
Burundi	17.7	21.1	20.1	20.0	18.9	17.7	18.5
Central African Republic	9.2	8.1	8.3	8.2	9.5	10.2	10.6
Comoros	12.9	15.8	15.6	15.7	13.6	12.1	14.2
Congo, Dem. Rep. of	5.8	7.7	9.5	11.4	13.0	14.5	18.8
Côte d'Ivoire	17.7	16.8	17.5	17.1	18.5	19.8	18.9
Eritrea	28.9	32.6	23.4	26.4	23.0	22.8	23.5
Gambia, The	17.6	15.7	20.9	19.7	21.2	22.1	21.1
Guinea	11.3	10.5	10.5	13.1	13.3	13.1	14.7
Guinea-Bissau	15.0	15.2	17.2	17.6	19.6	16.1	20.6
Liberia	...	11.2	14.9	14.6	18.6	22.4	25.3
São Tomé and Príncipe	16.6	15.4	16.8	64.7	21.3	39.3	34.5
Sierra Leone	9.4	12.4	12.3	11.9	11.8	10.8	11.9
Togo	13.6	17.0	16.8	15.7	16.9	17.0	17.2
Zimbabwe ¹	24.0	24.9	33.7	35.0	35.1	28.8	...
Sub-Saharan Africa	21.2	20.8	22.3	24.2	25.0	23.4	24.9
Including Zimbabwe	21.2	20.9	22.4	24.3	25.2	24.5	...
Excluding Nigeria and South Africa	18.9	19.5	20.8	22.6	25.3	23.9	24.9
Oil-importing countries	20.4	20.6	21.7	22.7	23.4	23.7	23.8
Excluding South Africa	16.9	17.3	18.5	18.9	19.5	19.5	19.8
CFA franc zone	17.4	18.0	18.7	20.7	23.3	23.8	23.5
WAEMU	15.6	16.0	16.5	16.4	17.3	18.3	17.9
CEMAC	19.8	20.6	21.1	25.0	29.1	29.1	28.6
EAC-5	14.7	14.9	15.7	15.8	16.4	16.7	17.4
SADC	23.2	23.0	24.2	26.0	28.0	27.4	28.1
SACU	24.5	24.1	24.9	26.5	27.6	28.1	28.1
COMESA	20.3	21.0	22.7	24.4	27.6	24.2	26.2
Resource-intensive countries	23.4	21.5	23.8	26.8	27.5	23.3	26.2
Oil	23.3	21.3	24.0	27.4	28.0	23.0	26.5
Non-oil	23.3	21.9	23.0	24.3	24.9	25.1	24.4
Non-resource-intensive countries	20.0	20.4	21.6	22.5	23.2	23.5	23.7
Coastal	21.2	21.4	22.5	23.7	24.4	24.9	25.1
Landlocked	13.4	14.4	15.5	15.6	16.5	16.2	16.9
MDRI	13.6	14.7	15.3	15.7	16.2	16.5	17.0
Fixed exchange rate regime	21.2	21.0	21.9	23.9	26.5	26.5	26.0
Floating exchange rate regime	21.2	20.7	22.4	24.2	24.6	22.8	24.6

Sources: IMF, African Department database, March 31, 2008; and World Economic Outlook (WEO) database, March 31, 2008.

¹ Ratios represent the sum of deflated monthly flows divided by annual real GDP. Conventionally calculated annual flows in relation to nominal GDP become distorted in a hyperinflation environment.

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Table SA11. Government Expenditure
(Central government; percent of GDP)

	1997–2002	2003	2004	2005	2006	2007	2008
Oil-exporting countries	26.8	22.4	19.6	19.6	18.5	20.3	18.8
Excluding Nigeria	31.8	27.5	25.7	24.1	25.3	27.3	25.7
Angola	57.4	44.3	38.5	33.3	31.6	33.1	30.3
Cameroon	15.6	15.4	16.0	14.6	14.5	15.6	17.0
Chad	18.3	21.9	14.4	13.1	16.5	20.7	20.4
Congo, Rep. of	34.3	29.8	26.7	23.2	27.4	32.0	22.7
Equatorial Guinea	17.3	15.6	19.3	18.2	22.2	23.6	24.5
Gabon	31.3	22.8	22.6	22.8	22.5	21.5	17.6
Nigeria	23.2	19.2	15.6	16.6	14.1	15.3	13.9
Middle-income countries	26.8	26.3	26.7	26.8	26.7	26.9	27.1
Excluding South Africa	34.7	34.8	34.5	32.5	31.2	32.0	33.8
Botswana	38.2	39.4	37.1	32.7	29.9	30.3	33.1
Cape Verde	39.9	31.1	35.6	36.5	34.8	33.9	32.7
Lesotho	49.5	45.3	43.7	45.9	46.2	51.5	58.9
Mauritius	24.6	26.6	25.6	25.1	25.5	23.6	23.8
Namibia	35.5	35.9	34.4	33.0	31.4	33.3	34.3
Seychelles	54.9	45.1	51.2	49.4	61.9	56.9	54.0
South Africa	25.7	25.2	25.7	26.2	26.1	26.3	26.4
Swaziland	28.3	31.3	36.2	34.7	32.1	39.1	41.7
Low-income countries	21.6	23.3	23.8	23.8	24.6	25.6	26.6
Benin	18.0	20.6	20.1	21.1	19.4	22.6	22.5
Burkina Faso	22.3	20.4	21.4	21.7	22.9	26.5	25.7
Ethiopia	24.1	29.7	23.7	23.3	22.3	22.3	22.4
Ghana	27.8	28.8	33.3	30.7	34.3	34.3	38.1
Kenya	22.3	23.4	22.5	23.7	24.4	24.3	25.7
Madagascar	17.9	19.6	25.4	21.6	21.6	20.6	21.6
Malawi	28.5	28.6	31.9	31.3	31.6	35.3	30.8
Mali	21.8	22.1	24.0	25.2	25.4	27.2	26.9
Mozambique	24.3	27.2	25.3	22.9	28.7	35.2	37.6
Niger	18.5	17.9	20.8	20.4	20.1	22.3	24.4
Rwanda	20.1	22.6	24.1	25.7	24.2	25.4	28.2
Senegal	19.1	21.6	23.3	24.2	27.8	27.0	26.7
Tanzania	14.1	16.4	18.1	20.3	21.8	22.1	25.7
Uganda	20.9	23.1	23.4	21.3	20.4	21.9	21.6
Zambia	29.9	30.9	26.6	25.7	23.1	25.7	26.2
Fragile countries	17.8	18.9	19.4	20.4	21.6	19.8	21.8
Including Zimbabwe	21.5	20.6	22.2	23.8	26.5	36.9	...
Burundi	24.6	34.9	39.8	36.8	38.2	38.7	40.9
Central African Republic	15.9	12.9	13.9	16.9	13.9	11.8	15.3
Comoros	21.9	21.5	20.1	19.9	21.2	21.3	19.5
Congo, Dem. Rep. of	10.5	14.4	16.3	20.2	22.2	18.6	23.8
Côte d'Ivoire	19.7	19.6	20.1	19.9	20.9	20.8	21.0
Eritrea	70.6	64.9	55.1	56.5	39.1	35.3	33.8
Gambia, The	25.2	22.9	31.1	30.0	29.2	25.4	29.1
Guinea	17.0	19.4	16.4	15.2	17.6	14.8	16.8
Guinea-Bissau	36.4	38.5	49.4	42.2	41.2	41.4	41.4
Liberia	...	11.0	15.1	14.6	17.6	17.3	25.9
São Tomé and Príncipe	53.4	45.0	51.7	44.5	51.5	39.4	37.3
Sierra Leone	23.4	26.7	24.8	24.6	22.7	16.8	21.3
Togo	17.1	15.2	16.6	20.4	22.1	20.6	21.9
Zimbabwe ¹	32.4	25.3	41.3	46.4	39.4	39.1	...
Sub-Saharan Africa	24.9	24.1	23.7	23.7	23.2	23.9	23.5
Including Zimbabwe	25.0	24.1	23.9	23.9	23.5	25.0	...
Excluding Nigeria and South Africa	24.5	24.9	25.0	24.4	25.2	26.1	26.3
Oil-importing countries	24.3	24.7	25.3	25.5	25.7	25.9	26.5
Excluding South Africa	22.8	24.1	24.7	24.6	25.1	25.5	26.7
CFA franc zone	20.6	19.7	20.1	19.8	21.2	22.3	21.7
WAEMU	19.9	20.3	21.4	21.9	23.0	23.9	23.9
CEMAC	21.6	19.1	18.7	17.7	19.4	20.8	19.7
EAC-5	19.4	21.2	21.6	22.5	23.2	23.6	25.3
SADC	26.8	26.5	26.8	26.9	26.8	27.5	27.6
SACU	26.7	26.2	26.6	26.8	26.6	26.9	27.1
COMESA	27.5	28.9	28.2	27.2	26.8	27.6	27.5
Resource-intensive countries	26.8	23.6	21.2	20.8	19.6	21.1	19.9
Oil	26.8	22.4	19.6	19.6	18.5	20.3	18.8
Non-oil	26.7	27.3	26.7	25.6	24.8	24.9	26.0
Non-resource-intensive countries	24.0	24.4	25.1	25.5	25.8	26.0	26.6
Coastal	24.5	24.5	25.3	25.7	26.1	26.3	26.8
Landlocked	21.5	23.6	23.9	24.1	23.9	24.6	25.5
MDRI	20.6	22.1	22.8	22.5	23.3	24.4	25.4
Fixed exchange rate regime	24.2	23.1	23.5	22.8	23.5	24.5	24.3
Floating exchange rate regime	25.1	24.4	23.8	23.9	23.1	23.8	23.4

Sources: IMF, African Department database, March 31, 2008; and World Economic Outlook (WEO) database, March 31, 2008.

¹ Ratios represent the sum of deflated monthly flows divided by annual real GDP. Conventionally calculated annual flows in relation to nominal GDP become distorted in a hyperinflation environment.

Table SA12. Broad Money
(Percent of GDP)

