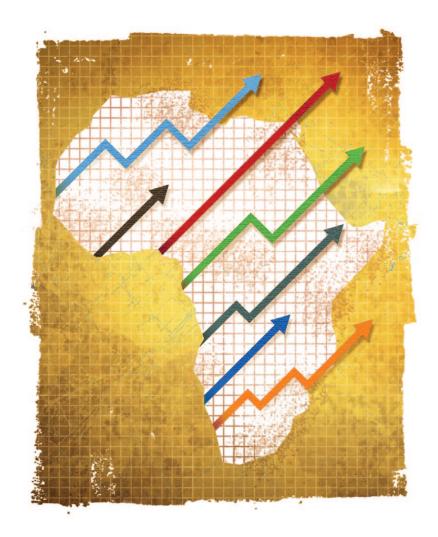
Africa's Pulse

An analysis of issues shaping Africa's economic future



- Sub-Saharan African countries maintain growth momentum, as well as progress toward the MDGs
- Growth has reduced poverty, but not by enough
- Better governance of mineral revenues, high agricultural prices, the demographic dividend and rapid urbanization represent opportunities for making growth more poverty reducing

AFRICA'S PULSE TEAM: Punam Chuhan-Pole (Team Leader) Luc Christiaensen, Manka Angwafo, Mapi Buitano, Allen Dennis, Vijdan Korman, Aly Sanoh and Xiao Ye

With contributions from Shanta Devarajan, Jos Verbeek and Eugenia Moran



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

Summary

- > The global economic recovery remains tepid, but it is expected to gradually strengthen going forward.
- Sub-Saharan African countries continue to grow at a strong pace, spurred by domestic demand and still high commodity prices. Economic prospects are tilted to the upside.
- > Good progress has been made on a few MDGs, even though the region lags in achieving the development goals.
- More than a decade of strong growth has reduced poverty in Sub-Saharan Africa, but high inequality and resource dependence have dampened the poverty-reducing effect of income growth.
- Several opportunities—mineral wealth, elevated food prices, rapid urbanization and a demographic dividend—hold the promise of accelerating the income growth of the poorest groups, but appropriate policies are required to unleash this potential.

Section I: Recent Trends and Prospects

- Fiscal consolidation and weak consumer and business sentiment in high-income countries continue to weigh down global growth, which is projected to tick up to 2.4 percent in 2013.
- Economic output in Sub-Saharan Africa expanded at nearly twice the global rate. With some of the fastest growing economies in the world, African growth is expected to accelerate to over 5 percent in 2013-15.

A. RECENT DEVELOPMENTS IN THE GLOBAL ECONOMY

More than four years after the financial crisis hit, the global economic recovery remains tepid, weighed down by weak activity in high-income countries, particularly in the Euro Area. The recession in the Euro Area likely continued through Q1 2013. Euro Area industrial production data in January point to a broad-based contraction in activity (-5.2%, 3m/3m saar), even if the pace of decline has slowed. Recent market sentiment indicators signal the persistence of weak economic activity in the region. Although financial markets' response to the Cyprus crisis has thus far been muted, it is still too early to assess the real-side impacts, if any, of this crisis on the wider Euro Area. It is unlikely to be favorable for the fragile recovery that is underway in the currency union. Nonetheless, acceleration in developing-country import demand and, to a lesser extent, in US imports is helping to mitigate some of the weakness in the Euro Area.

Activity has firmed up in the US and stabilized in Japan. Despite the drag coming from higher payroll taxes and the sequester, industrial production in the United States expanded at an annualized pace of 5.2 percent during the three months ending February 2013, supported by a recovering housing market and an increase in payroll jobs. The recent strengthening of economic indicators in the US—import demand, durable goods order, business sentiment indicators—signal that economic activity in Q1 2013 will pick up from the flat output observed in Q4 2012. In Japan, January industrial production data show that the 8-month contraction in activity came to an end in January (0.2% 3m/3m saar). This suggests that monetary and fiscal stimulus measures are boosting current quarter growth. However, if supply-side conditions do not improve this uptick may come at the expense of growth towards the end of the year and into 2014.

