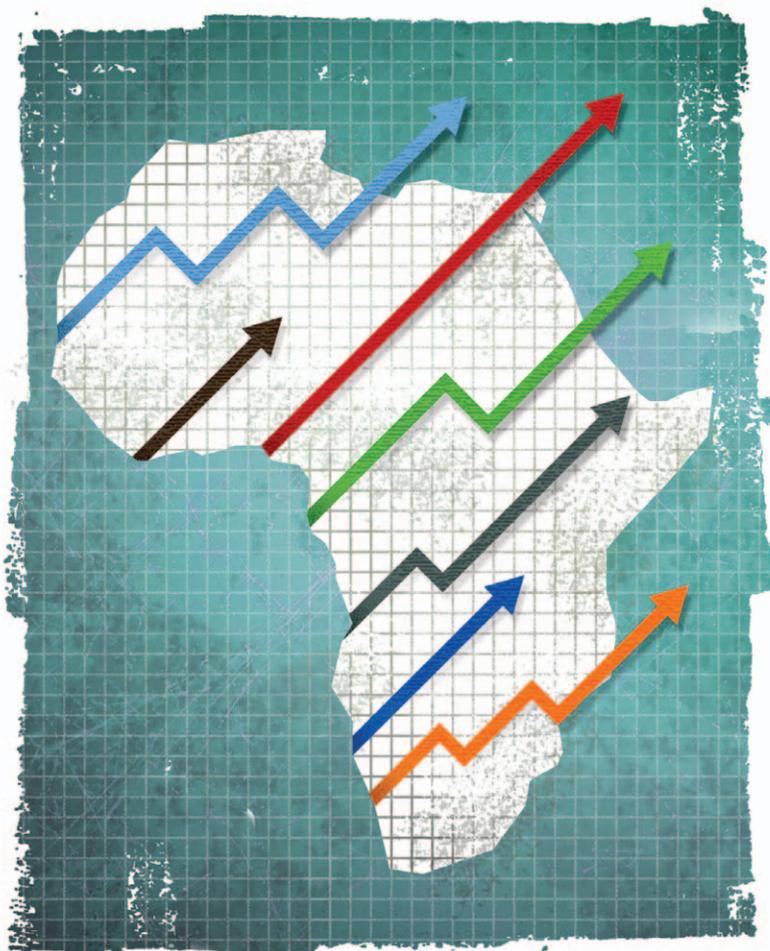


# Africa's Pulse

*An analysis of issues shaping Africa's economic future*



- ▶ After holding steady in 2011, Sub-Saharan Africa's economic growth is poised for acceleration
- ▶ Global uncertainties continue to pose downside risks to prospects
- ▶ Fuel subsidies impose a large fiscal burden, and disproportionately benefit the rich

**AFRICA'S PULSE TEAM:**

**Shanta Devarajan** (Africa Chief Economist),  
**Punam Chuhan-Pole** (Team Leader),  
**Hanane Ahmed**, **Manka Angwafo**,  
**Mapi Buitano**, **Allen Dennis**,  
**Vijdan Korman** and **Xiao Ye**

With contributions from  
**Stephen D. Mink** and **Rose Mungai**



**THE WORLD BANK**

This document was produced by  
the Office of the Chief Economist  
for the Africa region



If someone had told you in 2007 that, over the next five years, the global economy would experience a doubling of food and fuel prices, a worldwide financial crisis, a massive recession with an anemic recovery, and continued turmoil in capital markets, you would have thought that the prospects for Africa—the world’s poorest continent—would be terrible. But as this issue of *Africa’s Pulse*, like its five predecessors, demonstrates, African economies continue to show resilience, with GDP growth this year poised to overtake pre-crisis levels. Some of the fastest-growing economies in the world are in Africa. A major reason, also documented in the *Pulse*, is that the economic policy framework continues to improve: the Country Policy and Institutional Assessment score for economic management in non-fragile African countries is now higher than that of other low-income countries.

Impressive as it is, this performance also points to the challenges facing the continent. Another reason for Africa’s recovery from the crisis is high commodity prices—reinforcing the region’s vulnerability to shocks in these prices. The famine in the Horn of Africa last year and the drought in the Sahel this year are cruel reminders that Africa, the continent that contributed the least to greenhouse gas emissions, is likely to be the most hurt by climate change. Furthermore, growth has not yet translated to productive employment, especially for the 70-80 percent of the labor force working in the informal sector. Finally, despite progress on macroeconomic policy, Africa is challenged by weak governance, reflected not only in the large number of fragile states, but in the difficulty of implementing pro-poor reforms, such as appropriately targeting subsidies and social spending, as shown in this issue of the *Pulse*.

But the palpable dynamism on the continent, itself fueled by economic growth, innovations in technology and the openness and spirit of Africa’s young people, makes me confident that together, we can meet these challenges. As the widely acknowledged and hard-won, decade-long macroeconomic stability proves, Africa can commit to and deliver on the structural reforms to remove the important constraints that remain, such as availability of land, skilled labor and physical infrastructure, access to finance, and quality of the business environment. To do so, whether in policy making, building institutions or choosing the right investments, we will need an evidence-based approach to economic decision-making. We started *Africa’s Pulse* so that policymakers and the public could have a regular review of that evidence, representing just a little of the rich menu of analytical work the Region offers to our clients. As I return to Nigeria, I look forward to seeing the *Pulse* continue to provide that objective view of the African economy. I also look forward to continuing to work with you on our common goal—an Africa that sustains economic growth, reduces poverty and joins the league of wealthy economic poles.

Obiageli K. Ezekwesili  
Vice-President, Africa Region

## Summary

- ▶ The global recovery remains weak and fragile, amid some signs of improvement.
- ▶ Sub-Saharan African countries are continuing to see steady growth, but global uncertainties weigh on the region's prospects and policy landscape.
- ▶ The World Bank's latest poverty estimates show that the number of people living in poverty in Africa has declined—a first for the region.
- ▶ Food insecurity looms large in several countries in the Sahel region of West Africa, as the sub-region is buffeted by drought, poor food accessibility, and population displacement due to conflict.
- ▶ In an environment of high fuel prices, fuel subsidies are imposing a large and unsustainable fiscal burden, while disproportionately benefiting the rich.

## Section I: Recent Trends and Prospects

- ▶ Risks of a worsening fiscal and debt crisis in Europe have receded, but underlying structural and balance-sheet problems remain.
- ▶ Despite a turbulent global economic environment in the second half of 2011, growth in Sub-Saharan Africa was nearly 5 percent.