	1997–2002	2003	2004	2005	2006	2007	2008
Oil-exporting countries	18.6	20.1	17.7	16.6	18.6	21.3	20.9
Excluding Nigeria	15.1	16.0	15.2	14.9	16.9	19.5	18.3
Angola	19.4	17.3	16.4	16.2	19.0	21.8	19.8
Cameroon	14.1	17.7	18.1	17.9	18.3	20.5	20.4
Chad	12.0	11.5	8.1	7.5	9.1	12.6	13.1
Congo, Rep. of	14.3	14.0	13.4	14.0	16.4	19.5	16.9
Equatorial Guinea	6.4	9.0	8.0	7.0	7.1	8.5	9.1
Gabon	14.0	15.5	16.1	17.1	18.9	19.4	17.6
Nigeria	21.0	22.7	19.4	17.8	19.6	22.6	22.8
Middle-income countries	57.1	62.7	64.0	69.1	76.3	82.6	88.7
Excluding South Africa	44.5	51.2	51.1	50.2	66.4	73.5	72.1
Botswana	25.6	28.4	28.8	27.3	38.2	43.7	43.7
Cape Verde	67.9	71.5	76.6	82.0	82.9	84.4	85.2
Lesotho	31.3	29.2	27.8	28.6	34.7	34.3	34.3
Mauritius	77.6	92.4	98.4	103.4	161.0	177.1	169.2
Namibia	38.6	40.3	43.4	43.7	48.0	51.3	52.6
Seychelles	90.6	110.8	125.0	123.1	117.8	97.4	88.5
South Africa	58.8	64.1	65.5	71.5	77.5	83.7	90.6
Swaziland	21.4	21.6	21.4	20.9	23.0	25.5	19.7
Low-income countries	24.8	28.7	28.4	27.8	29.5	30.2	30.6
Benin	28.0	29.4	26.5	29.8	32.4	31.7	31.8
Burkina Faso	21.9	27.1	23.1	20.3	20.7	24.4	24.4
Ethiopia	35.5	44.3	39.0	38.0	36.1	33.3	30.9
Ghana	25.9	32.0	33.4	31.3	36.3	37.1	38.6
Kenya	38.3	39.5	39.8	38.6	39.8	39.1	40.3
Madagascar	19.6	21.4	21.4	18.2	19.3	20.5	21.9
Malawi	15.1	14.9	16.0	15.4	14.2	15.1	15.2
Mali	22.1	30.5	29.4	29.7	28.8	30.7	31.2
Mozambique	22.4	29.1	26.6	28.6	31.7	31.8	32.5
Niger	8.9	12.6	15.2	14.2	15.4	18.0	18.8
Rwanda	17.2	17.5	16.5	16.5	15.4	20.0	20.3
Senegal	23.4	32.1	34.1	34.0	36.6	37.3	39.9
Tanzania	16.2	18.2	18.6	20.5	24.2	25.6	26.8
Uganda	15.0	20.2	19.7	18.5	18.9	19.2	20.0
Zambia	20.5	21.8	22.4	18.0	21.6	23.1	23.1
Fragile countries	17.9	18.4	20.1	20.5	21.9	23.7	23.3
Including Zimbabwe	23.3	29.3	23.1	28.1	34.9	108.9	...
Burundi	19.8	27.0	27.7	29.9	31.7	30.3	29.9
Central African Republic	16.5	14.6	16.4	18.0	15.9	14.4	14.7
Comoros	20.5	22.4	20.7	20.0	20.2	22.8	23.8
Congo, Dem. Rep. of	6.0	6.2	8.8	8.5	10.5	12.3	12.1
Côte d'Ivoire	23.7	22.1	23.7	24.1	25.4	28.7	28.0
Eritrea	127.0	146.2	129.0	129.3	123.9	123.8	118.6
Gambia, The	34.0	45.8	45.1	46.6	54.4	52.6	52.6
Guinea	10.7	15.1	16.6	17.2	19.9	17.9	17.8
Guinea-Bissau	38.7	22.0	30.5	33.0	34.3	37.4	38.0
Liberia	...	15.2	18.8	21.3	23.5	25.1	27.3
São Tomé and Príncipe	19.0	29.7	27.9	36.4	39.6	38.7	38.7
Sierra Leone	16.5	20.5	19.6	21.5	21.3	23.3	23.2
Togo	24.7	27.6	31.1	28.9	33.9	38.3	40.2
Zimbabwe ¹	36.6	58.7	43.7	83.4	119.8	412.1	...
Sub-Saharan Africa	37.9	41.1	41.6	42.4	44.6	47.4	47.9
Including Zimbabwe	37.8	41.5	41.6	42.7	45.2	52.7	...
Excluding Nigeria and South Africa	24.1	26.6	26.5	25.6	28.5	30.0	28.8
Oil-importing countries	43.4	48.6	50.7	53.8	58.4	61.7	65.2
Excluding South Africa	26.3	29.9	30.5	30.1	34.0	35.3	35.0
CFA franc zone	18.8	21.1	20.8	20.2	21.3	23.4	23.0
WAEMU	22.8	25.8	26.3	26.3	27.7	30.0	30.5
CEMAC	13.6	15.3	14.6	14.1	15.1	16.9	16.2
EAC-5	25.3	27.8	27.8	27.7	29.9	30.7	31.4
SADC	48.9	53.5	55.1	58.1	62.4	66.2	68.2
SACU	56.2	61.6	62.9	68.1	74.2	80.4	86.9
COMESA	29.6	32.0	31.7	29.5	32.1	32.9	30.6
Resource-intensive countries	20.1	21.2	19.7	18.5	20.7	23.3	22.6
Oil	18.6	20.1	17.7	16.6	18.6	21.3	20.9
Non-oil	23.8	24.9	26.6	26.1	30.3	32.9	32.7
Non-resource-intensive countries	46.0	51.6	53.7	57.2	62.0	65.3	69.2
Coastal	50.9	56.3	58.6	63.0	69.0	73.1	78.1
Landlocked	20.0	24.2	23.5	22.9	23.2	23.9	23.4
MDRI	20.7	25.1	24.8	24.5	26.0	27.1	27.4
Fixed exchange rate regime	22.0	24.1	24.1	23.5	25.7	27.8	27.2
Floating exchange rate regime	41.9	45.3	45.8	46.9	48.8	51.6	52.2

Sources: IMF, African Department database, March 31, 2008; and World Economic Outlook (WEO) database, March 31, 2008.

¹ 2007 is an estimate.

REGIONAL ECONOMIC OUTLOOK: SUB-SAHARAN AFRICA

Table SA13. Broad Money Growth
(Percent)

	1997–2002	2003	2004	2005	2006	2007	2008
Oil-exporting countries	36.7	22.9	17.8	23.2	38.9	31.2	22.7
Excluding Nigeria	51.3	21.1	23.9	34.7	37.4	35.0	19.1
Angola	252.1	67.5	49.8	59.7	59.6	49.5	23.9
Cameroon	16.2	-0.9	7.3	4.2	9.3	18.6	7.4
Chad	7.5	-3.1	3.3	22.7	29.0	44.0	19.6
Congo, Rep. of	10.9	-2.4	15.9	36.3	47.9	7.4	10.3
Equatorial Guinea	36.4	56.7	33.5	34.7	14.1	34.0	29.6
Gabon	7.7	-0.3	11.8	27.6	21.0	11.0	7.8
Nigeria	28.0	24.1	14.0	16.0	39.9	28.5	25.3
Middle-income countries	13.9	13.2	13.3	19.3	25.3	23.7	21.3
Excluding South Africa	15.0	15.8	14.3	10.5	49.5	24.5	10.4
Botswana	21.8	17.6	13.9	10.6	67.4	34.3	12.9
Cape Verde	8.0	8.6	10.5	15.5	17.7	13.4	13.0
Lesotho	8.7	6.0	3.3	9.1	35.4	10.4	12.9
Mauritius	12.2	24.3	18.3	13.6	68.5	23.8	10.3
Namibia	13.0	9.6	16.2	9.7	29.8	18.8	15.4
Seychelles	15.4	6.0	14.0	1.7	3.0	-8.0	17.2
South Africa	13.8	12.9	13.1	20.5	22.5	23.6	22.6
Swaziland	10.9	14.1	10.4	5.9	25.1	21.4	-14.7
Low-income countries	15.1	22.0	12.8	12.6	21.9	19.5	16.1
Benin	13.3	6.6	-6.7	21.8	16.3	5.2	8.4
Burkina Faso	5.2	54.0	-7.2	-3.8	10.2	22.9	10.9
Ethiopia	8.9	14.7	10.9	19.6	17.4	19.7	21.1
Ghana	37.7	38.1	25.9	14.3	38.8	22.7	22.0
Kenya	6.1	11.5	13.4	9.1	17.1	19.1	12.5
Madagascar	15.6	6.4	19.4	4.6	24.9	24.0	23.4
Malawi	31.1	29.3	29.8	14.3	17.4	22.5	12.2
Mali	12.4	25.5	-2.4	9.5	7.2	11.8	8.0
Mozambique	28.2	18.7	5.9	27.1	23.4	16.2	15.4
Niger	6.5	42.2	20.3	6.6	16.2	24.1	14.9
Rwanda	14.2	15.2	12.1	17.2	10.7	50.2	14.1
Senegal	10.3	31.5	12.9	7.4	12.7	13.4	16.3
Tanzania	14.3	22.7	18.0	25.5	31.6	20.7	20.0
Uganda	18.9	23.3	9.0	8.7	16.4	17.4	16.6
Zambia	32.0	23.4	30.2	0.4	45.1	21.5	11.5
Fragile countries	33.2	-0.9	23.1	15.5	23.0	22.5	10.3
Including Zimbabwe	47.5	54.6	39.3	41.7	72.0	321.1	...
Burundi	15.8	23.3	16.7	27.1	16.4	10.0	15.0
Central African Republic	-2.7	-8.0	14.2	16.5	-4.2	-3.7	9.4
Comoros	11.4	-1.1	-6.3	3.1	4.2	15.0	9.2
Congo, Dem. Rep. of	225.5	57.3	59.9	26.4	48.5	50.6	16.3
Côte d'Ivoire	10.2	-26.6	9.5	7.4	10.3	17.2	5.3
Eritrea	25.4	15.1	11.7	10.7	5.7	8.6	7.7
Gambia, The	22.5	43.4	18.3	13.1	26.2	8.6	11.8
Guinea	14.9	35.3	37.0	37.2	59.4	8.3	15.9
Guinea-Bissau	34.7	-65.3	44.0	20.6	5.3	16.0	8.3
Liberia	...	8.3	49.3	35.7	34.4	33.7	29.6
São Tomé and Príncipe	34.5	43.9	7.4	45.9	39.3	24.8	21.1
Sierra Leone	28.8	26.2	18.9	32.8	19.3	28.5	17.1
Togo	3.3	11.4	18.3	1.4	22.1	16.4	10.0
Zimbabwe ¹	67.7	413.5	222.6	520.0	1,416.6	33,994.4	...
Sub-Saharan Africa	20.3	16.5	15.0	19.0	29.0	25.4	20.3
Including Zimbabwe	22.4	20.9	16.1	20.4	31.6	36.2	...
Excluding Nigeria and South Africa	24.4	17.2	17.3	18.9	29.6	25.4	16.0
Oil-importing countries	16.0	14.3	13.9	17.1	24.1	22.3	18.7
Excluding South Africa	18.6	16.0	15.0	12.8	26.1	20.8	14.2
CFA franc zone	10.8	3.8	8.9	13.4	15.6	18.0	11.5
WAEMU	9.3	4.3	6.2	7.3	11.8	15.7	9.6
CEMAC	12.8	3.1	12.0	19.8	19.3	20.2	13.2
EAC-5	11.6	17.5	14.1	14.6	20.5	20.6	15.5
SADC	22.7	17.6	16.8	22.3	30.1	27.4	21.2
SACU	14.0	12.9	13.1	19.5	24.5	23.9	21.6
COMESA	38.7	26.5	25.2	23.1	36.3	31.7	18.3
Resource-intensive countries	30.1	16.7	17.6	20.5	38.3	29.5	20.9
Oil	36.7	22.9	17.8	23.2	38.9	31.2	22.7
Non-oil	15.8	-1.5	16.7	10.0	35.3	21.5	10.6
Non-resource-intensive countries	16.0	16.4	13.6	18.0	22.7	22.4	19.8
Coastal	14.0	14.5	13.5	18.9	23.4	22.2	20.8
Landlocked	27.6	28.2	14.2	12.8	19.1	23.5	14.5
MDRI	17.1	20.0	11.8	12.1	20.9	19.6	15.6
Fixed exchange rate regime	11.8	5.4	9.7	12.6	21.0	19.2	11.3
Floating exchange rate regime	22.5	19.5	16.3	20.5	30.9	26.8	22.2

Sources: IMF, African Department database, March 31, 2008; and World Economic Outlook (WEO) database, March 31, 2008.

¹ 2007 is an estimate.

Table SA14. Claims on Nonfinancial Private Sector
(Percent of broad money)