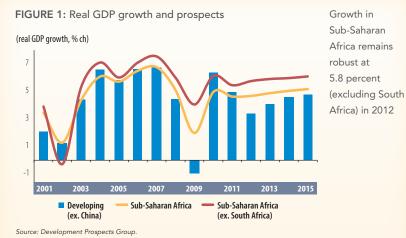
Led by China, the recovery in developing country activity remains strong. Industrial production in developing countries expanded at a robust 8.8 percent annualized pace in January (4.3%, 6m/6m saar), driven in part by a strong 11.6 percent expansion in China; excluding China, industrial production for developing countries grew at 3.8 percent in January. With China being an important trading partner for many developing countries, the robust growth there and subsequent strong import demand (23.2%, 3m/3m saar in January) is supporting the expansion in industrial production in other developing (and high-income) countries. Strengthening activity in the United States should also bode well for developing country exports.

Baseline projections are for a modest acceleration of growth between 2013 and 2015. Overall, global GDP is projected to expand by 2.4 percent in 2013 and gradually strengthen to about 3 and 3.3 percent in 2014 and 2015. For high-income countries, fiscal consolidation, high unemployment and still weak consumer and business confidence will continue to weigh on activity in 2013, with growth coming in at 1.2 percent. But growth should firm to about 2 and 2.3 percent in 2014 and 2015, respectively. Improved financial conditions, a relaxation of monetary policy, and somewhat stronger high-income country growth should prompt a gradual acceleration of developing country growth to about 5.4 percent this year, and to 5.7 and 5.8 percent in 2014 and 2015 respectively—roughly in line with underlying potential. But future growth is not guaranteed. So far, developing countries have weathered the great recession relatively well as developing

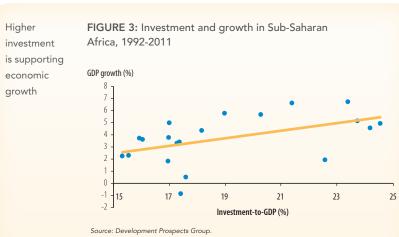
country growth has declined by only 1 percentage point over the 2000-07 average. Regaining, or surpassing, those growth rates will require sustained progress in raising supply potential by maintaining macroeconomic sustainability, improving governance, and investing in infrastructure, health and education.

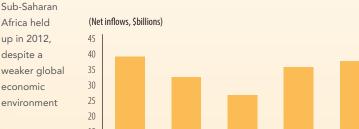
B. RECENT DEVELOPMENTS IN SUB-SAHARAN AFRICA

Despite the global economic slowdown in 2012, growth in Sub-Saharan Africa remained robust supported by resilient domestic demand and still high commodity prices. In 2012, the region's growth was estimated at 4.7 percent. Excluding South Africa, the region's largest economy, the remaining economies grew at a robust 5.8 percent—higher than the developing country average of 4.9 percent (Figure 1). About a guarter of countries in the region grew at 7 percent or better, and several African countries are among the fastest growing in the world (Figure 2). Mediumterm growth prospects remain strong and should be supported by a pick-up in the global economy, high commodity prices, and investment in the productive capacity of the region's economies. Overall, the region is forecast to grow at more than 5 percent on average over the 2013-15 period: 4.9









FDI flows to

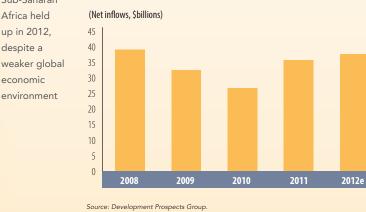
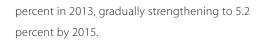


FIGURE 4: Foreign direct investment flows



Increased investment flows are supporting the region's growth performance, with investmentto-GDP ratios increasing by an average of 0.5 percentage points per annum over the past decade (Figure 3). In 2012, for instance, net private capital flows to the region increased by 3.3 percent to a record \$54.5 billion, notwithstanding the 8.8 percent decline in capital flows to developing countries. Foreign direct investment flows tend to dominate capital inflows to the region, thanks to a wealth of extractive resources, but also because other forms of capital flows such as portfolio and bank lending to the region are limited by less developed capital markets and a banking sector that is less integrated with global financial markets (South Africa and Mauritius are exceptions). Foreign direct investment (FDI) to the region increased by 5.5 percent in 2012 to \$37.7 billion, although for developing countries as an aggregate these flows fell by 6.6 percent (Figure 4). The resilience of FDI flows to the region in 2012 reflects, inter alia, still high commodity prices (even though prices softened during the year). In 2012,

several mines were expanded or new ones constructed; prospecting yielded major gas discoveries along the east coast of Africa; new, commercially viable oil wells were drilled in West Africa and East Africa; and a number of countries discovered new mineral deposits.