### RECENT TRENDS IN THE GLOBAL ECONOMY

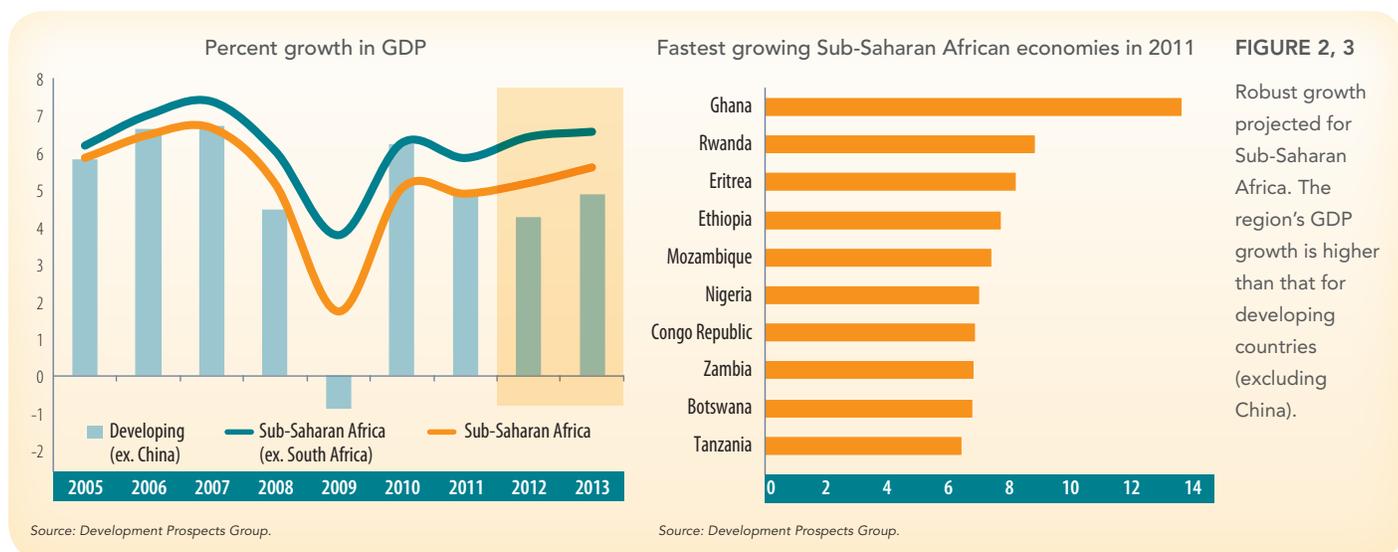
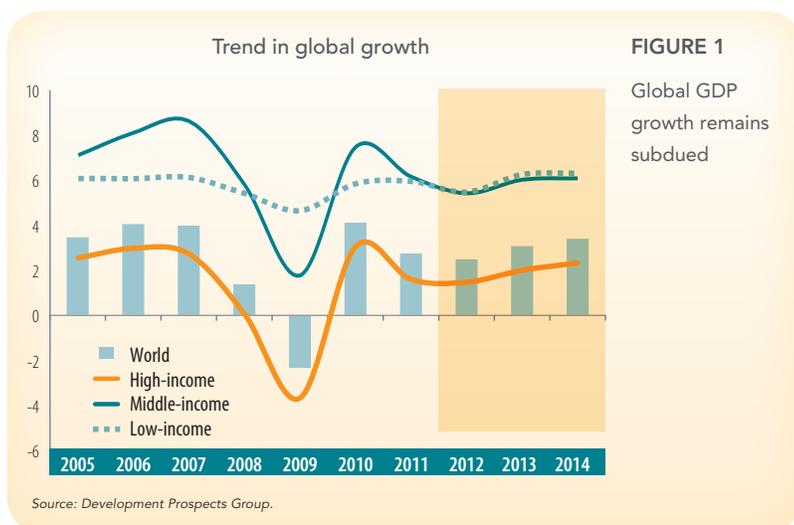
The intense pressures that gripped the global economy in the second half of 2011 have eased. A deepening of the fiscal crisis in Europe starting in July 2011 plunged financial markets into turmoil and generated significant headwinds for both developing and advanced economies. Europe entered a recession. Growth in Brazil, India, and to a lesser extent Russia, South Africa and Turkey slowed, partly in reaction to domestic policy tightening. As a result, and despite strengthening activity in the United States in the fourth quarter, global growth and world trade slowed sharply. Along with heightened risk aversion, there was a risk of a freezing up of capital markets and a severe crisis in high-income countries that could plunge the global economy into a recession similar to the Lehman crisis of 2008/9, affecting developing countries deeply.

Developments in the first few months of 2012 suggest that this downside risk has been avoided and its likelihood appears to have diminished. Conditions in financial markets have eased significantly, reversing the trends seen in the second half of 2011. While banking-sector de-leveraging in high-income Europe continues, the process has so far been relatively orderly, partly because ECB liquidity provisioning has boosted bank profitability and facilitated balance-sheet adjustment. On the real-side of the economy, although high-income Europe appears to have re-entered a recession, activity elsewhere appears to be gaining strength. Despite the headwinds emanating from increased risk aversion and weak European imports, global industrial production accelerated toward the end of 2011 and was growing at a 8.3 and 2.4 percent annualized pace in developing and high-income countries outside Europe respectively. Trade too appears to be picking up, with the pace of deceleration slowing to an annualized rate of 1.4 percent (volumes, 3m/3m) in the three months ending in December from a deceleration of 4.9 percent in the previous month.

Global GDP is expected to come in at a relatively weak 2.5 percent in 2012, with growth of 5.4 and 1.4 percent for developing and high-income countries—driven mostly by strengthening recovery in the US. Although there are signs of strengthening outside Europe, considerable downside risks could derail the global recovery: for example a sharper than anticipated deterioration in conditions in Europe or rising geo-political tensions related to Iran and concerns regarding oil supply.

## SUB-SAHARAN AFRICA: RECENT DEVELOPMENTS AND PROSPECTS

Amid a turbulent global economic environment, growth in Sub-Saharan Africa remained robust in 2011, steadying at 4.9 percent for the year—just shy of the pre-crisis average of 5 percent. Excluding South Africa, which accounts for over a third of the region's GDP, growth in the rest of Sub-Saharan Africa was 5.9 percent, making it one of the fastest growing developing regions. Over a third of countries in the region attained growth rates of at least 6 percent, with another forty percent growing between 4 - 6 percent. Among fast-growing economies in 2011 were resource-rich countries such as Ghana, Mozambique, and Nigeria, as well as non-resource-rich economies such as Rwanda and Ethiopia, all attaining growth rates of at least 7 percent in 2011.

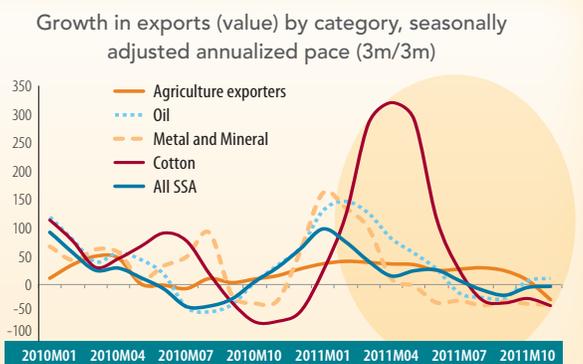


Although up for the year, the region's merchandise trade flows faced two contrasting periods in 2011. Export volumes from Sub-Saharan Africa increased by some 10.6 percent in 2011, supported by high commodity prices, increased investments in the natural resource sector, and strong demand from large emerging markets that are becoming important trading partners for the region. However, developments in 2011 were marked by two distinct phases. In the first half of the year, exports grew by double digits, benefiting from the momentum of the global economy. Indeed, unlike other regions which saw exports temporarily hit by the disruptions to supply chains from Japan's Tsunami, Sub-Saharan African exports generally gained momentum in the first half of the year, reflecting the region's weak integration with Japanese supply chains (excluding South Africa's automotive industry).

With the global economy slowing in the second half of 2011 due to heightened uncertainty in financial markets, escalation of the Euro zone debt crisis and policy tightening in some large developing countries, Sub-Saharan African exports suffered, decelerating through November (latest data). The deceleration was broad-based, cutting across all categories of the region's exporters. Reflecting the sharp deceleration in global industrial production during the latter months of 2011, metal and mineral exporters (e.g. Zambia, Niger, Mozambique) and cotton exporters (e.g. Benin and Burkina Faso) were among the hardest hit, with export values falling at a seasonally adjusted annualized pace of 35.4 percent and 37 percent.<sup>1</sup> (3m/3m, saar) respectively in the three months ending in November 2011. Though non-industrial agricultural exporters also suffered declines, these were relatively modest compared to other exporting sectors, reflecting the lower income elasticity of food products.

**FIGURE 4**

The sharp deceleration in world trade in the second half of 2011 impacted African exports



Source: Development Prospects Group.

The pace of deceleration of trade values, as with other regions, appears to have bottomed out by November 2011; Sub-Saharan trade values were decelerating at 3.1 percent compared to the peak deceleration of 19.5 percent in September. Indeed, thanks to the firming up of oil prices towards the end of 2011, export values for the oil exporters had once again begun expanding by the end of the year. Though the latest 2012 data are not yet available, given the recent strengthening of other commodity prices in 2012, export values for both agriculture and metal and mineral exporters may already have started expanding by early 2012.

The weakening global economy in the second half of 2011 affected tourism arrivals. For the year, tourism arrivals in Sub-Saharan Africa were up by 6.2 percent, higher than the global average of 4.4 percent, but lower than the 9.6 percent recorded for the region in 2010, when it benefited from hosting of the World cup. Tourism arrivals from Europe saw a decline in major destination markets such as Mauritius.

Notwithstanding the increased global financial market volatility, risk aversion and massive equity market sell-offs that characterized the latter half of 2011, overall capital flows to Sub-Saharan Africa rose by \$8 billion in 2011 to \$48.2 billion. Foreign direct investment, which accounts for about 77 percent of all capital flows to the region, contributed to about 83 percent of the increase. Recent foreign direct investment to the region has been spurred by increased global competition for natural resources (for example, net FDI inflows to Zambia increased by 31.2 percent from US\$0.63 billion in 2010 to US\$0.83 billion in 2011),

improvements in the region's regulatory environment, higher commodity prices, robust economic growth and a fast rising middle class. The region is increasingly being recognized as an investment destination, including from private equity investors (box 1).