	1997–2002	2003	2004	2005	2006	2007	2008
Oil-exporting countries	58.1	55.4	57.6	61.0	57.8	73.6	75.7
Excluding Nigeria	51.5	48.6	44.4	42.0	43.6	47.1	50.5
Angola	21.1	32.2	35.2	34.7	42.0	50.0	53.2
Cameroon	60.3	61.0	56.9	59.7	55.7	51.1	53.9
Chad	50.2	53.8	49.3	47.2	45.7	28.1	24.8
Congo, Rep. of	53.5	28.2	25.4	18.9	14.1	14.1	15.4
Equatorial Guinea	62.5	33.2	30.3	33.6	40.6	48.5	57.9
Gabon	80.9	75.5	61.3	53.6	53.7	56.8	60.3
Nigeria	62.7	59.7	66.1	73.8	67.1	92.4	93.8
Middle-income countries	103.9	101.2	102.1	101.5	102.2	100.4	100.2
Excluding South Africa	67.8	81.0	83.4	85.0	69.6	66.3	68.7
Botswana	57.2	66.5	72.3	70.1	50.3	46.6	46.6
Cape Verde	47.3	50.9	50.3	47.5	52.4	57.5	58.0
Lesotho	57.3	23.8	25.7	31.3	26.3	30.9	30.9
Mauritius	70.5	88.3	80.2	74.9	52.3	47.5	48.7
Namibia	102.4	123.6	128.2	139.7	125.5	117.4	114.4
Seychelles	19.3	23.8	27.2	30.8	28.7	42.3	42.4
South Africa	108.7	103.7	104.4	103.5	106.3	104.5	103.9
Swaziland	59.2	75.7	89.3	102.0	98.9	99.1	128.5
Low-income countries	51.0	45.6	48.8	54.4	56.4	58.4	60.3
Benin	33.0	49.2	55.0	54.3	51.9	53.7	53.6
Burkina Faso	53.5	50.7	61.2	79.2	82.0	67.2	69.5
Ethiopia	49.5	34.3	34.5	45.7	50.6	55.1	55.9
Ghana	52.8	48.9	49.2	58.8	59.6	66.1	73.6
Kenya	71.0	58.9	64.6	65.4	63.6	66.5	67.1
Madagascar	47.2	41.2	47.2	55.9	52.8	50.0	50.9
Malawi	34.0	26.9	29.4	30.7	44.7	41.2	41.5
Mali	68.2	61.4	65.1	74.8	91.3	97.7	105.7
Mozambique	66.8	44.4	39.5	48.8	51.2	51.5	49.1
Niger	53.5	42.8	43.3	48.7	55.2	53.5	52.8
Rwanda	56.3	60.5	59.5	60.3	66.9	56.1	58.5
Senegal	71.4	61.3	59.3	68.7	63.5	60.4	57.3
Tanzania	24.7	29.9	37.1	37.3	38.5	43.6	49.9
Uganda	42.2	36.1	39.6	41.2	45.7	48.1	52.8
Zambia	50.0	33.7	38.4	45.2	46.2	53.2	55.4
Fragile countries	50.6	47.8	46.3	45.5	44.1	45.0	45.7
Including Zimbabwe	60.0	57.8	48.6	43.8	42.8	45.3	...
Burundi	94.2	94.2	85.0	60.9	65.4	65.6	64.9
Central African Republic	37.0	51.2	50.0	42.1	45.9	49.9	49.6
Comoros	42.4	36.1	35.0	33.5	29.4	25.6	29.7
Congo, Dem. Rep. of	14.6	16.3	20.2	24.9	26.7	31.2	32.1
Côte d'Ivoire	67.3	61.8	60.6	57.2	56.3	57.0	57.8
Eritrea	31.6	22.2	23.5	24.4	23.5	23.4	23.9
Gambia, The	38.0	43.0	30.9	32.2	32.2	32.2	32.1
Guinea	48.4	40.9	32.2	34.6	29.7	27.1	27.2
Guinea-Bissau	19.0	8.8	5.2	6.4	11.5	16.1	17.9
Liberia	...	63.6	56.7	47.1	47.9	41.5	39.2
São Tomé and Príncipe	20.1	27.6	56.9	55.4	58.7	56.6	55.3
Sierra Leone	15.9	20.3	24.5	21.7	21.6	23.5	23.9
Togo	63.0	62.2	54.9	60.6	49.9	52.0	54.4
Zimbabwe	84.1	84.8	63.9	31.4	34.2	46.3	...
Sub-Saharan Africa	74.5	73.5	76.0	77.0	75.2	79.7	80.3
Including Zimbabwe	74.6	73.8	75.9	76.6	74.9	79.2	...
Excluding Nigeria and South Africa	52.1	50.7	51.5	53.1	52.2	53.7	55.8
Oil-importing countries	81.3	80.0	83.1	84.0	84.3	83.0	83.3
Excluding South Africa	53.4	51.3	54.0	57.8	56.3	57.1	58.8
CFA franc zone	60.4	57.0	54.3	54.9	54.4	53.3	54.9
WAEMU	61.4	57.5	58.6	63.0	64.1	62.7	63.4
CEMAC	62.1	56.4	49.4	46.8	45.1	44.2	47.2
EAC-5	50.8	45.9	51.1	51.6	53.4	56.4	59.0
SADC	89.7	87.2	89.5	88.1	87.5	86.3	85.4
SACU	105.5	102.2	103.1	102.5	103.8	102.0	101.7
COMESA	51.1	48.7	51.5	52.8	52.7	55.8	57.5
Resource-intensive countries	59.6	57.3	59.4	62.2	58.1	71.0	73.2
Oil	58.1	55.4	57.6	61.0	57.8	73.6	75.7
Non-oil	63.5	63.7	66.0	67.2	59.4	58.2	58.8
Non-resource-intensive countries	83.8	82.0	85.2	86.1	87.5	86.1	86.3
Coastal	93.0	89.1	91.8	92.0	93.2	91.7	91.6
Landlocked	46.3	41.0	44.4	51.1	56.1	56.3	59.0
MDRI	49.2	45.4	47.2	53.0	54.7	55.4	57.8
Fixed exchange rate regime	62.4	60.9	60.2	61.4	58.3	56.6	58.2
Floating exchange rate regime	81.0	76.6	79.9	80.6	78.9	84.7	84.9

Sources: IMF, African Department database, March 31, 2008; and World Economic Outlook (WEO) database, March 31, 2008.

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Table SA15. Exports of Goods and Services (Percent of GDP)							
	1997–2002	2003	2004	2005	2006	2007	2008
Oil-exporting countries	46.0	47.0	49.5	54.5	52.2	49.9	51.7
Excluding Nigeria	51.9	52.9	57.4	66.4	67.0	65.8	67.7
Angola	75.0	69.6	69.7	79.3	73.8	71.4	72.6
Cameroon	24.7	24.0	22.7	24.5	28.1	26.8	27.2
Chad	16.8	24.6	51.5	53.5	57.1	53.8	53.1
Congo, Rep. of	77.2	80.8	78.6	88.9	96.5	103.3	99.3
Equatorial Guinea	98.1	96.4	97.3	96.8	94.5	93.0	91.5
Gabon	58.3	55.2	62.2	67.7	66.0	64.4	68.4
Nigeria	42.2	43.2	44.4	46.5	42.6	38.6	40.2
Middle-income countries	30.5	31.0	29.5	30.0	31.9	34.0	35.0
Excluding South Africa	51.1	55.2	52.3	50.7	50.4	54.0	53.0
Botswana	44.7	56.7	47.6	46.2	41.8	46.8	44.6
Cape Verde	26.5	31.4	32.0	36.8	42.6	43.6	46.4
Lesotho	34.5	50.0	54.7	49.6	50.8	55.6	55.4
Mauritius	61.2	58.4	55.5	57.7	60.7	60.8	62.2
Namibia	45.0	37.2	40.6	39.7	45.8	49.3	47.1
Seychelles	72.1	87.4	89.7	99.6	110.7	123.7	118.1
South Africa	27.8	28.1	26.7	27.5	29.6	31.6	32.9
Swaziland	75.4	86.8	86.5	72.6	63.7	68.4	69.3
Low-income countries	20.1	21.3	23.7	23.4	24.6	23.9	23.0
Benin	14.9	13.7	14.3	13.0	10.7	11.4	12.2
Burkina Faso	10.1	8.6	10.7	9.6	11.7	11.0	10.9
Ethiopia	12.6	14.2	14.9	15.1	13.9	12.8	12.3
Ghana	39.2	40.7	39.3	36.1	39.1	38.5	37.5
Kenya	22.3	23.7	26.6	27.9	24.7	22.8	22.8
Madagascar	23.9	23.1	32.9	27.3	30.1	31.0	28.9
Malawi	25.5	19.5	20.6	19.6	18.8	19.5	20.5
Mali	25.6	26.0	24.6	25.6	30.6	27.4	26.5
Mozambique	18.2	29.0	32.1	32.9	42.5	41.3	39.2
Niger	17.9	15.7	17.9	16.5	15.5	15.8	18.5
Rwanda	7.5	7.9	9.6	9.6	10.3	9.3	9.0
Senegal	28.2	26.6	27.2	27.2	26.3	26.1	24.7
Tanzania	13.0	14.7	18.0	19.7	22.0	21.6	19.6
Uganda	11.8	12.0	14.3	13.8	14.7	15.7	15.7
Zambia	28.9	29.0	38.2	34.1	37.8	41.2	39.0
Fragile countries	31.7	35.5	37.5	40.4	41.9	40.5	42.0
Including Zimbabwe	29.2	30.7	38.1	40.6	41.2	35.2	...
Burundi	7.7	8.4	9.6	11.5	10.4	8.4	11.6
Central African Republic	19.2	13.5	13.2	12.6	14.0	14.8	14.4
Comoros	15.2	15.8	12.7	11.8	14.0	9.8	10.4
Congo, Dem. Rep. of	22.0	26.1	30.3	33.7	36.2	45.1	45.7
Côte d'Ivoire	42.2	45.8	48.6	51.1	52.2	47.8	50.2
Eritrea	13.6	8.3	8.6	6.2	7.0	6.6	6.3
Gambia, The	51.7	66.1	73.2	65.5	64.2	59.6	54.9
Guinea	22.9	22.3	21.0	28.3	34.9	24.9	24.0
Guinea-Bissau	25.1	30.0	31.0	31.4	23.8	30.8	27.9
Liberia	...	36.8	31.3	28.8	35.6	41.1	49.5
São Tomé and Príncipe	17.9	17.5	14.0	14.0	14.0	10.8	12.9
Sierra Leone	15.7	23.2	23.0	24.1	25.0	21.0	20.6
Togo	32.7	43.5	41.3	40.3	42.3	42.7	47.4
Zimbabwe	29.1	17.6	42.5	42.0	36.3	16.6	...
Sub-Saharan Africa	31.6	33.5	34.4	36.8	38.1	38.0	39.6
Including Zimbabwe	31.2	33.1	34.5	36.9	38.0	37.7	...
Excluding Nigeria and South Africa	32.2	34.9	38.1	41.5	43.1	42.9	44.3
Oil-importing countries	27.5	28.6	28.6	29.0	30.6	31.5	31.8
Excluding South Africa	27.3	29.3	31.2	31.0	31.8	31.3	30.6
CFA franc zone	35.2	36.3	40.0	44.0	46.3	44.7	46.4
WAEMU	30.2	30.3	31.5	31.8	32.5	30.4	31.3
CEMAC	41.7	43.7	49.5	56.3	59.6	58.6	60.1
EAC-5	16.2	17.6	20.4	21.4	21.0	20.2	19.7
SADC	30.8	32.0	31.8	34.0	36.8	39.2	41.0
SACU	29.4	30.0	28.6	29.1	31.0	33.2	34.1
COMESA	32.6	35.2	39.3	43.2	43.7	44.3	46.5
Resource-intensive countries	43.8	45.7	47.9	52.3	50.7	48.9	50.5
Oil	46.0	47.0	49.5	54.5	52.2	49.9	51.7
Non-oil	38.4	41.3	42.5	43.2	44.0	43.8	43.4
Non-resource-intensive countries	26.0	27.0	26.9	27.2	28.9	29.9	30.4
Coastal	27.4	28.2	27.6	28.2	30.1	31.4	32.0
Landlocked	18.6	20.5	22.5	21.5	21.9	22.4	22.2
MDRI	20.3	21.4	23.1	22.8	25.1	24.5	23.6
Fixed exchange rate regime	37.8	39.5	42.2	44.9	46.5	46.0	47.1
Floating exchange rate regime	30.1	32.0	32.5	34.9	36.2	36.3	38.0

Sources: IMF, African Department database, March 31, 2008; and World Economic Outlook (WEO) database, March 31, 2008.

Table SA16. Imports of Goods and Services
(Percent of GDP)