While both foreign and domestic-originating private and public investments (mainly infrastructure-related) have increased, the investment-to-GDP ratio of about 22 percent in Sub-Saharan Africa is the lowest among developing regions. The region's investment-to-GDP ratios are at levels observed in China in the early 1960's and India in the early 1980's—both prior to their economic boom, suggesting increased scope for further expansion in productivity-enhancing investment in the region.

While the extractive industry sector dominates in terms of the value of overall FDI flows, investment in the services sector, notably among infrastructure-related projects in construction, transportation, electricity, telecommunication and water, has been expanding. In addition, some of the larger economies with a growing middle-class such as Nigeria, South Africa, Kenya and Ghana, are increasingly attracting investment flows to their rapidly expanding consumer sector: i.e. retail and consumer banking. The contribution of the service sector to economic growth is large in both resourcerich and resource-poor countries (Figure 14). Africa is an attractive investment destination: The United Nations World Investment Report, 2012 reports that data on the profitability of United States FDI—FDI income as a share of FDI stock shows a 20 percent return in Africa in 2010, compared with 14 percent in Latin America and the Caribbean and 15 percent in Asia.

Notwithstanding the positive developments at the regional level, investment flows were held back due to political instability and regulatory uncertainty in a number of countries (e.g. Guinea).

Besides increased private investment, governments in the region are focusing their attention on tackling the infrastructural weaknesses that are inhibiting the region's competitiveness and growth. For example, the spike in capital expenditure in Niger since 2010 is linked to the construction of the Kandadji Dam, which will increase the provision of electricity and irrigation services. In Cote d'Ivoire, a country-wide infrastructure rehabilitation and renewal program has boosted capital spending. Capital projects in the region have been funded with higher government revenues (generated from faster growing economies and higher commodity prices) as well as from improving access to international capital markets and new sources of bilateral official financing, notably from China (Box 1). Continued investment in key infrastructure will be critical to maintaining and strengthening growth over the medium term.

Nonetheless, care must be exercised to ensure

In 2012, Zambia issued a maiden 10-year \$750 billion Euro bond at a 5.625 percent yield—lower than yields in some high-spread Euro Area economies at the time--that was oversubscribed. Other African countries that accessed global bond markets for the first time in recent years were Ghana, Namibia, Nigeria and Senegal. Also in 2012, the domestic bonds of the two largest economies in the region were added to the emerging market bond indices of major global banks: South Africa to the Citi World Government Bond Index (WGBI) and Nigeria to the JP Morgan Emerging Market Global Bond Index. This March, a Nigerian domestic bond was included in the Barclays Index. Further, in a bid to deepen capital markets in the region, the International Finance Corporation is planning to issue domestic currency-denominated bonds in selected countries. Indeed, in January 2013 it became the first non-resident entity to issue a Naira-bond, which was oversubscribed by some 50 percent and raised \$75 million. Nonetheless, for the more fragile economies in the region, public capital investments will continue to rely heavily on official development assistance. While gaining access to more diversified sources of capital to fund critically needed infrastructure should help improve competitiveness, the increased exposure to private capital flows calls for keeping fiscal balances and debt-to-GDP ratios at prudent levels.

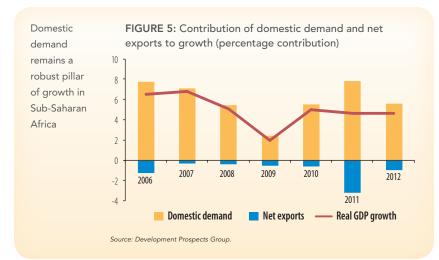
BOX 1:

A growing number of African countries are raising capital from international sources

the long-term sustainability of public investment programs. For example, where high commodity prices have boosted government revenues, spending needs to be sufficiently flexible so as to be able to absorb what could be a significant revenue loss if commodity prices were to fall. World Bank simulations suggest that a 20 percent fall in industrial commodity prices would lead to a 1.6 percentage points of GDP decline in government balances over a three year period. Hence, countries will need to carefully balance a ramping up of priority investment spending with safeguarding fiscal flexibility should commodity prices and government revenues decline.