**BOX 1**

Recent private equity activity in Sub-Saharan Africa

In 2011, the London-based Helios Investment Partners announced that it had succeeded in raising \$900 million (the fund was oversubscribed by a \$1 billion) for its Africa dedicated fund. This followed the ECP Africa Fund, which raised \$613 million for an Africa focused fund in 2010. Several other Africa dedicated funds continue to be launched, including from the Carlyle Group--the second largest private equity fund in the world--which plans on raising a reported \$750 million fund.

Further evidence of increased private equity investment in the region is the 21.9 percent increase in cross-border mergers and acquisitions for the first nine months of 2011, according to estimates from UNCTAD. Significant transactions in 2011 included the \$2.4 billion purchase of the South African retail giant Massmart (which has operations in over a dozen countries in the region) by Walmart -- the world's largest retailer.

Source: Global Economic Prospects (2012), Annex on Sub-Saharan Africa.

Excluding foreign direct investment, net capital flows to Sub-Saharan Africa suffered the same declines that were observed elsewhere among developing countries. Net portfolio equity flows to Sub-Saharan Africa, which are short-term in nature and thus more susceptible to market sentiments, fell by about 50 percent (from \$8 billion to \$3.9 billion) in 2011. The decline in short-term instruments (stocks and local currency bonds) was limited to the deeper financial markets in the region, most importantly South Africa, but also, Kenya, Mauritius, and Nigeria.

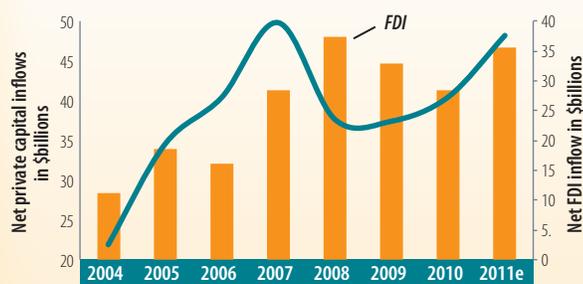
With fiscal consolidation and a growth slowdown in advanced countries beginning to squeeze aid budgets, official development assistance to Africa is being impacted. The latest DAC data show that net ODA flows to developing countries fell by 2.7 percent in real terms (2010 prices and exchange rates) in 2011, the first such drop in ODA since 1997; in nominal terms net ODA was \$128.5 billion in 2010 and \$133.5 billion in 2011. Nearly two-thirds (15) of the 23 DAC donors saw lower ODA disbursements; non-DAC donors bucked this trend and contributed larger amounts in aid. At \$28 billion, bilateral aid to Sub-Saharan Africa slipped by 0.9 percent in real terms in 2011. The decline in ODA is of particular concern to countries that rely heavily on aid or receive a large portion of their aid from countries with shrinking aid budgets: twenty one low and middle income countries in the region had net ODA receipts larger than 10 percent of GNI, with the share being above 20 percent in eight of these countries.

Accounting for some 60 percent of GDP in Sub-Saharan Africa, consumer demand is an important driver of growth in the region. Using monthly passenger car import data as a proxy for the strength of consumer durable goods spending, we observe that import demand of durable consumer goods expanded for each quarter (y/y) in 2011. The strength of consumer demand was mixed across countries. But the weakness observed in a number of countries appeared to have more to do with domestic developments rather than a spillover from the external environment. Rising and double-digit inflation levels in Kenya, Malawi, Tanzania, and Uganda cut real incomes there and reduced spending on durable consumer goods. Significant policy tightening in these economies also contributed to the squeeze in consumer (as well as business) spending. Elsewhere, a fiscal crisis in Swaziland and political uncertainty in the Comoros contributed to lower spending by consumers on durable goods. However, for the majority of economies in the region, spending on durable consumer goods appeared to have been buoyed by robust growth, easing inflationary pressures, and rising remittance inflows.

## POLICY SPACE

Inflation pressures have abated from the highs in 2011, but inflation remains above 2010 levels. Rising food and fuel prices contributed to overall inflation in 2011, while in several countries accommodative monetary policy facilitated second-round effects. Monetary financing of the government deficit, for example in Ethiopia and Uganda, fueled inflation as

Private capital flows to Sub-Saharan Africa, 2004-11



Source: Development Prospects Group.

FIGURE 5

Led by FDI, private capital flows to Sub-Saharan Africa rebounded to near pre-crisis peak, despite perturbations in the global economy

ODA/GNI (%), 2010

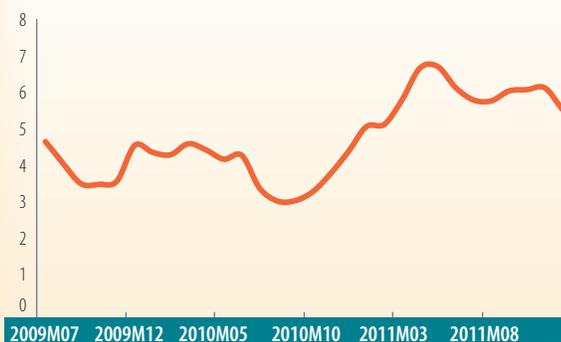
	> 20%	> 10%
Liberia	177	Rwanda 19
Burundi	40	Gambia 16
Congo, Dem. Rep.	28	Guinea-Bissau 16
Sierra Leone	25	Congo, Rep. 15
Sao Tome & Principe	25	Togo 15
Cape Verde	21	Niger 14
Mozambique	21	Central African Rep. 13
Malawi	21	Tanzania 13
		Comoros 13
		Mali 12
		Burkina Faso 12
		Ethiopia 12
		Zimbabwe 11

Source: OECD-DAC

TABLE 1

Over 40 percent of African countries receive ODA flows larger than 10 percent of GNI

Evolution of inflation in Sub-Saharan Africa



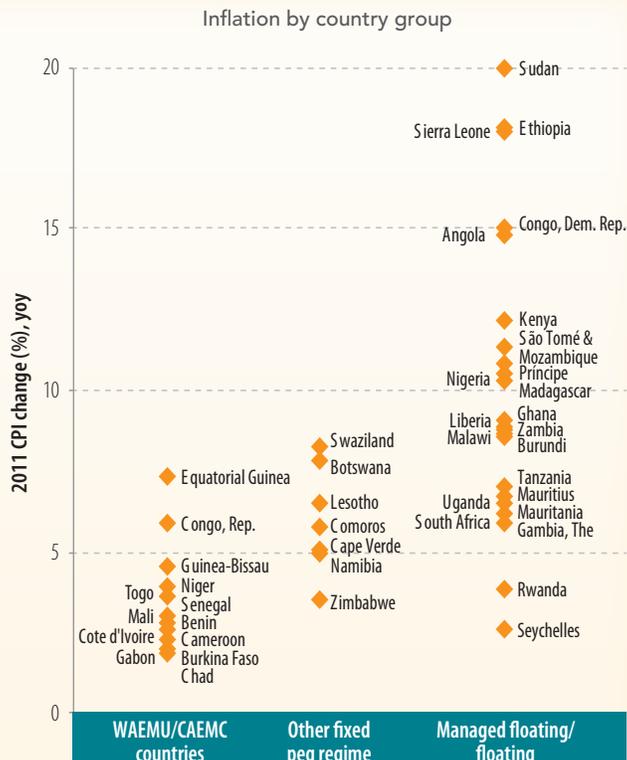
Source: Development Prospects Group.