	1997–2002	2003	2004	2005	2006	2007	2008
Oil-exporting countries	41.1	43.1	36.0	35.4	32.7	34.7	30.6
Excluding Nigeria	46.3	46.4	43.2	41.9	40.1	41.7	37.0
Angola	72.2	63.1	53.7	49.4	37.9	37.7	34.1
Cameroon	23.2	23.4	25.0	26.4	27.5	27.9	28.1
Chad	47.7	61.1	60.3	47.3	51.2	47.7	45.0
Congo, Rep. of	57.1	59.8	45.0	52.0	71.9	100.6	69.5
Equatorial Guinea	105.1	76.1	58.8	47.6	50.1	52.4	45.9
Gabon	37.3	31.0	32.0	29.4	32.1	35.4	34.1
Nigeria	37.6	41.0	31.4	31.0	27.8	29.8	26.0
Middle-income countries	28.8	29.1	30.0	30.8	34.8	37.0	38.6
Excluding South Africa	56.0	56.0	54.2	51.1	49.6	55.6	58.9
Botswana	36.8	42.9	39.1	31.0	27.3	33.1	37.8
Cape Verde	61.2	67.4	69.5	64.8	68.6	73.3	75.8
Lesotho	100.6	103.2	102.4	99.0	97.8	106.0	102.2
Mauritius	62.3	57.4	55.0	62.1	67.6	71.7	73.5
Namibia	53.2	44.3	44.6	43.3	43.1	46.3	48.6
Seychelles	84.3	82.7	94.5	122.0	127.9	160.3	161.1
South Africa	25.1	25.8	27.1	28.3	32.9	34.7	36.2
Swaziland	88.6	84.7	89.1	81.5	71.4	80.2	86.1
Low-income countries	30.6	31.9	35.0	36.4	37.5	38.1	38.6
Benin	27.0	26.5	26.6	22.8	22.2	22.9	23.1
Burkina Faso	24.5	21.7	24.3	24.7	24.6	25.4	26.3
Ethiopia	23.6	29.2	31.5	35.5	36.6	32.2	31.9
Ghana	56.1	52.7	60.4	61.7	65.0	65.9	62.6
Kenya	28.0	28.2	32.6	35.2	34.7	33.2	34.7
Madagascar	30.7	32.1	47.9	41.6	41.2	48.5	58.1
Malawi	38.2	36.2	38.8	46.3	42.5	40.4	40.9
Mali	33.6	33.2	32.9	34.2	33.6	33.8	34.0
Mozambique	35.5	46.2	41.8	44.0	50.3	51.5	54.4
Niger	26.4	25.8	28.8	30.9	30.1	31.0	34.1
Rwanda	24.7	26.1	26.5	28.0	27.4	27.4	31.1
Senegal	36.2	38.7	39.9	42.7	44.4	42.2	42.7
Tanzania	22.1	20.8	23.2	27.0	33.0	35.0	33.0
Uganda	23.2	26.7	27.6	26.9	29.9	32.0	34.1
Zambia	40.4	41.5	42.6	36.2	29.6	38.3	36.5
Fragile countries	30.1	33.5	37.1	42.9	42.3	42.8	46.2
Including Zimbabwe	28.3	30.0	38.9	44.1	42.1	37.1	...
Burundi	18.3	27.7	33.9	39.7	47.6	43.1	41.3
Central African Republic	24.0	18.0	19.4	21.4	21.9	22.3	23.1
Comoros	34.3	31.0	31.7	33.9	38.3	28.4	33.0
Congo, Dem. Rep. of	21.2	28.4	34.4	45.3	41.3	50.7	55.2
Côte d'Ivoire	33.2	34.9	39.4	43.6	41.6	40.5	43.8
Eritrea	67.2	87.1	88.9	55.4	38.7	36.3	34.0
Gambia, The	60.7	79.0	104.3	99.1	89.6	90.7	92.1
Guinea	26.4	24.6	25.4	31.5	39.6	33.5	34.2
Guinea-Bissau	47.9	44.1	47.3	48.2	55.0	49.3	48.5
Liberia	...	47.6	70.9	75.7	90.2	93.4	107.6
São Tomé and Príncipe	50.4	53.6	52.7	57.5	86.5	69.9	72.5
Sierra Leone	28.4	40.8	34.2	37.2	32.6	28.3	30.4
Togo	45.7	57.5	56.3	57.2	61.8	63.5	72.5
Zimbabwe	29.4	20.7	51.2	52.9	40.9	16.9	...
Sub-Saharan Africa	32.0	33.7	33.1	33.9	35.0	36.7	35.8
Including Zimbabwe	31.6	33.4	33.3	34.1	35.0	36.4	...
Excluding Nigeria and South Africa	36.7	38.3	39.8	40.6	40.2	41.6	40.6
Oil-importing countries	29.4	30.3	32.0	33.3	36.2	37.8	39.2
Excluding South Africa	34.3	35.8	38.6	40.0	40.3	41.5	42.8
CFA franc zone	34.0	35.3	36.3	37.0	39.5	41.1	39.5
WAEMU	32.6	33.5	35.8	37.8	37.3	36.9	38.8
CEMAC	35.8	37.6	37.0	36.3	41.5	45.3	40.1
EAC-5	24.8	25.4	28.3	30.7	33.1	33.3	34.0
SADC	30.5	31.3	32.1	33.1	35.4	37.7	38.4
SACU	27.4	27.9	29.1	29.7	33.7	35.7	37.4
COMESA	38.8	40.7	42.5	43.2	39.1	40.0	39.4
Resource-intensive countries	39.6	41.8	36.7	36.0	33.2	35.3	32.0
Oil	41.1	43.1	36.0	35.4	32.7	34.7	30.6
Non-oil	36.2	37.7	39.0	38.3	35.6	38.3	40.6
Non-resource-intensive countries	28.5	29.4	31.1	32.7	36.3	37.7	39.1
Coastal	28.3	28.9	30.4	31.8	36.1	37.7	39.1
Landlocked	29.6	32.5	35.4	37.7	37.1	37.8	39.0
MDRI	30.0	31.4	33.8	35.2	36.6	37.5	37.8
Fixed exchange rate regime	38.2	39.1	39.8	39.3	40.6	43.0	42.3
Floating exchange rate regime	30.4	32.4	31.4	32.7	33.7	35.3	34.5

Sources: IMF, African Department database, March 31, 2008; and World Economic Outlook (WEO) database, March 31, 2008.

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Table SA17. Trade Balance (Percent of GDP)							
	1997–2002	2003	2004	2005	2006	2007	2008
Oil-exporting countries	17.5	15.0	24.3	29.4	27.6	23.9	28.7
Excluding Nigeria	23.2	22.3	30.7	40.7	40.7	38.7	43.5
Angola	36.4	28.9	38.6	51.4	49.3	47.5	50.9
Cameroon	3.7	1.9	-0.4	0.3	3.0	1.6	1.9
Chad	-15.4	-8.4	28.0	35.8	34.0	31.6	30.8
Congo, Rep. of	47.5	50.6	53.0	56.5	52.6	42.4	57.3
Equatorial Guinea	40.9	53.5	64.0	67.7	63.0	59.2	63.3
Gabon	34.7	35.2	41.9	48.8	45.4	41.5	45.4
Nigeria	13.7	10.3	20.1	21.9	19.1	13.4	18.1
Middle-income countries	2.1	1.5	-0.4	-0.6	-2.3	-2.3	-3.0
Excluding South Africa	-5.0	-3.3	-3.3	-2.1	-1.2	-4.3	-8.9
Botswana	10.7	13.9	8.9	15.5	15.1	14.2	7.4
Cape Verde	-35.5	-37.8	-41.0	-35.0	-39.4	-47.3	-49.9
Lesotho	-65.2	-49.8	-44.9	-46.1	-44.7	-47.4	-44.8
Mauritius	-7.7	-5.8	-6.3	-11.4	-13.2	-17.3	-19.8
Namibia	-5.9	-10.3	-5.0	-4.3	1.4	1.6	-2.0
Seychelles	-29.6	-12.6	-22.2	-41.4	-37.4	-63.1	-65.4
South Africa	3.0	2.1	-0.1	-0.4	-2.4	-2.0	-2.4
Swaziland	-4.8	5.7	3.8	-4.7	-5.1	-11.3	-16.3
Low-income countries	-8.5	-9.0	-10.3	-12.2	-12.1	-13.6	-14.4
Benin	-10.4	-11.3	-11.0	-9.3	-10.7	-10.9	-10.4
Burkina Faso	-10.4	-8.9	-9.1	-9.9	-8.6	-9.4	-10.5
Ethiopia	-12.8	-17.1	-19.8	-22.6	-23.7	-20.3	-20.6
Ghana	-15.1	-10.3	-17.0	-23.7	-23.8	-26.7	-23.4
Kenya	-7.7	-7.7	-10.0	-11.2	-14.3	-15.3	-15.1
Madagascar	-3.1	-3.5	-10.1	-12.0	-9.8	-16.2	-23.1
Malawi	-4.8	-10.5	-11.8	-19.6	-17.4	-14.9	-14.0
Mali	0.6	-1.3	-2.4	-2.7	2.5	-1.1	-2.8
Mozambique	-15.4	-14.9	-9.3	-11.0	-7.9	-8.5	-13.0
Niger	-2.9	-5.2	-5.1	-8.7	-7.9	-7.9	-7.9
Rwanda	-9.4	-10.2	-9.0	-10.4	-10.1	-11.9	-14.3
Senegal	-7.6	-11.8	-12.3	-15.1	-17.7	-17.6	-17.9
Tanzania	-7.1	-5.6	-6.7	-8.0	-11.9	-15.3	-14.5
Uganda	-7.2	-10.0	-9.9	-9.6	-11.6	-11.3	-14.1
Zambia	-5.3	-7.0	-0.5	0.7	10.9	8.3	6.4
Fragile countries	7.5	8.2	6.3	3.3	5.7	3.7	2.8
Including Zimbabwe	5.5	5.7	4.6	1.9	4.6	2.9	...
Burundi	-7.3	-15.3	-15.2	-18.4	-19.7	-22.8	-20.2
Central African Republic	2.4	0.9	-1.7	-3.2	-3.1	-2.5	-3.5
Comoros	-15.3	-11.7	-16.4	-20.8	-22.5	-18.0	-21.2
Congo, Dem. Rep. of	6.1	2.1	0.9	-5.6	0.1	0.1	-1.1
Côte d'Ivoire	15.7	18.5	16.6	14.6	18.0	15.0	14.5
Eritrea	-50.3	-69.7	-73.7	-44.6	-29.5	-27.5	-25.8
Gambia, The	-14.1	-14.6	-39.1	-45.6	-40.0	-47.7	-52.8
Guinea	3.2	4.2	0.7	2.7	2.2	-2.5	-4.0
Guinea-Bissau	-9.7	-3.6	-2.7	-5.5	-19.6	-10.8	-13.0
Liberia	...	-4.7	-28.8	-34.7	-39.7	-37.0	-39.0
São Tomé and Príncipe	-23.0	-25.6	-28.2	-30.7	-49.8	-39.5	-42.2
Sierra Leone	-6.1	-14.8	-8.3	-12.1	-6.6	-6.0	-7.0
Togo	-10.2	-9.4	-13.1	-16.4	-19.1	-20.3	-25.0
Zimbabwe	1.1	-1.0	-6.5	-8.5	-3.1	0.0	...
Sub-Saharan Africa	3.5	3.3	4.9	6.6	6.6	5.1	7.5
Including Zimbabwe	3.4	3.2	4.8	6.5	6.5	5.0	...
Excluding Nigeria and South Africa	1.0	1.8	3.8	6.6	8.2	6.9	9.4
Oil-importing countries	-0.6	-0.9	-2.5	-3.5	-4.5	-5.2	-6.1
Excluding South Africa	-4.5	-4.6	-5.8	-7.7	-7.2	-9.1	-10.5
CFA franc zone	8.8	9.1	12.3	15.4	16.1	13.3	16.0
WAEMU	2.4	1.6	0.4	-1.5	-0.3	-2.1	-2.8
CEMAC	17.0	18.4	25.6	32.3	31.9	28.3	33.0
EAC-5	-7.4	-7.6	-8.9	-10.0	-13.0	-14.5	-14.8
SADC	2.7	2.2	1.6	3.2	3.7	4.3	5.7
SACU	2.7	2.0	-0.1	-0.1	-1.8	-1.6	-2.3
COMESA	-0.8	-1.1	1.8	5.9	8.9	9.1	12.6
Resource-intensive countries	14.6	13.3	20.5	25.3	24.8	21.5	25.5
Oil	17.5	15.0	24.3	29.4	27.6	23.9	28.7
Non-oil	7.5	7.9	7.3	8.4	11.8	9.6	7.0
Non-resource-intensive countries	-1.7	-2.0	-3.7	-4.9	-6.6	-7.1	-7.7
Coastal	-0.6	-0.9	-2.8	-3.7	-5.7	-6.2	-6.7
Landlocked	-7.0	-8.5	-9.5	-12.6	-11.6	-11.7	-13.0
MDRI	-6.9	-7.6	-8.8	-10.6	-9.6	-11.2	-12.0
Fixed exchange rate regime	6.0	6.9	9.2	12.2	13.0	10.5	11.9
Floating exchange rate regime	2.8	2.4	3.9	5.3	5.1	3.9	6.6

Sources: IMF, African Department database, March 31, 2008; and World Economic Outlook (WEO) database, March 31, 2008.