Overall, the region's general government balance as a share of GDP deteriorated in 2012, with some 40 percent of countries seeing their fiscal balance worsen by 1 percent or more of GDP. Resource-rich countries generally saw a decline in their fiscal positions, with stagnant oil prices and growing nonoil deficits pulling down fiscal balances in several oil-exporting countries. A few countries—Chad, Ghana, Malawi and Sudan—saw a sharp widening of their fiscal deficit by more than 4 percent of GDP. Public debt-to-GDP ratios in the region are relatively low in historical terms or in comparison with high-income countries. Yet, this ratio has increased from 31 percent in 2008 to 38 percent in 2012. Ghana, Niger, Senegal and Uganda are among countries that have seen a rapid increase in their debt levels over the past four years. Overall, the region's oil importers have a relatively higher debt of 43 percent of GDP compared to 34 percent for oil exporters

Consumer spending held up in 2012. Supported by solid real income growth—averaging 2.3 percent per capita growth per annum—consumer demand has grown relatively rapidly in recent years. Consumer spending accounts for over 60 percent of GDP. Overall, the contribution of domestic demand to growth was a robust 5.6 percentage points (net exports subtracted 0.9 percentage points) reflecting the importance of domestic demand—investment, consumption and government



spending—to the region's resilient growth performance (Figure 5).

Factors shoring up consumer spending include declining inflation, which fell from 9.5 percent in January 2012 to 7.6 percent in December 2012 (in Ethiopia, Kenya, Tanzania and Uganda inflation rates fell by over 8 percentage points in 2012); improved access to credit, for example in Angola, Ghana, Mozambique, South Africa, and Zambia; lower interest rates—for every interest rate hike there were three cuts; a rebound in agricultural sector incomes, thanks to more favorable weather conditions in countries such as Guinea, Mauritania and Niger,

which all experienced better rains compared with the 2010/2011 crop year; and steady remittance inflows, which were estimated at \$31 billion in 2012 and 2011.

Export performance differed across the various exporter groups in the region. Among oil exporters, export volumes for the first ten-months of the year were some 3.8 percent higher than for the same period a year ago, mostly due to an increase in exports from Angola. Export volumes expanded by 7.8 percent among the predominantly metal exporters, notwithstanding subdued demand in the global economy and a 15 percent decline in the World Bank metal prices index. The increased export volumes reflect investments in mines in earlier years: for example, Mozambique, Niger, Sierra Leone and Zambia. Export volumes of agricultural exporters expanded the most in the region (13.7 percent in the first ten months). This was in part due to improved rains in east Africa compared to a year earlier and the lower cyclical sensitivity of agricultural commodities to global business cycles.

Trade performance in the region as a whole, however, was not immune to developments in the global economy. For the first two quarters of 2012, export growth in the region was at a robust annualized pace of 20.5 percent and 52 percent respectively. Following the slump in global economic activity in the third quarter, export growth in Sub-Saharan Africa contracted at a 33.8 percent annualized pace (Figure 6). With the pick-up in global industrial production in recent quarters, it is expected that expansion in the region's export volumes would have resumed by the first quarter

Global economic developments influenced the monthly trade performance of major exports

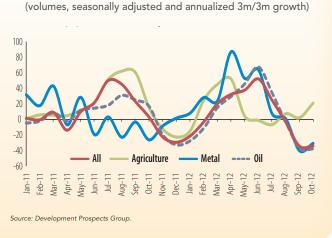
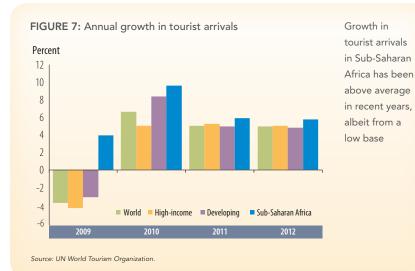


FIGURE 6: Growth in Sub-Saharan African exporters

of 2013. Available data for South Africa show that export growth expanded by 19 percent (3m/3m saar) in the fourth quarter although there was a contraction in activity in the third quarter (-12.9 %, 3m/3m saar).