FIGURE 6

After accelerating in the first half of 2011, inflationary pressures declined towards the end of 2011

**FIGURE 7**

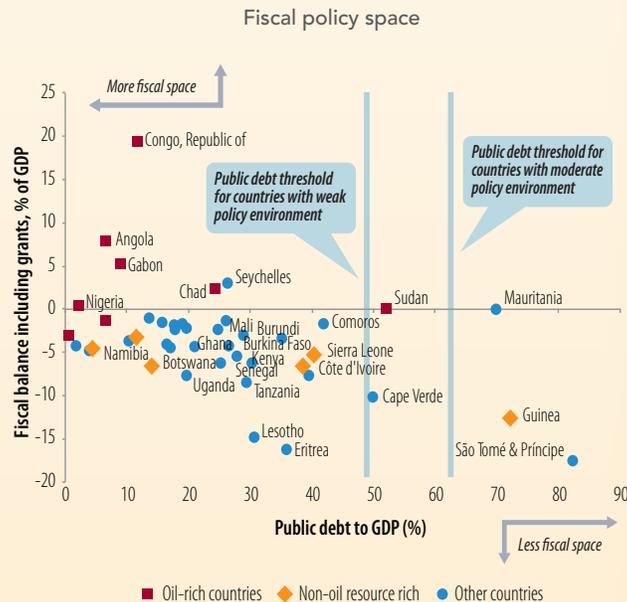
Inflation in countries with fixed exchange rate arrangements was generally lower and less variable than in countries with flexible exchange rates.



Source: IMF WEO database and staff calculation. The classification is based on IMF 2004 classification "Classification of Exchange Rate Arrangement and Monetary Policy Frameworks".

**FIGURE 8**

Countries with large fiscal deficits and high debt burdens will have less policy space to adopt expansionary policies



Source: IMF WEO database (Public debt to GDP), Regional WEO October 2011 (fiscal balance), and staff calculation.

well. Expansionary monetary policy put pressure on exchange rates, and some countries saw a weakening of their nominal exchange rates. Not surprisingly, inflation in countries with fixed exchange rate arrangements was generally lower and less variable than in countries with flexible exchange rates. Monetary policy has since been tightened in countries that saw a sharp uptick in core inflation, and the region is seeing a downward trend in inflation.

Lower inflation means that countries will be better positioned to ease monetary policy (through interest rate policy, credit conditions) in the event of an adverse shock. The available policy space will also depend on external imbalances. Countries with large current account deficits will find it harder to cut interest rates if global financial conditions tighten. The median current account balance of African countries was -7.5 percent of GDP in 2011. While elevated oil prices have helped to strengthen the current account balances of oil exporting countries, deficits have widened in nearly half of the non-oil countries. Overall, 10 countries have deficits equivalent to 15 percent of GDP or higher (including Lesotho, Liberia, Guinea, Niger, Sao Tome and Principe, Seychelles and Sierra Leone).

Flexibility of fiscal policy to effectively respond to an adverse shock will depend on the size of the fiscal balance and of the public debt burden. Countries with large fiscal deficits and high debt burdens will have less policy space to adopt expansionary policies. The median fiscal deficit, including grants, for Sub-Saharan African countries was an estimated 3.8 percent of GDP in 2011. Excluding grants, the deficit is three percentage points wider at 6.8 percent of GDP. Well over half of the countries in the region have seen a

deterioration of their fiscal balance since 2008. A large number of countries have also seen an increase in the public debt-to-GDP ratio since 2008. Nevertheless, debt burdens remain moderate and manageable, thanks to substantial debt relief received under the HIPC and MDRI initiatives.

## DECLINING POVERTY

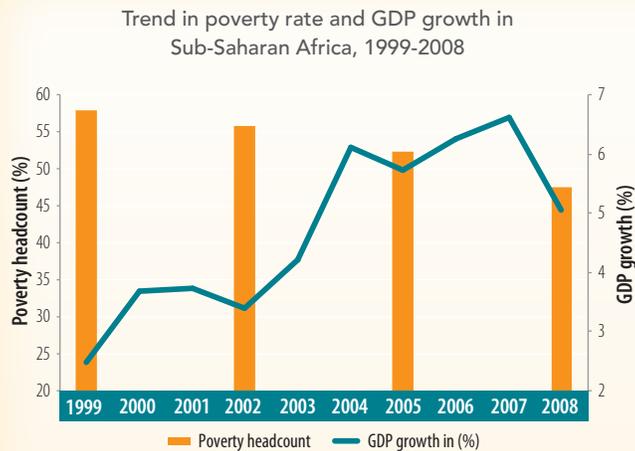
Africa is making progress on reducing poverty. The World Bank's latest estimates of poverty show that the region's \$1.25 a day poverty rate has fallen from 58.1 percent in 1999 to 47.5 percent in 2008, a 10.6 percentage point decline. The decline in poverty accelerated in 2005-08, with 9 million fewer people living below \$1.25 a day—the first such recorded decline in the number of poor. Although progress on reducing poverty has been uneven, 34 countries saw a lowering of their income poverty rate between 1999 and 2008. Countries with the largest percentage point decline in poverty are: Cameroon, Chad, Ethiopia, Mali, Niger and Sierra Leone.<sup>2</sup> Not all countries saw an improvement in poverty reduction: Seven countries had higher poverty rates in 2008 compared to 1999; five are fragile states. An analysis of economic performance among African countries over 1999-2008 shows that the countries with higher GDP per capita growth and better policies and institutions enjoyed a more rapid decline in poverty than countries, including fast growing ones, with weak policy environment (*Africa's Pulse* Volume 2).

The quick rebound in economic growth in African countries following the global financial crisis of 2008-09 and a commitment to sensible economic policies, hold the promise of a continued decline in poverty.

## OUTLOOK FOR SUB-SAHARAN AFRICA

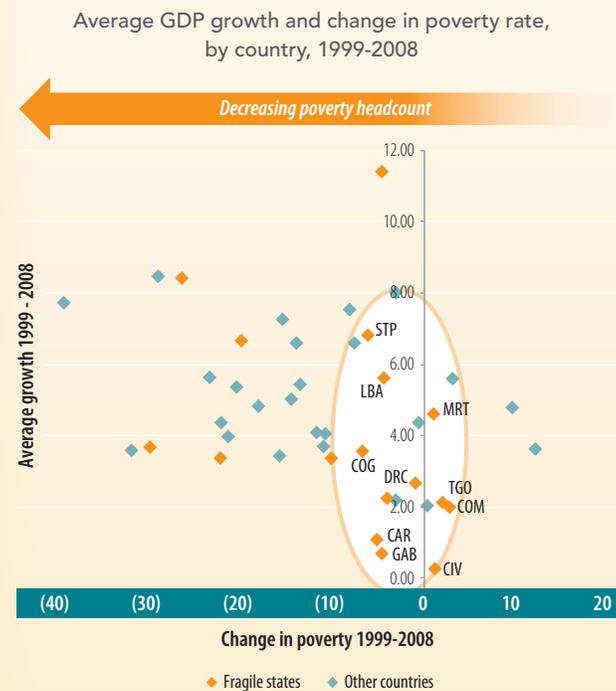
Looking forward, though weak demand from Europe will impact the region's exports, the increasing diversification of trading partners should help cushion the effects of a slowdown in Europe. Further, easing inflationary pressures in several countries, still high commodity prices, ongoing investments in new mineral discoveries, and the peace dividend in Côte d'Ivoire should underpin an acceleration in GDP. Growth is projected to rise to 5.2 percent in 2012, with a pick up to 5.6 percent in 2013 as the global economy rebounds. Excluding South Africa, growth is expected to reach 6.4 percent in 2012 before settling at 6.6 percent in 2013.

Risks to these forecasts remain tilted on the downside, as the global economy still remains fragile even though there are signs of strengthening outside of Europe. Although financial conditions are improved relative to Q4



**FIGURE 9**  
Higher GDP growth is reducing poverty levels; between 2005-08 the number of poor declined by 9 million.

Source: World Development Indicators and staff estimates



**FIGURE 10**  
Despite growth a majority of fragile states are unable to reduce poverty head-count

Source: World Development Indicators and African Development Indicators, World Bank

<sup>1</sup> The percent decline over this period was: Cameroon (76.3 percent), Ethiopia (71 percent), Gabon (64.9 percent), (Cape Verde (56.9 percent) and Botswana (54.9 percent)

2011, markets remain nervous and sentiment is vulnerable to bad news. Should conditions in Europe deteriorate beyond what is envisaged in the baseline Euro Area forecast (-0.2 percent), growth in Sub-Saharan could be further curtailed. If there is a credit squeeze in some of the periphery Euro Area economies, the GDP growth rate in Sub-Saharan Africa could fall by 1.8 percentage points. The effects for individual Sub-Saharan Africa countries will, however, differ depending on their exposure to European markets and the composition of exports (*GEP 2012* and February 2012 issue of the *Pulse*).