Table SA18. External Current Account, Including Grants
(Percent of GDP)

	1997–2002	2003	2004	2005	2006	2007	2008
Oil-exporting countries	-3.7	-6.2	2.8	7.8	10.8	2.8	7.4
Excluding Nigeria	-6.5	-6.5	-0.6	8.9	12.9	5.6	8.6
Angola	-12.7	-5.2	3.5	16.8	23.3	11.0	12.0
Cameroon	-3.1	-1.8	-3.8	-3.4	0.7	0.4	0.0
Chad	-28.0	-46.8	-16.0	2.1	-9.5	-4.3	-2.4
Congo, Rep. of	-8.0	-4.1	12.7	11.4	1.6	-19.8	6.4
Equatorial Guinea	-33.8	-33.2	-22.3	-5.4	4.5	1.8	2.9
Gabon	7.0	9.5	11.2	19.8	18.0	12.8	15.4
Nigeria	-1.7	-6.1	5.0	7.1	9.5	0.7	6.5
Middle-income countries	-0.2	-0.5	-2.6	-3.1	-4.9	-5.7	-6.1
Excluding South Africa	1.4	3.9	2.3	4.6	7.7	7.6	3.1
Botswana	7.6	7.1	3.1	14.1	15.3	16.0	8.3
Cape Verde	-10.6	-11.1	-14.3	-3.4	-5.1	-10.1	-11.6
Lesotho	-21.6	-12.3	-5.5	-7.0	4.4	4.9	4.8
Mauritius	0.6	2.4	0.8	-3.5	-5.3	-7.9	-6.4
Namibia	3.4	6.7	8.2	5.5	15.9	18.4	11.8
Seychelles	-15.7	0.4	-7.0	-23.6	-17.2	-38.7	-44.9
South Africa	-0.5	-1.1	-3.2	-4.0	-6.5	-7.3	-7.1
Swaziland	-2.1	6.8	2.2	-3.1	-3.7	1.3	-1.4
Low-income countries	-6.3	-4.7	-4.9	-6.2	-5.0	-7.0	-8.5
Benin	-7.0	-8.3	-7.2	-5.9	-6.2	-5.7	-6.1
Burkina Faso	-9.8	-8.9	-10.4	-11.3	-9.6	-9.9	-11.6
Ethiopia	-3.7	-1.4	-4.0	-6.3	-9.1	-4.5	-4.1
Ghana	-7.4	1.7	-2.7	-7.0	-10.9	-12.8	-9.8
Kenya	-2.1	-0.2	0.1	-0.8	-2.5	-3.5	-5.2
Madagascar	-5.3	-4.9	-9.2	-11.1	-8.7	-15.1	-27.3
Malawi	-7.5	-7.2	-8.5	-12.3	-6.2	-3.2	-2.9
Mali	-7.5	-6.2	-8.4	-8.3	-4.9	-6.6	-7.6
Mozambique	-12.5	-10.5	-6.3	-11.4	19.7	-9.9	-12.1
Niger	-6.7	-8.3	-7.8	-9.3	-8.6	-7.7	-9.8
Rwanda	-7.6	-7.4	-2.8	-2.9	-6.5	-4.8	-9.4
Senegal	-4.9	-6.1	-6.1	-7.8	-9.8	-8.1	-10.3
Tanzania	-6.5	-4.2	-3.6	-4.1	-7.8	-9.2	-9.4
Uganda	-6.1	-5.8	-2.2	-3.2	-4.0	-2.0	-7.7
Zambia	-15.0	-14.8	-11.8	-9.1	1.1	-6.7	-5.5
Fragile countries	-2.8	0.0	-1.2	-4.0	-1.1	-2.6	-5.0
Including Zimbabwe	-2.6	-0.8	-2.1	-4.9	-1.7	-2.3	...
Burundi	-4.7	-4.6	-8.1	-9.6	-14.4	-12.3	-11.4
Central African Republic	-2.5	-2.2	-1.8	-6.6	-2.7	-4.5	-6.4
Comoros	-5.4	-3.8	-4.6	-6.5	-5.2	1.9	-3.5
Congo, Dem. Rep. of	-4.0	1.0	-2.4	-10.5	-2.4	-4.0	-10.5
Côte d'Ivoire	-0.4	2.1	1.6	0.2	3.1	1.4	0.6
Eritrea	-5.5	12.5	-1.0	0.3	-3.4	-4.7	-5.1
Gambia, The	-3.3	-7.1	-9.1	-22.3	-16.9	-18.3	-22.5
Guinea	-5.6	-3.4	-5.8	-4.5	-5.9	-9.2	-10.9
Guinea-Bissau	-12.7	-2.8	2.4	-5.1	-11.3	-1.7	7.0
Liberia	...	-14.2	-5.6	-13.3	-31.0	-30.7	-42.1
São Tomé and Príncipe	-17.1	-13.2	-17.3	-13.6	-45.7	-35.5	-36.1
Sierra Leone	-3.1	-4.8	-5.8	-7.1	-3.6	-3.8	-6.4
Togo	-6.9	-4.2	-3.0	-5.3	-6.0	-6.5	-8.4
Zimbabwe	-1.7	-2.9	-8.3	-11.0	-6.0	-1.0	...
Sub-Saharan Africa	-2.6	-2.9	-1.5	-0.4	0.7	-2.8	-1.2
Including Zimbabwe	-2.6	-2.9	-1.5	-0.5	0.7	-2.7	...
Excluding Nigeria and South Africa	-4.7	-3.4	-2.3	-0.2	2.6	-0.8	-0.7
Oil-importing countries	-2.3	-1.7	-3.1	-4.0	-4.6	-5.8	-6.7
Excluding South Africa	-4.4	-2.4	-2.9	-4.0	-2.2	-4.1	-6.2
CFA franc zone	-4.3	-5.2	-3.5	-1.0	-0.3	-2.4	-0.6
WAEMU	-4.3	-3.7	-4.1	-5.2	-4.1	-4.5	-5.8
CEMAC	-4.3	-7.0	-2.7	3.2	3.3	-0.2	4.1
EAC-5	-4.6	-2.9	-1.8	-2.6	-4.7	-4.9	-7.2
SADC	-1.9	-1.6	-2.6	-2.0	-1.1	-3.6	-3.6
SACU	-0.2	-0.6	-2.6	-3.0	-4.8	-5.5	-6.0
COMESA	-5.0	-2.5	-1.0	1.2	5.4	1.5	0.9
Resource-intensive countries	-2.8	-4.6	2.2	6.7	10.0	3.0	6.5
Oil	-3.7	-6.2	2.8	7.8	10.8	2.8	7.4
Non-oil	-0.7	0.7	0.1	2.4	6.5	4.2	1.3
Non-resource-intensive countries	-2.5	-2.0	-3.5	-4.8	-6.0	-7.1	-7.7
Coastal	-1.9	-1.6	-3.3	-4.4	-6.0	-7.5	-7.9
Landlocked	-6.0	-4.1	-4.9	-7.3	-6.1	-4.6	-7.0
MDRI	-6.6	-5.0	-5.5	-6.7	-4.6	-6.6	-7.9
Fixed exchange rate regime	-3.1	-3.4	-2.2	0.5	1.9	0.3	0.5
Floating exchange rate regime	-2.5	-2.8	-1.3	-0.6	0.4	-3.4	-1.6

Sources: IMF, African Department database, March 31, 2008; and World Economic Outlook (WEO) database, March 31, 2008.

REGIONAL ECONOMIC OUTLOOK: SUB-SAHARAN AFRICA

Table SA19. External Current Account, Excluding Grants
(Percent of GDP)

	1997–2002	2003	2004	2005	2006	2007	2008
Oil-exporting countries	-3.9	-6.4	2.7	7.6	10.8	2.7	7.3
Excluding Nigeria	-7.1	-7.2	-0.9	8.3	12.7	5.4	8.5
Angola	-13.8	-5.9	3.4	16.7	23.7	11.3	12.2
Cameroon	-3.4	-2.4	-4.0	-3.8	0.1	-0.6	-0.9
Chad	-31.1	-52.0	-20.3	-1.9	-12.0	-6.7	-4.6
Congo, Rep. of	-8.2	-4.3	12.5	10.4	1.5	-20.0	6.3
Equatorial Guinea	-35.4	-33.8	-22.7	-5.7	4.3	1.6	3.0
Gabon	6.8	10.2	11.9	19.7	18.0	12.8	15.3
Nigeria	-1.5	-5.9	5.0	7.2	9.5	0.8	6.5
Middle-income countries	-0.3	-0.6	-2.6	-2.8	-4.8	-5.8	-6.2
Excluding South Africa	-3.9	-1.6	-4.3	-2.3	-0.5	-2.2	-6.4
Botswana	4.1	2.7	-2.5	8.1	8.4	8.2	0.8
Cape Verde	-17.8	-17.2	-20.0	-8.0	-9.3	-15.0	-14.5
Lesotho	-38.7	-27.8	-23.5	-27.3	-20.5	-26.9	-26.6
Mauritius	0.5	1.9	0.4	-3.7	-5.5	-8.0	-7.2
Namibia	-7.7	-3.1	-3.2	-4.9	2.6	3.4	-1.0
Seychelles	-17.6	-1.1	-9.0	-26.8	-20.2	-40.9	-47.3
South Africa	0.1	-0.5	-2.4	-2.9	-5.4	-6.2	-6.2
Swaziland	-10.2	-1.2	-6.8	-15.8	-17.3	-19.6	-24.8
Low-income countries	-9.5	-8.3	-8.6	-10.0	-8.3	-10.5	-12.0
Benin	-9.8	-11.6	-10.4	-7.9	-8.7	-8.9	-8.4
Burkina Faso	-13.0	-13.1	-13.4	-14.5	-12.5	-13.9	-15.2
Ethiopia	-7.6	-8.8	-9.6	-12.4	-14.8	-10.7	-12.1
Ghana	-10.7	-3.5	-8.8	-12.3	-14.0	-15.1	-12.8
Kenya	-2.3	-0.6	0.1	-0.8	-2.7	-3.6	-5.2
Madagascar	-6.2	-7.5	-13.0	-12.4	-9.9	-15.5	-27.8
Malawi	-14.8	-12.5	-15.4	-21.5	-19.4	-16.3	-15.9
Mali	-9.3	-8.8	-10.4	-10.5	-6.8	-8.4	-8.8
Mozambique	-17.9	-15.5	-12.0	-16.8	13.0	-19.8	-21.4
Niger	-9.4	-11.2	-10.3	-12.6	-10.9	-9.0	-13.8
Rwanda	-17.0	-18.2	-16.8	-17.5	-15.1	-15.7	-19.7
Senegal	-6.9	-7.9	-7.8	-9.2	-10.9	-9.9	-11.4
Tanzania	-10.6	-7.3	-6.8	-8.2	-11.4	-12.3	-12.5
Uganda	-12.9	-13.5	-12.0	-11.7	-9.5	-8.6	-12.3
Zambia	-16.8	-15.9	-12.2	-10.9	-1.3	-9.4	-7.7
Fragile countries	-5.1	-2.6	-3.4	-6.3	-4.2	-5.8	-7.3
Including Zimbabwe	-4.4	-2.8	-4.1	-6.9	-4.6	-4.9	...
Burundi	-11.5	-21.1	-25.5	-27.5	-35.4	-33.3	-28.4
Central African Republic	-6.1	-5.0	-5.8	-8.7	-8.0	-7.9	-9.3
Comoros	-7.7	-4.4	-5.9	-8.4	-6.7	-1.0	-5.4
Congo, Dem. Rep. of	-8.7	-6.3	-7.9	-16.0	-10.2	-9.3	-12.9
Côte d'Ivoire	-0.8	1.9	1.7	0.4	3.3	-0.3	-0.6
Eritrea	-15.0	-11.8	-23.4	-9.1	-7.8	-7.2	-7.1
Gambia, The	-12.6	-19.0	-21.8	-29.9	-21.7	-27.2	-32.3
Guinea	-6.7	-3.9	-6.0	-4.9	-6.5	-9.7	-11.1
Guinea-Bissau	-24.0	-9.7	-9.4	-12.7	-24.7	-11.4	-12.0
Liberia	...	-18.9	-46.9	-63.3	-65.9	-62.2	-71.4
São Tomé and Príncipe	-36.0	-35.9	-38.8	-43.9	-72.9	-57.3	-58.7
Sierra Leone	-10.8	-10.7	-13.1	-14.2	-8.9	-7.3	-9.8
Togo	-9.3	-4.8	-3.7	-6.5	-7.4	-8.2	-10.8
Zimbabwe	-2.6	-3.3	-8.8	-11.6	-7.0	-1.4	...
Sub-Saharan Africa	-3.7	-3.9	-2.3	-1.2	-0.1	-3.7	-2.1
Including Zimbabwe	-3.6	-3.9	-2.4	-1.2	-0.1	-3.7	...
Excluding Nigeria and South Africa	-7.5	-6.4	-5.3	-3.2	-0.2	-3.8	-3.4
Oil-importing countries	-3.6	-3.0	-4.3	-5.1	-5.8	-7.2	-8.1
Excluding South Africa	-7.7	-6.1	-6.8	-8.1	-6.3	-8.4	-10.4
CFA franc zone	-5.5	-6.5	-4.5	-2.2	-1.3	-3.8	-1.9
WAEMU	-6.0	-5.5	-5.6	-6.6	-5.4	-6.7	-7.7
CEMAC	-5.0	-7.8	-3.3	2.3	2.6	-1.0	3.4
EAC-5	-7.9	-6.3	-5.6	-6.6	-7.8	-8.0	-9.8
SADC	-2.6	-2.2	-3.0	-2.3	-1.6	-4.2	-4.1
SACU	-0.2	-0.6	-2.6	-2.7	-4.7	-5.6	-6.1
COMESA	-8.2	-6.2	-4.6	-2.3	2.2	-1.7	-1.8
Resource-intensive countries	-3.8	-5.4	1.4	5.9	9.3	2.1	5.8
Oil	-3.9	-6.4	2.7	7.6	10.8	2.7	7.3
Non-oil	-3.5	-2.0	-3.0	-1.1	2.4	-0.8	-3.0
Non-resource-intensive countries	-3.6	-3.2	-4.4	-5.6	-6.8	-8.0	-8.7
Coastal	-2.1	-1.9	-3.3	-4.1	-5.8	-7.4	-7.7
Landlocked	-11.2	-10.7	-11.3	-14.2	-12.8	-11.6	-13.8
MDRI	-9.9	-8.7	-9.4	-10.7	-8.1	-10.4	-11.7
Fixed exchange rate regime	-5.5	-5.8	-4.7	-2.1	-0.9	-3.2	-2.6
Floating exchange rate regime	-3.2	-3.5	-1.8	-0.9	0.1	-3.8	-1.9

Sources: IMF, African Department database, March 31, 2008; and World Economic Outlook (WEO) database, March 31, 2008.