Services trade, particularly tourism, is an important driver of growth in several countries, including traditional destinations such as Cape Verde, Kenya, Mauritius and Seychelles and newer destinations such as Rwanda. Data from the UN World Tourism Organization show that the growth in tourist arrivals was 5 percent (y/y) in 2012, compared with a global average of 3.8 percent (Figure 7). Countries recording a strong growth in tourist arrivals included Cape Verde, Madagascar, Sierra Leone and South Africa.

The growth in tourist arrivals is encouraging and indicative of a diversification of source countries. For instance, in Mauritius, arrivals from Europe (largest source market) fell by 7.7 percent for the January – September period, but arrivals from China rose 38 percent, and those from Russia 91 percent. Tourist arrivals to the country were also up from elsewhere in Africa (13.2 percent), Australia (13.5 percent), Canada (18 percent) and South America (55.3 percent). Other countries fared less well: the cancellation of major charter flights to Mombasa

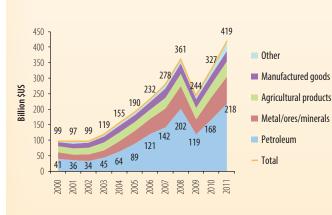


Robust export growth has underpinned Sub-Saharan Africa's economic expansion. However, much of the region's export growth has been driven by natural resources. Between 2000 and 2011, total Sub-Saharan exports increased from \$100 billion to \$420 billion, with the resource sector, including petroleum, ores, base metals and gold, accounting for three quarters of exports.

Among manufacturing exporters, South Africa is the regional powerhouse, accounting for 70 percent of total regional manufacturing exports. A few smaller countries have developed manufacturing capacity that drives exports, such as Lesotho, Madagascar and Mauritius.

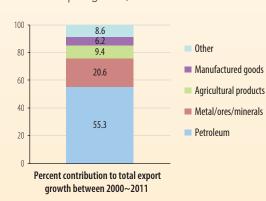
During the same period, the region's manufactured goods increased from \$13 billion to \$33 billion. The EU's dominance as Sub-Saharan manufacturing exports destination has decreased significantly, from importing 39 percent of total Sub-Saharan African manufacturing exports in 2000 to 29 percent in 2011.

Since 2000, the overall growth of Sub-Saharan exports to emerging markets, including those of China, Brazil and India, and to countries in the region has surpassed that to developed markets. Total exports to Brazil, India and China were larger than to the EU market in 2011. Geographic characteristics of export diversification are also noteworthy. Intra-regional exports, though still in a nascent stage, are most diversified, with manufactured goods and agricultural products accounting for 46 percent of total exports. In contrast, manufacturing and agriculture account only for 5 percent of total exports to Brazil, India and China; 10 percent to the United States; and 30 percent to the EU.



Exports by type

Contribution of different exports to total export growth, 2000-11



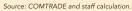
BOX 2:

Africa has diversified its export markets, but the composition of exports is unchanged

FIGURE 8:

Composition of Sub-Saharan Africa's export

Box 2 continues





following terrorism and piracy concerns there contributed to the 2 percent (y/y) fall in tourist arrivals to Kenya between January and August 2012. Similarly, the conflict in Mali led to a sharp decline in tourist arrivals in that country.

C. MEDIUM-TERM OUTLOOK

Medium-term economic prospects for Sub-Saharan Africa remain strong. The same driving forces that have underpinned the region's robust performance in recent years are expected to be sustained over the projection horizon. On aggregate, the region's GDP growth is expected to average more than 5 percent over 2013-15: 4.9, 5.1 and 5.2 percent for 2013, 2014 and 2015 respectively. Excluding South Africa, GDP growth for the rest of the region is expected to pick-up to about 6.1 percent in 2013 and 6.0 percent and 6.1 percent in 2014 and 2015 respectively.