A related risk to the slowing of the global economy is a fall in commodity prices. This is all the more likely given the projected slower growth forecasts for China. With commodities accounting for over 70 percent of merchandise exports, Sub-Saharan Africa remains vulnerable to declines in commodity prices. World Bank simulations suggest that if commodity prices were to fall as they did in the 2008/09 crisis, fiscal balances in Sub-Saharan Africa could deteriorate by as much as 4 percentage points, with oil and metal exporters being worst affected. With the deterioration in fiscal positions since 2008, African countries would have less fiscal space to respond to a slower global economy. However, for non-resource rich countries in the region, the terms of trade effects could turn in their favor, thereby improving their growth prospects as underlying inflationary pressures are contained and monetary policy stimulus becomes a credible option.

While external risks are most prominent, a number of domestic challenges could also cause outturns to sour. Disruptions to productive activity from political unrest are important downside risks, as investment, merchandise trade and tourism receipts—all important—growth drivers, are likely to suffer. The 6 percent contraction in output in Cote d'Ivoire in 2011 was due to the civil unrest there. Another downside risk stems from adverse weather conditions. With agriculture accounting for about 20-40 percent of GDP in most Sub-Sahara African countries, and much of it dependent on good rains, the impact of drought on GDP growth in the region can be significant, not just to the agricultural sector but also for services and industries that depend on the generation of power from hydroelectric sources. Already in 2012, poor rains are forecast for the eastern Horn of Africa as well as the Sahelian zone .

## FOOD INSECURITY: A CONTINUING SOURCE OF VULNERABILITY

The Sahel region of West Africa is facing a severe food security situation. Less-than-average rainfall, poor distribution, and population displacement due to conflict have left more than 13-15 million people across Niger, Mali, Burkina Faso, Chad and Mauritania vulnerable. Recent FAO estimates indicate that the percentage of people at risk of hunger ranges from 10

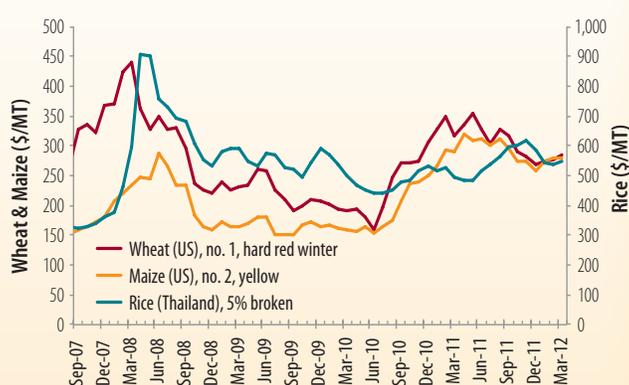
to almost 35 percent of the populations of these countries (FAO, March 2012).

Below average, irregular rainfall patterns in 2011 led to a low grain harvest for the 2011/2012 season, and a deficit in grain production across the Sahel, in particular in Mauritania, Chad, Niger and the Gambia, as well as stress on livestock herds in pastoral areas. Total grain production in the Sahel is at least 25 percent below production from the previous season (2010/2011), with Chad and Mauritania recording decreases of at least 50 percent in production levels compared to last year. There are concerns the food crisis could spread to

**FIGURE 11**

**World price of food**

Food prices are rising again, but remain below 2011 peak levels



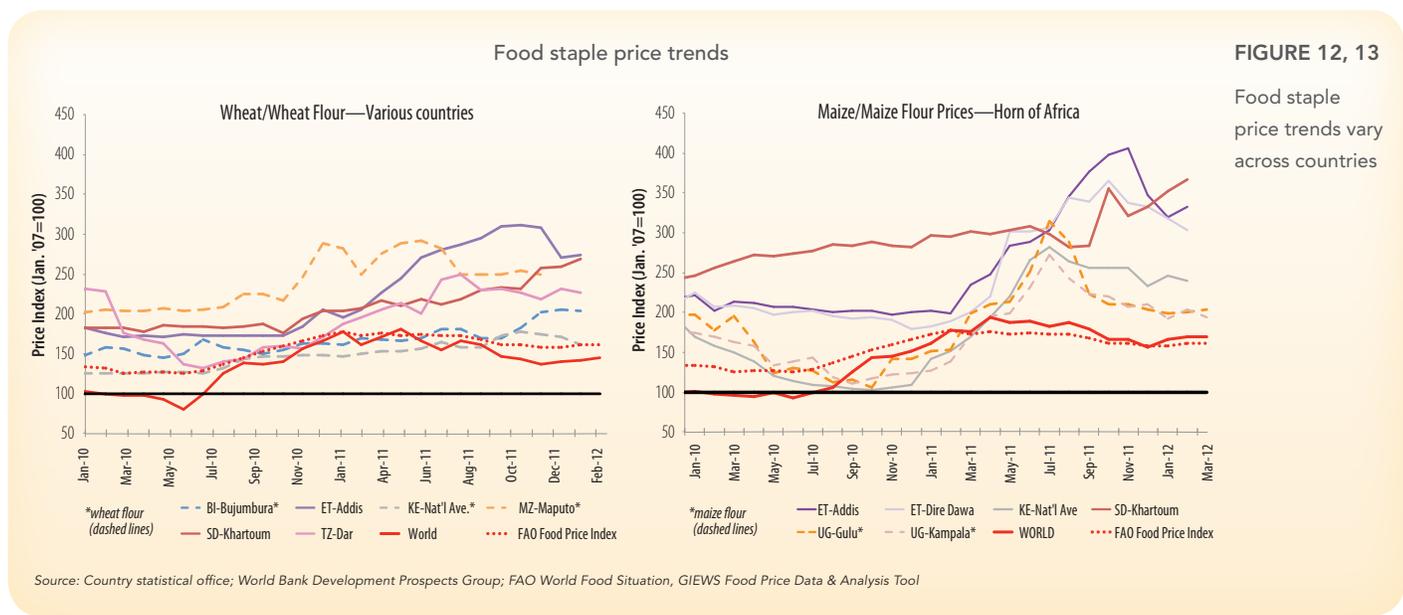
Source: World Bank Development Prospects Group

Senegal and northern parts of Nigeria and Cameroon. This zone typically sees decreasing grain prices at this time of year following the harvest, but prices have continued to rise in some areas, particularly for locally-produced grains.

Production shortages are intensified by high international prices. The world price of grains—maize, wheat, rice—has trended up in the first quarter of this year, although wheat and maize remain below March 2011 levels. West Africa is particularly vulnerable to higher cereal prices as the region is highly dependent on rice imports for consumption.

Further, the return of immigrants from North Africa and the reduction of remittances from migrant workers in North Africa have deepened the effects of the crisis. The current conflict in Mali has forced thousands to flee from their homes to southern Mali as well as to neighboring countries such as Burkina Faso and Mauritania, putting pressure on food markets and increasing the strain on already vulnerable communities.

While the countries in the Sahel are experiencing depressed production levels, their neighbors in the Gulf of Guinea have excess production for this season. It is estimated that regional cereal availability is sufficient to meet the needs of the region as a whole, underscoring the importance of intra-regional trade.



In East Africa, new projections (FEWS NET) are for yet another poor rainy season (March-May) in the eastern Horn of Africa (as low as 60% of average)—not the average levels predicted as recently as late February. This could cause significant problems as many areas are still recovering from the drought in 2011. The food security situation in Sudan and South Sudan has significantly deteriorated following poor harvests and continued conflict. The price of food in Ethiopia remains high; after weakening some in December and January, the prices of varieties of teff were up 2-3%, maize was up 4.2% and lentils were up 6.2%. In Uganda, the overall food prices index rose by 1.2% during March 2012.

Prospects in Southern Africa remain positive, even through the lean season. The main season harvest is getting underway in some areas but is delayed in others due to poor rains. However, below-average yields in this season could lead to lower supplies during the next season.

**BOX 2**

Public food grain stocks: A food security measure in Sub-Saharan Africa?

Public food grain stocks as a food security measure have attracted renewed interest by both governments and development partners in the aftermath of the global food price crisis of 2007/2008. In Sub-Saharan Africa, the primary contribution of public stocks to improving food security has been through food reserves for emergency situations and for supporting safety-net programs. Careful design, implementation arrangements and a focus on results are key to success of emergency and safety net reserves.