Table SA20. Official Grants
(Percent of GDP)

	1997–2002	2003	2004	2005	2006	2007	2008
Oil-exporting countries	0.2	0.2	0.1	0.2	0.0	0.1	0.0
Excluding Nigeria	0.7	0.7	0.4	0.6	0.2	0.2	0.1
Angola	1.0	0.7	0.0	0.1	-0.3	-0.3	-0.2
Cameroon	0.3	0.6	0.2	0.5	0.6	1.0	0.9
Chad	3.2	5.2	4.3	3.9	2.5	2.4	2.2
Congo, Rep. of	0.2	0.2	0.2	1.0	0.2	0.2	0.2
Equatorial Guinea	1.5	0.6	0.4	0.3	0.2	0.2	-0.1
Gabon	0.2	-0.7	-0.7	0.0	0.0	0.0	0.1
Nigeria	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0.0
Middle-income countries	0.1	0.1	0.0	-0.3	-0.1	0.1	0.1
Excluding South Africa	5.2	5.4	6.5	6.9	8.2	9.8	9.4
Botswana	3.5	4.5	5.6	6.1	6.9	7.8	7.5
Cape Verde	7.2	6.0	5.7	4.6	4.2	4.9	2.9
Lesotho	17.1	15.5	18.0	20.3	24.9	31.7	31.4
Mauritius	0.1	0.5	0.4	0.2	0.2	0.1	0.8
Namibia	11.1	9.8	11.4	10.4	13.4	15.0	12.8
Seychelles	2.0	1.5	2.0	3.2	3.0	2.2	2.4
South Africa	-0.6	-0.6	-0.8	-1.2	-1.1	-1.0	-1.0
Swaziland	8.0	8.0	8.9	12.7	13.6	20.8	23.4
Low-income countries	3.2	3.6	3.8	3.8	3.3	3.5	3.6
Benin	2.7	3.2	3.2	2.0	2.5	3.1	2.4
Burkina Faso	3.2	4.2	3.0	3.2	3.0	4.0	3.6
Ethiopia	3.9	7.5	5.6	6.1	5.7	6.2	8.0
Ghana	3.3	5.2	6.1	5.3	3.1	2.3	3.0
Kenya	0.3	0.4	0.0	0.0	0.3	0.2	0.0
Madagascar	0.9	2.6	3.9	1.3	1.2	0.4	0.5
Malawi	7.3	5.3	7.0	9.2	13.3	13.1	13.0
Mali	1.8	2.6	2.0	2.2	1.9	1.7	1.2
Mozambique	5.5	5.0	5.7	5.4	6.7	9.9	9.3
Niger	2.7	2.9	2.5	3.3	2.3	1.3	4.0
Rwanda	9.4	10.8	14.0	14.6	8.6	11.0	10.3
Senegal	2.0	1.8	1.7	1.4	1.1	1.8	1.1
Tanzania	4.1	3.1	3.2	4.1	3.5	3.1	3.2
Uganda	6.7	7.7	9.8	8.5	5.5	6.6	4.5
Zambia	1.8	1.0	0.4	1.8	2.4	2.7	2.3
Fragile countries	2.3	2.6	2.2	2.3	3.1	3.2	2.3
Including Zimbabwe	1.8	2.0	2.0	2.1	2.8	2.6	...
Burundi	6.8	16.5	17.4	17.9	21.1	21.0	16.9
Central African Republic	3.6	2.7	4.0	2.0	5.2	3.4	2.9
Comoros	2.3	0.6	1.3	1.9	1.6	2.9	1.8
Congo, Dem. Rep. of	4.6	7.3	5.5	5.5	7.8	5.3	2.4
Côte d'Ivoire	0.4	0.3	-0.1	-0.1	-0.2	1.7	1.2
Eritrea	9.5	24.3	22.4	9.4	4.4	2.5	2.0
Gambia, The	9.2	11.9	12.7	7.6	4.7	8.9	9.8
Guinea	1.1	0.5	0.3	0.4	0.6	0.5	0.2
Guinea-Bissau	11.3	6.9	11.8	7.6	13.4	9.7	19.0
Liberia	...	4.8	41.3	50.0	34.9	31.5	29.2
São Tomé and Príncipe	18.9	22.6	21.6	30.3	27.2	21.8	22.6
Sierra Leone	7.7	5.9	7.3	7.1	5.3	3.5	3.5
Togo	2.4	0.6	0.8	1.2	1.4	1.7	2.5
Zimbabwe	0.8	0.4	0.5	0.6	1.0	0.5	...
Sub-Saharan Africa	1.0	1.0	0.9	0.8	0.8	0.9	0.8
Including Zimbabwe	1.0	1.0	0.9	0.8	0.8	0.9	...
Excluding Nigeria and South Africa	2.8	3.0	3.0	3.0	2.8	3.0	2.7
Oil-importing countries	1.3	1.3	1.2	1.0	1.2	1.4	1.4
Excluding South Africa	3.3	3.7	3.9	4.0	4.0	4.4	4.1
CFA franc zone	1.2	1.3	1.1	1.2	1.0	1.5	1.3
WAEMU	1.7	1.8	1.4	1.4	1.3	2.2	1.9
CEMAC	0.7	0.8	0.6	0.9	0.7	0.8	0.7
EAC-5	3.3	3.4	3.8	4.0	3.0	3.1	2.6
SADC	0.7	0.6	0.5	0.3	0.5	0.6	0.5
SACU	0.1	0.0	-0.1	-0.3	-0.1	0.1	0.1
COMESA	3.2	3.8	3.6	3.5	3.2	3.1	2.7
Resource-intensive countries	1.0	0.8	0.8	0.8	0.7	0.9	0.7
Oil	0.2	0.2	0.1	0.2	0.0	0.1	0.0
Non-oil	2.8	2.7	3.1	3.5	4.1	5.0	4.3
Non-resource-intensive countries	1.0	1.2	0.9	0.7	0.8	1.0	1.0
Coastal	0.2	0.2	0.0	-0.3	-0.3	-0.2	-0.1
Landlocked	5.2	6.6	6.4	6.8	6.7	7.1	6.9
MDRI	3.4	3.8	3.8	4.0	3.5	3.8	3.8
Fixed exchange rate regime	2.4	2.4	2.5	2.7	2.9	3.5	3.1
Floating exchange rate regime	0.7	0.7	0.5	0.3	0.3	0.4	0.4

Sources: IMF, African Department database, March 31, 2008; and World Economic Outlook (WEO) database, March 31, 2008.

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Table SA21. Real Effective Exchange Rates ¹ (Annual average; index, 2000 = 100)						
	1997-2002	2003	2004	2005	2006	2007
Oil-exporting countries	116.9	109.0	114.3	127.0	137.6	138.2
Excluding Nigeria	104.1	114.7	123.5	130.3	143.3	149.9
Angola	103.3	117.5	140.0	158.5	190.6	206.9
Cameroon	106.5	110.5	110.5	109.7	113.2	113.4
Chad	110.5	119.1	114.2	119.8	126.7	116.8
Congo, Rep. of	105.3	111.2	116.1	115.4	117.3	120.3
Equatorial Guinea	107.8	134.4	143.8	147.7	150.8	161.5
Gabon	104.8	105.3	105.4	104.1	102.1	107.1
Nigeria	131.6	105.0	107.8	124.2	133.1	129.3
Middle-income countries	98.8	98.8	108.1	108.6	104.5	96.0
Excluding South Africa	98.1	106.9	107.4	105.3	103.0	99.1
Botswana	99.3	115.0	110.2	107.1	104.0	97.6
Cape Verde	102.0	100.3	97.3	94.8	97.3	98.6
Lesotho	102.1	112.2	132.1	132.8	129.4	128.8
Mauritius	96.2	94.3	92.0	88.4	87.6	88.6
Namibia	97.7	104.6	111.9	112.7	109.8	105.1
Seychelles	98.7	100.9	94.2	92.1	87.5	71.3
South Africa	99.0	97.4	107.6	108.5	104.2	95.1
Swaziland	96.3	102.8	113.2	113.2	110.9	106.9
Low-income countries	101.5	97.8	94.6	100.2	105.2	108.0
Benin	104.0	115.1	117.9	120.6	121.9	122.7
Burkina Faso	105.8	112.2	111.5	114.8	115.1	116.4
Ethiopia	97.0	90.1	84.9	91.1	99.4	106.5
Ghana	125.7	100.9	99.5	109.7	116.1	113.7
Kenya	101.0	106.6	104.2	116.2	135.2	146.5
Madagascar	101.8	105.7	80.2	84.7	85.2	99.7
Malawi	106.4	80.4	73.3	75.2	73.3	65.1
Mali	107.3	109.9	106.6	109.8	108.3	108.8
Mozambique	89.1	128.2	134.2	137.0	137.6	137.6
Niger	105.1	108.2	108.8	113.3	110.6	110.7
Rwanda	102.1	72.7	69.6	75.2	79.0	79.4
Senegal	104.7	106.6	106.7	105.4	105.1	110.7
Tanzania	97.4	75.0	67.7	65.6	60.9	60.2
Uganda	107.2	81.8	84.6	88.7	87.8	89.6
Zambia	104.2	101.7	107.8	134.7	176.7	152.2
Fragile countries	92.8	85.7	84.2	82.1	83.3	88.2
Including Zimbabwe	94.1	92.5	89.0	86.5	88.3	123.3
Burundi	103.1	63.6	64.2	71.1	73.2	68.8
Central African Republic	104.8	123.3	122.3	122.3	129.3	129.4
Comoros	104.5	116.7	120.4	121.3	123.9	129.1
Congo, Dem. Rep. of	74.2	31.7	30.1	29.4	32.8	31.8
Cote d'Ivoire	104.0	115.0	116.5	116.4	115.9	117.7
Eritrea	94.7	95.0	83.6	105.9	117.5	117.4
Gambia, The	96.3	51.8	51.2	54.5	54.3	60.1
Guinea	105.5	88.3	83.2	65.5	58.9	84.6
Guinea-Bissau	102.2	107.2	108.9	106.9	108.0	110.7
Liberia	...	...	...	...	...	...
São Tomé and Príncipe	90.9	86.9	84.2	89.7	89.3	89.8
Sierra Leone	102.2	77.7	69.5	70.9	73.5	73.8
Togo	104.2	109.5	110.9	113.7	112.4	112.8
Zimbabwe	143.2	199.6	69.3	63.0	77.5	1,074.1
Sub-Saharan Africa	102.7	102.0	106.1	111.4	114.3	112.1
Including Zimbabwe	102.7	102.5	106.5	111.8	114.7	114.8
Excluding Nigeria and South Africa	100.0	101.0	101.2	105.2	110.8	114.1
Oil-importing countries	98.7	98.7	102.4	104.7	104.6	101.5
Excluding South Africa	98.9	96.8	94.3	97.6	101.1	103.5
CFA franc zone	105.5	112.5	113.2	114.2	115.3	117.0
WAEMU	104.7	111.7	112.1	113.4	112.9	114.9
CEMAC	106.4	113.4	114.5	115.1	117.8	119.2
EAC-5	100.8	91.3	88.4	92.7	96.7	100.1
SADC	96.4	98.7	106.1	108.4	108.5	103.2
SACU	98.9	98.7	108.4	109.0	104.9	96.0
COMESA	96.3	95.0	96.5	104.5	116.4	121.8
Resource-intensive countries	112.1	107.6	111.6	121.8	130.8	131.4
Oil	116.9	109.0	114.3	127.0	137.6	138.2
Non-oil	100.7	102.2	101.8	102.7	105.7	106.2
Non-resource-intensive countries	98.3	97.4	101.5	103.9	103.5	100.0
Coastal	99.3	100.0	105.8	107.8	106.2	101.3
Landlocked	95.1	85.6	83.9	87.5	90.7	92.1
MDRI	102.3	97.7	94.6	98.5	101.3	102.7
Fixed exchange rate regime	104.2	112.2	113.1	113.7	114.1	114.4
Floating exchange rate regime	102.4	99.3	104.2	110.6	114.0	111.3

Sources: IMF, African Department database, March 31, 2008; and World Economic Outlook (WEO) database, March 31, 2008.