Among food reserves that have been operating well is Ethiopia's *Emergency Food Security Reserve Administration* (EFSRA). EFSRA has benefited from having a clear objective, and the ability to maintain small reserves sufficient enough to meet required emergency cases, which is largely due to the use of precise and timely food security information. Small size keeps the fiscal burden of maintaining the emergency reserves low. In addition, the organizational structure of EFSRA has contributed to its flexibility in responding to emergency needs. Distribution of the reserves is done through registered NGOs or any government agency working in rehabilitation and relief activities. This type of collaboration minimizes the influence on market prices and ensures cost-efficient management of stocks. In 2005, Ethiopia included a safety nets component to the emergency goal of EFSRA.

Mali's integrated food security reserve system, *Programme pour la reconstruction du marche de cereals* (PRMC), has been able to function effectively in the context of private participation in markets. Mali's food safety net program has been extended to other countries such as Burkina Faso and Niger.

As in other developing regions, the use of public stocks for price stabilization (called buffer stocks) has been less successful in African countries. One reason is that food grain stocks are not suitable for addressing the underlying long-term structural reasons for price volatility in these countries. Moreover, public stocks tend to crowd out the private sector. Other reasons are: unclear and multiple objectives of public stocks usage and substantial and unsustainable fiscal burden of managing buffer stocks.

Source: World Bank, "Using Public Food Grain Stocks to Enhance Food Security," March 2012.

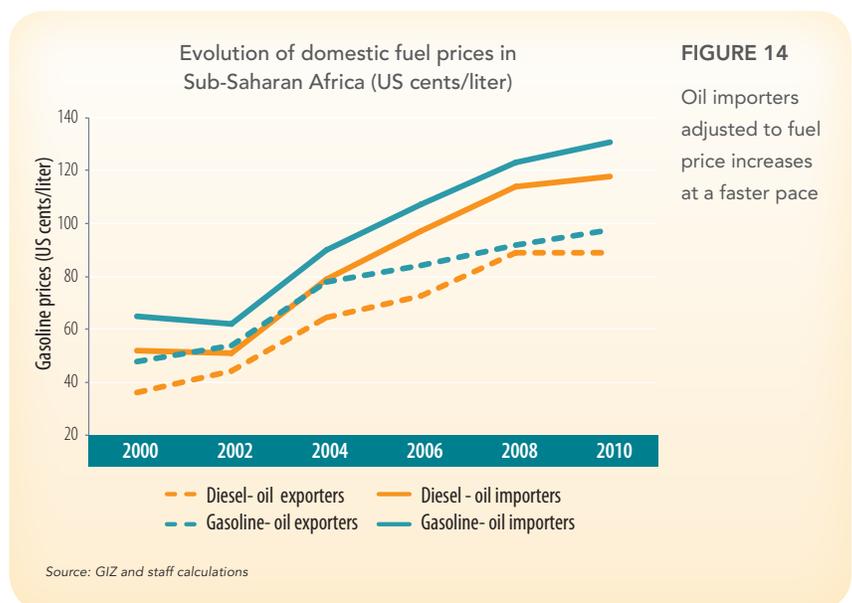
## Section II: Fuel Price Subsidies in Sub-Saharan Africa

- ▶ Over half of all African governments subsidize fuel to protect consumers, with oil exporters having the largest subsidies.
- ▶ At an average cost of 1.4 percent of GDP, fuel price subsidies impose a heavy fiscal burden and are likely not sustainable.
- ▶ Since these subsidies disproportionately benefit high-income households, they are a costly way to protect the poor.

Rising fuel prices impact people’s welfare directly—as households have to use more of their income on consuming energy products and hence less on other things—and indirectly—through higher prices of goods and services that use energy inputs. Reluctant to pass on the full cost of high and rising fuel prices to their citizens, governments often resort to pricing policies to limit the pass-through. Many African countries subsidize fuel price, mostly through price controls or reduction in fuel consumption taxes, to protect consumers from the high cost of fuel. But universal subsidies are an inefficient way to protect poor consumers, as most of the benefits of these subsidies accrue to high-income households.

### EVOLUTION OF FUEL PRICES IN SUB-SAHARAN AFRICA

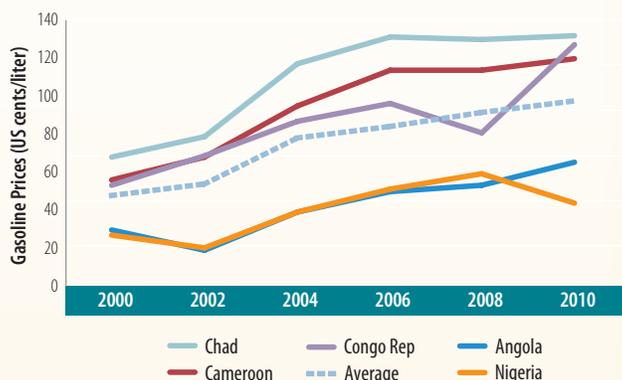
Local fuel prices in Africa have risen in recent years, reflecting the evolution in global energy prices. On average, gasoline and diesel prices in the region have doubled between 2002 and 2010 (Figure 1). Data for kerosene (2002-08) also reflect this trend (Coady et al. 2010). The pace of increase and levels vary by country. Non-oil rich countries have seen a sharper increase than oil-rich countries, particularly over the last few years. For gasoline, the average price in oil exporters in the most recent data year (GIZ database for 2010) was \$0.98 per liter compared to \$1.31 per liter in oil-importing countries. This differential appears to exceed the standard cost of transportation that oil exporters do not have to pay. Although even exporters, if they don’t have refinery capacity, have to pay transport costs. Overall, diesel prices are lower than gasoline, even though the world price of diesel and crude oil is the same. The greater subsidization of this fuel partly reflects governments’ concern for competitiveness, because diesel is used widely in public transportation and industry. The average retail price ratio of gasoline to diesel is around 1.1 for both oil importers and oil exporters. Kerosene prices are lower than both diesel and gasoline.



**FIGURE 15**

Retail fuel prices in African oil exporters (US cents/liter)

The pace of increase and level of fuel prices in oil-producing countries varies

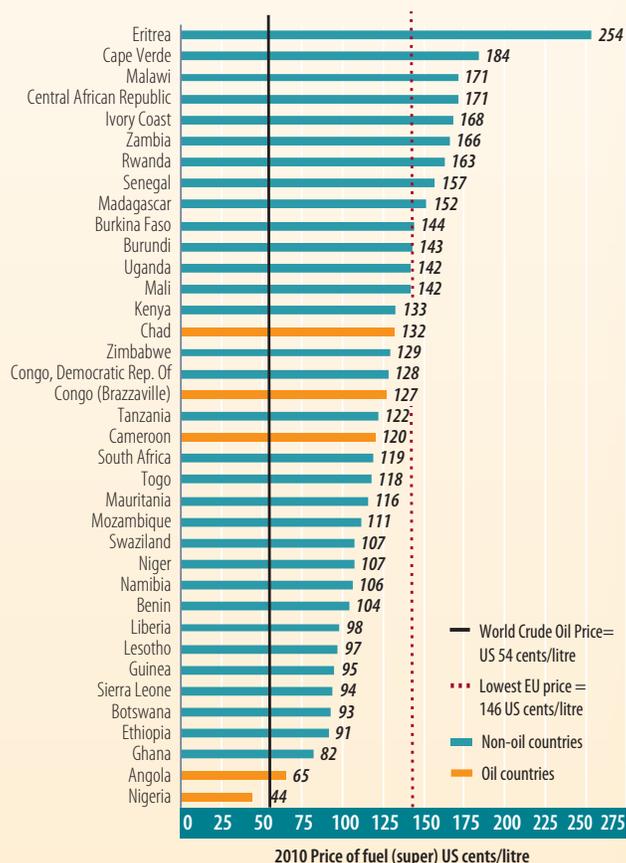


Source: GIZ and staff calculations

**FIGURE 16**

Domestic gasoline prices in 2010 (US cents/liter)

There is considerable dispersion in prices across countries, as countries subsidize fuel differently



Source: GIZ data and staff calculations  
Note: Price levels are in US cents/liter.

There is substantial dispersion in observed fuel prices (gasoline and diesel) across countries, particularly among oil exporters, suggesting considerable variation in fuel subsidies. For example, fuel prices in Chad and Cameroon were close to the international EU benchmark level in 2010, but fuel products in Angola and Nigeria (gasoline) were about half that level. The gasoline price of \$0.44 per liter in Nigeria was one-third of the price in Chad in 2010. The decline in the dollar price of gasoline in Nigeria was due to the fact that the domestic currency depreciated faster than the local Naira price. For diesel, Angola has the lowest price among African oil-producers at \$0.43 per liter, with Nigeria the next lowest at \$0.77 a liter.

For the period 2002-10, the increase in average domestic gasoline and diesel prices in African oil-importing countries, 75 and 72 cents, respectively, was on par with that of the European (lowest price) benchmark. The comparable price movement was considerably smaller in oil-exporting countries, especially in 2002-08, indicating that these countries are more likely to maintain fuel subsidies when global crude prices are high.

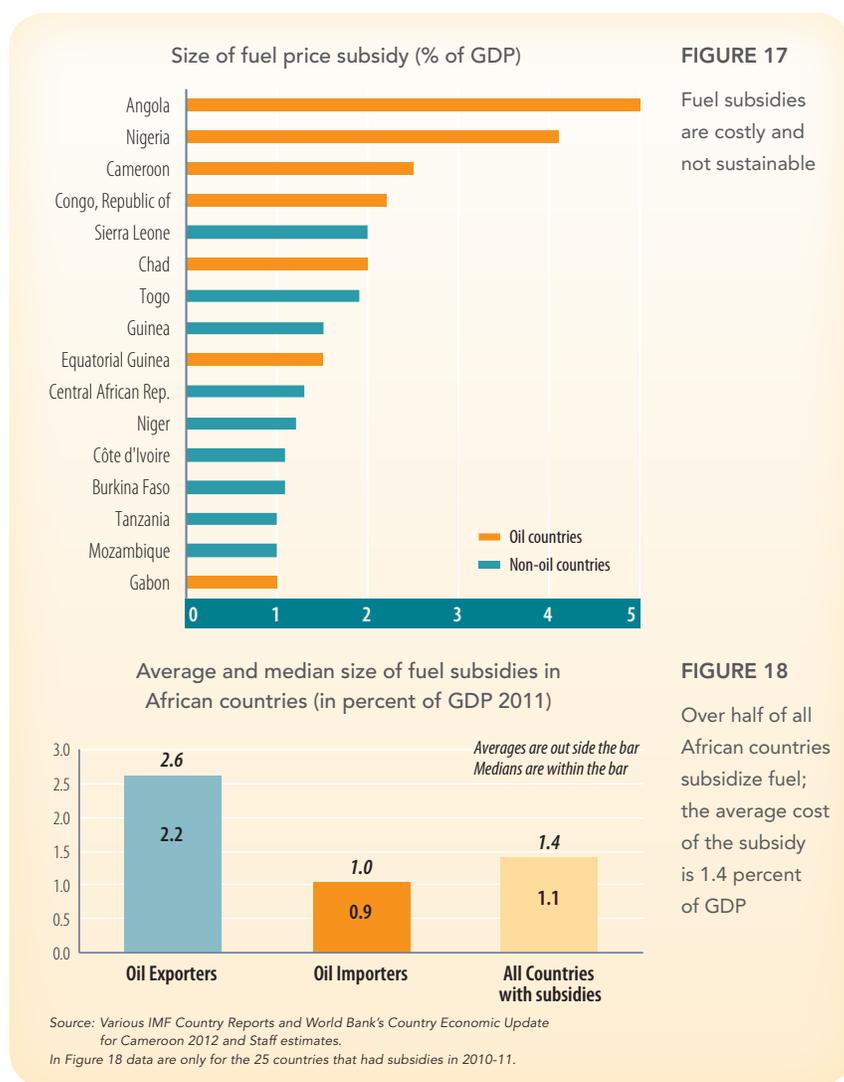
## SIZE OF FUEL SUBSIDIES IN SUB-SAHARAN AFRICA

In 2010-11, over half of all African countries had some subsidy in place for fuel products, and these subsidies consumed, on average, 1.4 percent of GDP in public resources. Of the 25 countries with fuel subsidies, the fiscal cost of subsidies in six countries—primarily oil exporters—was at or above 2 percent of GDP in 2011. The fiscal cost in oil exporters was almost two-and-a-half times the levels observed for oil importers. These costs have grown sharply in

some countries in recent years. In countries facing substantial fiscal deficits and rising public debt levels (see section I), the fiscal space to subsidize fuel costs is constrained. With oil prices likely to remain elevated, fuel subsidies will continue to weigh on government budgets.

As world oil prices remain high (and rising), a number of countries have raised domestic prices of fuel to stem fiscal costs. For example, Ghana raised fuel prices by about 30 percent in January 2011. As the world price of oil continued to grow since early 2011, fiscal costs reemerged in 2011. Similarly, Mozambique implemented a number of fuel price hikes in 2011 (10 percent in April and 8 percent in July) to bring prices to cost-recovery levels by early 2012, when the unrestricted application of the price-setting formula will allow full pass-through from changes in the world prices. Guinea also introduced measures to reduce the fuel subsidy.

Nigeria, the second largest economy in the region, also hiked gasoline prices to limit fuel subsidy costs. These costs had been rising in recent years and exceeded 4 percent of GDP in 2011 (about \$9 billion, or over 30 percent of the federal budget). Two key fuel products (gasoline and kerosene) are subsidized. Despite substantial increases in world prices of these two products, their regulated prices remained almost constant for many years. For example, gasoline is much cheaper in Nigeria (\$0.44 per liter) compared to neighboring countries: Benin (\$1.04), Niger (\$1.07), Cameroon



**FIGURE 17**  
Fuel subsidies are costly and not sustainable

**FIGURE 18**  
Over half of all African countries subsidize fuel; the average cost of the subsidy is 1.4 percent of GDP

The subsidy on fuel is measured as the sum of two components: pre-tax subsidy and tax subsidy. The pre-tax subsidy is the amount by which the opportunity cost of supplying fuel is greater than the domestic price (excluding any consumption taxes). Thus for oil importers it is the gap between the cost of importing oil, which includes cost of transportation to the border, plus the distribution and marketing costs and the domestic price pre-taxes. For oil exporters it is the foregone revenue from selling domestically instead of exporting. The tax subsidy represents a lower tax than the "optimal" fuel tax. The notion of optimal fuel tax will vary by country context and depends on the government's revenue requirement and the environmental externalities associated with fuel consumption. It is reasonable to assume that the optimal tax should be at least as large as the consumption tax in a country.

Not surprisingly, the size of subsidies varies with oil prices. Using this methodology, Coady et al. (2010) estimate that globally pre-tax subsidies amounted to nearly \$60 billion in 2003. These subsidies had ballooned to \$520 billion by mid-2008, as world prices rose rapidly between 2003 and mid-2008. Pre-tax subsidies dropped to a projected \$250 billion by end-2010, as oil prices pulled back in the second half of 2008. Oil-exporting countries accounted for over half of the pre-tax subsidies. Tax-inclusive subsidies in 2010 were estimated to be three times larger at \$740 billion, with advanced economies accounting for less than a fourth (23 percent) of these subsidies.

Source: David Coady, Robert Gillingham, Rolando Ossowski, John Piotrowski, Shamsuddin Tareq, and Justin Tyson, 2010, "Petroleum Subsidies: Costly, Inequitable, and Rising," IMF Staff Position Note.

**BOX 3**  
Measuring fuel subsidies

(\$1.2) and Chad (\$1.32 per liter). Large subsidies led to smuggling of fuel to neighboring countries. On January 1, 2012, the Nigerian government removed the subsidy on gasoline, more than doubling prices—from \$0.44 per liter to \$0.91. However, following week-long protests across the country, a portion of the gasoline subsidy was reinstated and the new regulated gasoline price was fixed at \$0.61 per liter.

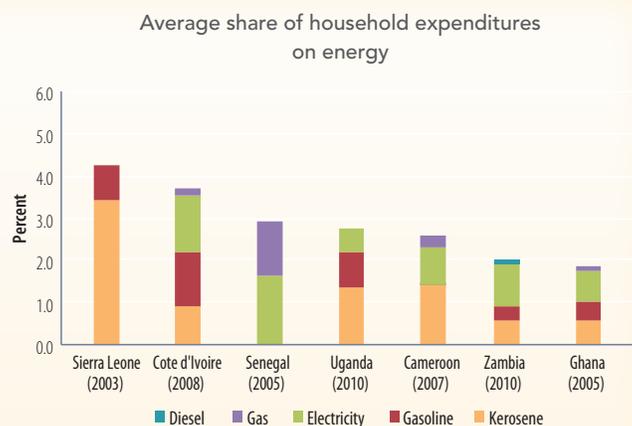
## WHO BENEFITS FROM FUEL SUBSIDIES?