¹ An increase indicates appreciation.

Table SA22. Nominal Effective Exchange Rates ¹
(Annual average; index, 2000 = 100)

	1997-2002	2003	2004	2005	2006	2007
Oil-exporting countries	131.6	66.7	62.3	61.6	63.3	61.7
Excluding Nigeria	138.1	56.6	54.2	52.8	54.8	55.3
Angola	782.3	10.8	9.0	8.4	9.2	9.1
Cameroon	103.8	108.6	110.8	110.1	110.3	113.0
Chad	104.2	109.3	113.2	112.8	113.3	116.8
Congo, Rep. of	104.6	112.8	116.6	116.2	115.8	118.7
Equatorial Guinea	106.4	114.0	119.8	119.6	120.2	126.2
Gabon	103.1	106.3	108.5	108.1	108.3	110.6
Nigeria	132.6	74.2	67.9	68.0	69.2	65.6
Middle-income countries	100.7	91.4	103.1	104.6	102.6	97.1
Excluding South Africa	100.2	100.0	98.8	95.1	90.4	87.6
Botswana	101.5	112.4	105.1	99.0	93.3	92.6
Cape Verde	100.1	104.4	105.9	105.3	105.3	105.2
Lesotho	105.8	92.0	105.8	106.4	100.1	94.6
Mauritius	97.8	86.7	82.9	76.8	71.4	68.2
Namibia	100.5	89.6	93.9	95.0	91.0	85.2
Seychelles	99.9	100.5	92.7	92.5	92.0	73.7
South Africa	100.9	89.8	103.1	105.3	103.6	97.8
Swaziland	100.0	98.5	109.5	110.6	112.3	112.9
Low-income countries	104.5	88.1	82.6	82.5	82.6	81.6
Benin	104.8	112.1	117.0	116.4	116.1	119.1
Burkina Faso	102.4	114.3	117.7	117.8	118.6	121.7
Ethiopia	100.5	90.3	84.9	84.0	83.3	76.4
Ghana	141.9	55.2	49.5	48.6	47.6	44.0
Kenya	105.0	97.5	87.8	91.4	96.0	98.1
Madagascar	105.8	92.8	63.9	57.9	54.0	58.7
Malawi	137.9	68.0	61.9	60.5	61.3	66.0
Mali	103.2	109.2	111.8	111.2	111.5	114.3
Mozambique	85.9	99.7	94.4	92.8	84.9	82.2
Niger	103.6	111.4	114.7	114.0	114.0	116.9
Rwanda	101.2	69.5	61.3	63.0	63.5	60.9
Senegal	102.7	109.1	111.5	111.2	111.4	113.5
Tanzania	102.1	73.8	65.8	63.0	57.0	54.7
Uganda	108.4	80.7	83.7	84.1	81.6	82.3
Zambia	120.1	70.8	69.0	78.6	107.7	103.0
Fragile countries	110.8	68.6	65.2	58.9	56.4	56.2
Including Zimbabwe	111.5	67.2	61.9	54.9	51.2	50.1
Burundi	115.6	61.4	56.9	57.5	59.7	53.8
Central African Republic	103.2	106.3	108.1	107.9	108.1	110.1
Comoros	103.5	112.3	113.3	113.4	115.3	120.2
Congo, Dem. Rep. of	438.3	3.6	3.2	2.6	2.7	2.2
Cote d'Ivoire	103.0	112.2	114.9	113.6	113.1	115.6
Eritrea	100.4	62.9	45.5	52.4	51.6	48.6
Gambia, The	94.9	42.3	37.5	39.1	39.3	42.2
Guinea	106.5	80.2	66.9	41.5	28.4	34.0
Guinea-Bissau	104.1	112.0	116.2	115.2	115.4	117.3
Liberia	...	63.1	62.2	57.9	55.5	50.4
São Tomé and Príncipe	103.1	72.6	63.7	59.4	49.4	43.2
Sierra Leone	120.0	78.4	62.7	58.3	56.5	52.2
Togo	102.0	115.7	120.5	120.0	119.8	123.5
Zimbabwe	142.2	18.1	1.0	0.3	0.0	0.0
Sub-Saharan Africa	108.4	82.7	83.5	83.2	83.1	80.5
Including Zimbabwe	108.5	82.5	83.2	82.8	82.5	79.9
Excluding Nigeria and South Africa	109.7	78.1	74.1	72.4	72.5	72.0
Oil-importing countries	102.7	89.6	93.5	93.4	92.1	89.0
Excluding South Africa	104.7	86.0	81.4	79.6	78.6	77.5
CFA franc zone	103.4	110.6	113.7	113.1	113.2	116.2
WAEMU	103.0	111.7	114.8	114.1	114.2	116.8
CEMAC	103.9	109.3	112.4	112.0	112.2	115.3
EAC-5	104.3	87.0	81.2	81.6	80.5	80.4
SADC	107.3	75.9	80.4	80.2	79.8	76.3
SACU	100.9	91.3	103.5	105.3	103.4	97.9
COMESA	122.4	57.6	52.3	51.3	53.3	52.1
Resource-intensive countries	121.9	72.0	67.6	66.6	68.0	66.7
Oil	131.6	66.7	62.3	61.6	63.3	61.7
Non-oil	103.4	94.2	90.3	87.0	87.3	87.4
Non-resource-intensive countries	102.6	88.3	93.0	93.3	91.9	88.3
Coastal	101.4	90.9	97.4	98.3	96.5	92.7
Landlocked	108.0	76.2	74.5	72.9	72.6	70.1
MDRI	104.4	88.9	84.7	83.9	83.3	82.0
Fixed exchange rate regime	102.9	109.5	112.0	111.0	110.2	112.1
Floating exchange rate regime	110.6	76.5	77.0	76.8	76.8	73.6

Sources: IMF, African Department database, March 31, 2008; and World Economic Outlook (WEO) database, March 31, 2008.

¹ An increase indicates appreciation.

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Table SA23. External Debt to Official Creditors (Percent of GDP)							
	1997–2002	2003	2004	2005	2006	2007	2008
Oil-exporting countries	67.4	49.5	41.8	21.7	8.0	6.7	4.6
Excluding Nigeria	73.3	55.3	46.3	29.5	17.2	13.3	8.8
Angola	65.8	44.3	33.3	23.8	12.1	6.7	4.7
Cameroon	61.0	44.9	42.0	35.5	5.4	4.9	5.6
Chad	62.3	50.4	36.9	27.6	27.5	29.4	26.1
Congo, Rep. of	182.2	176.2	176.5	76.5	62.0	70.5	52.9
Equatorial Guinea	39.3	10.3	6.6	3.2	1.8	1.3	0.9
Gabon	69.0	58.3	40.3	29.4	33.9	27.8	7.2
Nigeria	63.3	45.7	38.8	16.4	2.1	2.0	1.6
Middle-income countries	5.2	4.4	3.5	3.0	2.8	2.7	2.3
Excluding South Africa	16.6	16.0	13.1	10.9	9.7	9.9	8.8
Botswana	8.8	6.8	4.7	3.6	3.0	3.0	2.8
Cape Verde	53.3	61.8	57.1	49.4	49.1	42.4	37.6
Lesotho	66.5	60.6	49.3	41.9	38.3	39.6	37.0
Mauritius	23.8	17.6	14.0	12.7	10.8	10.0	8.1
Namibia	3.1	5.4	6.0	5.1	5.2	5.9	5.1
Seychelles	24.2	34.8	39.6	44.9	29.2	35.3	30.8
South Africa	3.6	3.0	2.3	2.1	2.0	1.8	1.6
Swaziland	15.8	17.5	15.7	12.1	11.5	12.3	10.6
Low-income countries	77.4	68.5	61.8	46.5	25.7	17.4	18.0
Benin	68.1	49.2	41.3	36.3	10.8	12.8	13.6
Burkina Faso	53.4	41.6	41.2	37.6	19.9	20.8	21.5
Ethiopia	63.3	83.4	72.4	48.2	36.7	11.3	12.1
Ghana	112.9	109.9	95.8	59.2	17.1	23.0	26.8
Kenya	37.6	31.7	29.4	24.9	20.7	17.0	15.9
Madagascar	112.0	83.5	78.2	71.6	30.4	26.7	25.6
Malawi	132.2	119.7	112.6	104.0	35.8	22.6	22.6
Mali	97.6	63.8	66.8	63.2	26.5	28.2	30.6
Mozambique	90.5	84.9	73.8	31.5	28.3	31.6	33.5
Niger	90.9	69.9	58.8	52.3	14.2	14.9	14.9
Rwanda	70.5	80.6	85.1	63.3	12.7	16.2	15.6
Senegal	66.1	54.0	46.4	40.4	18.9	19.2	19.4
Tanzania	70.3	46.8	45.0	42.8	43.6	14.6	15.5
Uganda	59.0	67.5	65.6	50.6	47.0	13.0	15.1
Zambia	195.3	154.5	114.4	56.8	4.9	6.0	6.2
Fragile countries	122.0	108.0	99.7	93.5	70.0	62.1	51.2
Including Zimbabwe	93.8	88.0	96.7	88.8	66.6	52.9	...
Burundi	145.9	224.0	207.3	182.0	164.5	148.0	122.1
Central African Republic	83.1	93.9	88.4	86.1	75.6	69.1	65.5
Comoros	99.1	90.5	81.6	67.7	69.6	55.2	50.4
Congo, Dem. Rep. of	250.3	184.7	164.3	154.4	60.4	51.4	42.5
Côte d'Ivoire	72.0	65.9	61.8	55.5	59.5	60.0	47.6
Eritrea	38.6	80.3	80.2	66.3	61.4	65.1	59.7
Gambia, The	130.0	203.5	194.1	175.7	165.7	59.8	65.7
Guinea	96.7	92.7	81.8	96.9	100.4	61.5	52.6
Guinea-Bissau	381.5	386.9	378.7	332.0	322.5	294.9	282.4
Liberia	...	822.8	814.7	692.8	713.0	562.5	588.0
São Tomé and Príncipe	375.9	315.1	294.2	285.9	259.2	102.7	94.9
Sierra Leone	162.0	158.5	163.6	117.6	8.4	7.1	6.5
Togo	91.9	103.3	96.6	81.9	82.8	87.2	68.9
Zimbabwe	33.8	33.7	76.8	55.1	44.4	20.1	...
Sub-Saharan Africa	44.7	37.2	31.3	22.0	12.5	10.1	8.6
Including Zimbabwe	44.0	37.1	31.7	22.3	12.7	10.3	...
Excluding Nigeria and South Africa	76.7	65.6	57.4	43.5	26.7	20.7	17.6
Oil-importing countries	38.7	32.8	27.3	22.2	14.8	12.1	11.2
Excluding South Africa	77.7	68.8	61.4	49.4	31.2	24.4	22.7
CFA franc zone	76.0	62.5	56.6	43.7	30.4	29.9	24.0
WAEMU	75.9	63.1	58.5	52.4	37.8	38.2	33.4
CEMAC	76.6	61.9	54.5	35.0	23.3	21.9	15.5
EAC-5	56.0	48.7	47.0	40.3	34.3	17.8	17.4
SADC	27.0	20.5	16.0	13.0	7.8	5.8	5.3
SACU	4.3	3.7	2.9	2.5	2.4	2.2	2.0
COMESA	78.7	67.4	57.7	43.7	22.9	14.4	12.3
Resource-intensive countries	68.0	52.9	44.3	25.5	11.7	10.3	7.4
Oil	67.4	49.5	41.8	21.7	8.0	6.7	4.6
Non-oil	70.7	64.2	53.3	41.0	28.9	28.5	23.7
Non-resource-intensive countries	34.4	28.9	24.1	19.9	13.0	10.0	9.7
Coastal	22.5	18.5	14.8	11.8	8.5	7.3	7.1
Landlocked	97.4	88.6	81.1	68.0	38.2	24.5	23.3
MDRI	83.2	72.1	65.0	49.2	23.6	15.7	16.6
Fixed exchange rate regime	63.2	54.0	47.9	37.1	26.2	26.2	21.4
Floating exchange rate regime	40.1	33.0	27.2	18.5	9.4	6.7	6.0

Sources: IMF, African Department database, March 31, 2008; and World Economic Outlook (WEO) database, March 31, 2008.