Governments are often reluctant to pass on the full impact of fuel prices to consumers. One reason is that they wish to smooth the impact of volatile price movements on household real income and consumption and to limit disruption of production. But sustaining such a policy in the medium term has adverse fiscal and efficiency implications—i.e., it constrains fiscal policy space and supports an inefficiently high level of consumption of subsidized fuel by consumers and producers. Moreover, studies have shown that these subsidies overwhelmingly benefit higher income households. Results using household survey data for 12 countries across the world show that the top quintile receives about six times more in benefits (amount) than the bottom quintile (Granado et al. 2010).<sup>2</sup>

The distribution of fuel subsidies depend on the pattern of fuel consumption by households. Expenditure data from the Africa Region’s Survey-Based Harmonization Indicators Program (SHIP) for seven countries shows that the mean

**FIGURE 19**

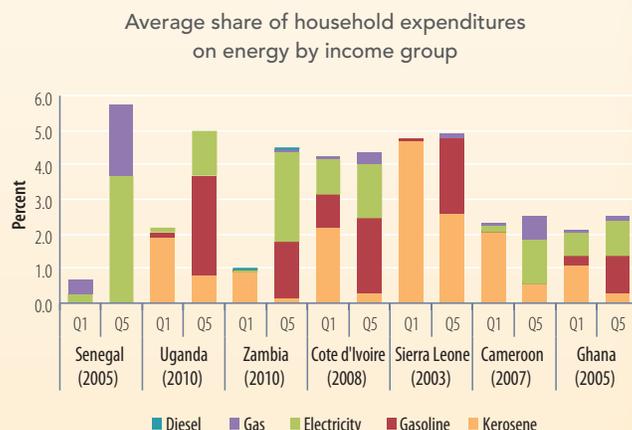
Typically, spending on kerosene and electricity make up the bulk of energy spending by households in Sub-Saharan Africa



Source: Preliminary estimates from Africa Region Survey-Based Harmonized Indicators Program (SHIP).

**FIGURE 20**

Poorer households have a higher share of spending on kerosene, while richer households have a higher share of expenditures on both electricity and gasoline



Source: Preliminary estimates from Africa Region Survey-Based Harmonized Indicators Program (SHIP).

share of total household direct expenditure on energy varies from around 1.9% (Ghana) to 4.2% (Sierra Leone). Typically, spending on kerosene and electricity make up the bulk of energy spending by households. Urban households spend a larger share of their income on energy than rural households: the share in urban areas ranges from 2.8% in Ghana to 5.9% in Senegal, while the comparable share in rural areas is between nearly 1% in Zambia and 4% in Sierra Leone.

Poorer households allocate a smaller share of their income to fuel products than richer households. Richer households also have better access to energy resources such as electricity. Not surprisingly, richer households have a higher mean share of expenditures on both electricity and gasoline than poorer households. By contrast, households in the bottom quintile (Q1) have a higher mean share of spending on kerosene than households in the top quintile (Q5).

From the size and share of household consumption patterns it follows that richer

2 The Unequal Benefits of Fuel Subsidies: A Review of Evidence for Developing Countries by Javier Arze del Granado, David Coady, and Robert Gillingham (IMF WP/10/202).

households spend a larger amount on fuel products and, consequently, benefit much more than poorer households from any universal subsidy on these products. Results from the SHIP data show that on average the top quintile receives over six times more in subsidy benefits than the bottom quintile, with considerable variation across countries and energy products. The potential distribution of gasoline subsidy benefits across the top and bottom quintile—i.e. the share of the total subsidy going to Q5 and Q1—ranges from 30% to 71% and 3% to 14%, respectively. On average, the top quintile receives nearly 12 times more in benefits than the bottom quintile. Likewise, the direct benefit of electricity subsidies largely accrues to richer households. However, because of the relatively high share of kerosene consumption by poor households, the concentration of kerosene subsidies in the hands of the rich is less pronounced. The distribution of a subsidy benefit on kerosene ranges from 12%–27% for households in the bottom quintile and from 15%–41% for the top quintile. Nevertheless, on average, the top quintile receives nearly 2 times more in benefits than the bottom quintile. In Cote d'Ivoire and Ghana the bottom quintile actually receives as much or more of the subsidy benefit than the top quintile. [The distribution of the subsidy is based on household spending on fuel or kerosene in each income quintile as a fraction of total spending on the respective energy product across all income quintiles.]

Although fuel price subsidies are not well-targeted to the poor, it is clear that a removal of these subsidies would impact household welfare both directly through the higher price of energy products and indirectly through higher cost of goods and services that use energy inputs. Results of simulating the short-term (assuming no substitution away from fuel) direct impact of a 20 percent increase in energy prices (using SHIP data) show that both rich and poor households would

Potential distribution of gasoline subsidy to households by income group, % of gasoline subsidy

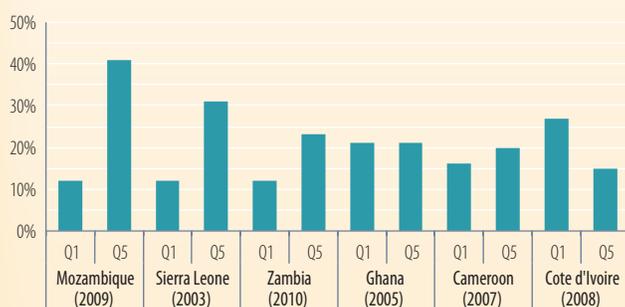


Source: Preliminary estimates from Africa Region Survey-Based Harmonized Indicators Program (SHIP) for all countries.

FIGURE 21, 22

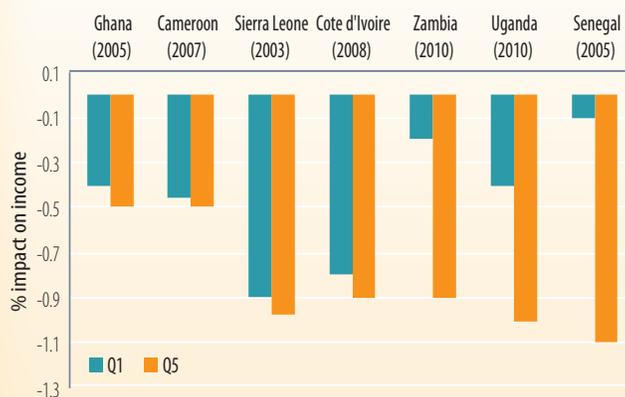
Richer households spend a larger amount on fuel products and, consequently, benefit much more than poorer households from price subsidies on these products

Potential distribution of kerosene subsidy to households by income group, % of kerosene subsidy



Source: Preliminary estimates from Africa Region Survey-Based Harmonized Indicators Program (SHIP).

Direct impact of a 20% increase in energy prices on income, by income group



Source: Preliminary estimates from Africa Region Survey-Based Harmonized Indicators Program (SHIP).

FIGURE 23

Rich and poor households would see a decline in consumption with a 20% increase in energy prices: 1% for the top quintile and 0.5% for the bottom quintile

see a substantial negative impact on consumption: a decline of nearly 1 percent for the top quintile and of 0.5 percent for the bottom quintile. Other studies estimate that the total impact—direct and indirect—of higher fuel prices as a percent of consumption is about the same across income quintiles (Granado et al. 2010): For nine African countries the average short-term direct and indirect welfare impact of a \$0.25 per liter increase in fuel price is estimated to be 2 percent and 3.8 percent of per capita consumption respectively. Unlike the rich, the poor have very limited capacity to offset the effects of the price shock on overall consumption by borrowing or drawing on savings.

While fiscal pressures, heightened by the ongoing rise in oil prices, are providing an impetus for reform, it is well recognized that rolling back fuel subsidies is a politically sensitive issue. Removing subsidies and raising prices needs to be well managed. For one thing, social assistance programs need to be strengthened so as to help poor and vulnerable households weather the price shock. Another is to increase public understanding and support for subsidy reform by having a transparent and evidence-based discussion and scrutiny of subsidies: the full cost of the subsidy, the distribution of the subsidy and who is benefiting from the subsidy, and the implications for public spending on priority areas.