Table SA24. Terms of Trade
(Index, 2000 = 100)

	1997–2002	2003	2004	2005	2006	2007	2008
Oil-exporting countries	79.1	92.6	106.6	141.3	165.2	177.1	223.3
Excluding Nigeria	82.3	94.6	101.5	126.0	144.1	145.8	175.2
Angola	70.7	80.8	97.6	126.4	152.2	153.6	193.1
Cameroon	92.0	102.1	99.9	119.6	134.3	131.1	137.3
Chad	97.4	102.2	92.4	110.1	92.1	94.5	92.3
Congo, Rep. of	79.2	107.0	119.6	131.2	140.5	147.3	181.6
Equatorial Guinea	78.6	95.0	105.6	142.3	166.4	167.1	182.8
Gabon	77.8	98.4	106.9	130.0	141.6	141.7	163.2
Nigeria	76.7	91.3	109.9	151.6	178.9	199.3	257.8
Middle-income countries	103.5	103.0	103.6	104.9	109.1	113.6	115.4
Excluding South Africa	100.2	98.5	98.6	103.6	104.8	109.0	103.7
Botswana	99.2	89.2	91.9	102.4	102.8	107.6	96.5
Cape Verde	91.1	96.7	105.4	125.3	127.6	126.9	137.1
Lesotho	99.3	111.6	110.8	104.4	104.4	102.2	102.9
Mauritius	106.4	102.1	99.4	94.2	90.1	86.9	80.9
Namibia	93.3	96.6	95.7	104.3	109.1	121.4	116.3
Seychelles	123.2	150.0	133.6	107.2	108.9	96.6	101.3
South Africa	104.0	103.5	104.3	105.1	109.6	114.2	116.8
Swaziland	98.6	98.9	110.1	119.5	125.4	135.2	141.4
Low-income countries	108.1	95.8	96.6	90.0	100.1	99.6	93.9
Benin	142.0	86.9	91.7	77.7	83.4	81.7	86.9
Burkina Faso	120.8	122.7	132.5	96.6	99.6	99.2	98.8
Ethiopia	127.9	81.6	71.9	77.1	81.5	80.0	80.5
Ghana	117.9	127.2	108.0	100.6	106.4	115.5	117.8
Kenya	102.0	84.0	78.2	72.6	70.4	64.9	60.4
Madagascar	103.2	113.5	95.7	60.6	57.1	55.6	53.5
Malawi	127.4	247.7	374.8	339.7	335.0	321.3	305.8
Mali	111.6	96.5	96.6	113.6	117.0	113.1	99.6
Mozambique	98.3	92.0	100.7	106.0	134.9	140.9	129.0
Niger	108.6	111.0	112.7	120.6	111.7	113.7	141.2
Rwanda	90.8	48.9	58.5	65.8	63.5	67.5	61.6
Senegal	99.6	100.5	97.7	94.5	104.3	99.9	101.1
Tanzania	86.5	65.3	60.0	53.9	47.2	51.5	49.6
Uganda	110.3	75.5	72.0	50.6	60.6	88.1	68.6
Zambia	105.8	99.3	132.2	140.9	216.5	221.5	193.4
Fragile countries	113.8	123.4	105.9	103.7	112.2	124.6	122.1
Including Zimbabwe	109.4	115.3	103.4	100.7	106.8	114.7	...
Burundi	103.6	78.4	100.4	111.4	105.8	104.4	90.3
Central African Republic	96.5	85.0	70.7	74.3	72.0	70.2	64.8
Comoros	93.7	294.1	188.7	99.9	116.0	64.9	71.1
Congo, Dem. Rep. of	104.8	124.6	129.0	143.6	152.3	192.3	185.0
Cote d'Ivoire	123.9	135.5	104.5	96.0	106.7	116.2	116.8
Eritrea	102.0	83.4	61.9	73.3	71.7	73.6	49.8
Gambia, The	98.4	118.9	76.9	64.1	62.3	51.7	60.6
Guinea	108.8	92.0	87.1	82.3	87.9	82.6	70.5
Guinea-Bissau	86.9	74.4	69.6	74.6	57.7	57.6	59.1
Liberia	...	...	...	...	...	...	...
São Tomé and Príncipe	61.8	69.5	51.9	54.6	47.1	53.6	51.3
Sierra Leone	113.4	100.4	95.7	91.2	85.6	85.3	76.5
Togo	105.0	121.4	104.9	97.9	96.7	102.3	103.4
Zimbabwe	100.7	93.6	86.7	79.0	72.2	79.1	...
Sub-Saharan Africa	100.5	100.1	103.3	113.2	126.9	134.0	153.8
Including Zimbabwe	100.5	99.9	103.1	112.9	126.5	133.2	...
Excluding Nigeria and South Africa	103.3	100.2	99.5	104.0	116.2	119.0	128.0
Oil-importing countries	105.9	102.8	102.0	100.7	106.7	110.2	109.3
Excluding South Africa	108.1	101.9	98.8	94.8	103.0	105.5	100.4
CFA franc zone	104.7	108.9	103.7	111.0	119.8	121.0	129.9
WAEMU	117.1	115.6	104.8	97.8	104.1	106.1	107.7
CEMAC	87.4	100.6	102.5	124.2	135.0	135.5	150.0
EAC-5	98.4	74.4	70.4	62.8	62.3	66.4	59.3
SADC	101.6	101.8	104.7	107.6	117.5	122.7	130.3
SACU	103.4	102.8	103.7	105.1	109.5	114.2	116.1
COMESA	103.7	96.7	101.8	105.8	122.9	125.7	139.0
Resource-intensive countries	89.0	96.9	105.6	134.1	158.4	169.4	208.6
Oil	79.1	92.6	106.6	141.3	165.2	177.1	223.3
Non-oil	110.7	110.9	102.0	104.7	127.0	131.5	122.3
Non-resource-intensive countries	105.2	101.8	102.0	100.2	104.1	107.6	107.7
Coastal	103.7	101.2	100.4	99.1	103.1	105.6	106.8
Landlocked	113.5	104.9	111.7	106.6	110.1	117.7	112.4
MDRI	106.9	98.9	100.1	97.2	109.9	110.4	105.7
Fixed exchange rate regime	103.3	107.5	102.9	110.0	117.5	119.7	126.1
Floating exchange rate regime	99.7	98.2	103.3	114.0	129.0	137.1	159.6

Sources: IMF, African Department database, March 31, 2008; and World Economic Outlook (WEO) database, March 31, 2008.

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Table SA25. Reserves (Months of imports of goods and services)							
	1997–2002	2003	2004	2005	2006	2007	2008
Oil-exporting countries	3.8	2.3	4.8	6.5	9.0	9.1	11.4
Excluding Nigeria	1.0	1.2	1.9	3.0	5.3	5.4	6.6
Angola	1.2	0.9	1.6	2.5	6.0	6.3	6.8
Cameroon	0.9	2.4	2.5	2.6	4.2	5.5	6.0
Chad	2.4	1.3	1.0	1.0	2.3	3.2	3.9
Congo, Rep. of	0.7	0.2	0.7	2.8	4.0	3.1	7.0
Equatorial Guinea	0.3	1.3	3.9	7.0	8.6	7.5	8.4
Gabon	0.7	1.3	2.3	3.2	4.4	3.4	4.7
Nigeria	6.3	3.1	7.5	9.7	12.4	12.7	16.4
Middle-income countries	3.9	3.3	3.6	4.0	4.1	4.6	4.4
Excluding South Africa	9.7	8.5	7.3	7.1	8.4	9.2	9.3
Botswana	30.7	23.0	18.6	21.3	27.7	28.0	26.8
Cape Verde	1.2	2.0	2.6	3.2	3.8	4.0	4.0
Lesotho	6.7	5.2	4.5	4.4	5.4	7.2	8.2
Mauritius	3.7	6.3	5.9	4.2	3.6	3.6	3.9
Namibia	1.9	2.0	1.6	1.4	1.8	2.8	2.7
Seychelles	0.9	1.4	0.6	0.8	1.4	0.7	0.8
South Africa	2.2	1.9	2.7	3.3	3.3	3.7	3.4
Swaziland	3.0	2.2	1.8	1.4	2.2	3.9	3.2
Low-income countries	3.6	5.3	5.0	4.0	4.0	4.0	3.6
Benin	7.6	9.1	7.1	7.9	10.4	9.3	8.8
Burkina Faso	5.3	9.7	6.5	3.8	4.4	6.4	5.7
Ethiopia	3.4	4.9	5.7	3.1	1.8	1.8	1.7
Ghana	1.5	4.1	3.7	3.2	3.1	2.1	1.9
Kenya	3.0	4.2	3.4	3.2	3.7	4.1	3.3
Madagascar	2.9	2.8	2.9	2.8	3.1	2.7	2.2
Malawi	3.4	1.7	1.5	1.4	1.2	1.9	2.1
Mali	5.1	7.8	6.4	5.5	5.6	5.6	5.5
Mozambique	5.6	5.2	5.7	4.4	4.1	4.3	4.3
Niger	1.9	4.6	3.7	2.9	4.1	4.8	4.0
Rwanda	5.2	5.6	7.2	7.3	6.7	7.3	5.4
Senegal	3.0	5.0	5.2	3.9	3.9	3.9	4.0
Tanzania	5.2	10.1	9.3	6.4	5.8	5.4	4.9
Uganda	6.9	7.8	8.4	6.9	7.6	8.3	7.3
Zambia	1.8	1.7	1.7	2.6	2.7	3.0	3.1
Fragile countries	3.0	2.9	3.1	2.1	2.6	2.3	2.2
Including Zimbabwe	2.4	2.4	2.6	1.9	2.3	2.2	...
Burundi	4.9	4.9	3.5	3.8	3.6	3.8	3.7
Central African Republic	7.0	7.8	7.2	5.8	4.7	2.2	1.7
Comoros	8.1	11.2	10.8	7.8	7.3	9.6	8.2
Congo, Dem. Rep. of	1.2	1.1	1.4	0.7	0.7	0.6	0.5
Cote d'Ivoire	3.0	3.3	3.3	2.2	3.0	2.9	3.0
Eritrea	1.4	0.5	0.9	-0.9	-1.8	-2.2	-2.2
Gambia, The	5.9	3.6	3.6	3.8	4.7	4.2	4.1
Guinea	2.7	1.9	1.4	1.6	1.5	1.3	1.5
Guinea-Bissau	6.5	3.8	6.9	6.6	5.8	6.8	7.1
Liberia	...	0.2	0.3	0.3	0.6	0.6	0.7
São Tomé and Príncipe	3.8	5.7	4.1	4.9	3.9	4.7	6.3
Sierra Leone	3.0	2.0	4.1	4.5	4.8	5.3	4.0
Togo	2.5	2.6	4.0	1.9	3.3	3.4	2.8
Zimbabwe	0.8	0.5	0.5	0.6	0.7	1.2	...
Sub-Saharan Africa	3.7	3.3	4.2	4.7	5.6	5.8	6.4
Including Zimbabwe	3.7	3.3	4.2	4.6	5.5	5.8	...
Excluding Nigeria and South Africa	4.0	4.3	4.2	3.9	4.8	4.9	5.1
Oil-importing countries	3.7	3.9	4.0	3.8	3.9	4.2	3.9
Excluding South Africa	5.0	5.6	5.1	4.3	4.6	4.7	4.4
CFA franc zone	2.4	3.4	3.5	3.4	4.5	4.5	5.2
WAEMU	3.6	5.1	4.7	3.4	4.1	4.3	4.1
CEMAC	1.1	1.5	2.3	3.5	4.8	4.6	6.2
EAC-5	4.5	6.5	6.1	4.9	5.1	5.4	4.6
SADC	3.6	3.2	3.5	3.7	4.2	4.6	4.5
SACU	4.0	3.1	3.5	4.0	4.2	4.7	4.4
COMESA	2.7	3.0	3.1	2.8	3.9	4.3	4.3
Resource-intensive countries	5.1	3.3	5.2	6.4	8.7	8.8	10.7
Oil	3.8	2.3	4.8	6.5	9.0	9.1	11.4
Non-oil	8.7	7.0	6.2	6.0	7.3	7.7	7.7
Non-resource-intensive countries	2.9	3.4	3.6	3.5	3.5	3.7	3.4
Coastal	2.6	3.0	3.4	3.5	3.5	3.7	3.4
Landlocked	4.3	5.0	4.6	3.4	3.4	3.9	3.5
MDRI	3.5	5.1	4.9	4.0	4.1	4.1	3.9
Fixed exchange rate regime	5.3	5.0	4.7	4.6	5.7	6.0	6.6
Floating exchange rate regime	3.3	2.8	4.1	4.7	5.5	5.8	6.4

Sources: IMF, African Department database, March 31, 2008; and World Economic Outlook (WEO) database, March 31, 2008.

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