Increased investment will drive growth over the medium term. Foreign direct investment to the region is expected to remain strong, with FDI inflows projected to increase to record levels each year reaching \$54 billion by 2015. FDI inflows to the extractive industries sector and, to a lesser extent, the agriculture sector should be supported by high, if somewhat softening, commodity prices over the next two to three years. Strong exploration efforts in East Africa in recent years have led to the opening of several oil and gas wells. In Southern Africa, Mozambique is likely to attract increased foreign investment to its huge coal deposits and offshore gas discoveries and Zambia will continue to see increased investments in its copper sector. Similar investments in the minerals sector in the West African countries of Ghana, Guinea, Liberia, Nigeria and Sierra Leone are also expected.

Domestic private investment in the near term is expected to be supported by the interest rate cuts in the region in 2012. Furthermore, in an environment of easy monetary policy in high-income countries, countries with a stable macroeconomic environment and prudent fiscal policies could access international capital markets to finance their public infrastructure programs. So far some twenty countries in the region have obtained international sovereign credit ratings. Angola, Kenya, Rwanda and Tanzania have all expressed interest in raising international bonds in the near term.

Consumer spending will likely remain strong, helped by an improving inflation outlook. With fuel and food staple prices easing, inflationary pressures will moderate. Monetary authorities are also expected to keep inflationary pressures in check. Nevertheless, some countries may see an uptick in inflation due to higher imported inflation from weaker currencies, higher food prices or a reduction in energy subsidies.

The modest pick-up in the global economy projected in 2013 and beyond should provide some support to Sub-Saharan African export growth. Exports are also expected to increase due to the coming on stream of new mineral exports in Burkina Faso, Cameroon, Gabon, Mozambique, Niger and Sierra Leone. A stronger global economy should also lead to further strengthening of the region's tourism sector.

The increased demand for capital goods to meet infrastructure and other investment needs, growing demand for oil, and rising per capita incomes should boost demand for consumer durables and other imports. As a result, the regional current account deficit is projected to increase to about 2.8 percent of regional GDP in 2014 from 2.4 percent in 2012 before improving to 2.5 percent in 2015. However, for some of the less diversified oil exporters, such as Angola and the Republic of Congo, net exports will be positive.

These expected medium-term positive developments will not be uniform across the region. Labor unrest (South Africa) and political instability (Central African Republic, Mali and Togo) are expected to cut into economic activity in some countries in the region over the forecast horizon.

Risks

Notwithstanding the robust growth expected for the region over the forecast horizon, some significant downside risks remain. On the external front, a fragile global recovery is a source of risk. While a tepid recovery of global economic activity is the baseline scenario, the many tension points in the global economy could result in a much weaker outcome. First, though tensions in financial markets in the Euro Area have eased since Q2 2012, conditions remain fragile and sentiment is vulnerable to bad news. Should they deteriorate markedly, with a credit freeze to some of the larger, high-spread, troubled Euro Area economies, global economy activity could return to recession-like conditions and GDP in Sub-Saharan Africa could fall by up to 3.5 percentage points relative to the baseline forecast.

The sequester in the United States is already sapping growth there. The baseline scenario assumes agreement on a credible medium-term plan to restore fiscal sustainability. In an alternate scenario where uncertainty in US fiscal policy leads to increased precautionary savings by US consumers and businesses, US growth could slow by some 2.3 percentage points. Should that arise, the trade channel alone could cause Sub-Saharan Africa's GDP to decline by 0.6 percentage points relative to the baseline. Given the importance of the US economy to global markets, the indirect effects through weaker confidence and the rattling of global financial and commodity markets would likely have a stronger impact on the region.

A third tension point surrounds the possibility of a disorderly unwinding of China's unusually high investment rate. With Chinese demand accounting for some 50 percent of many industrial metals exported from Africa, a sharper-thanenvisaged downturn there could lead to a slump in commodity prices which would hurt countries which are especially reliant on oil, metals and other minerals.

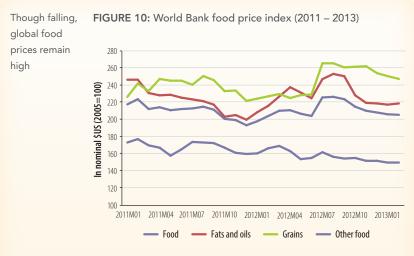
Aside from these external risks, downturns from domestic disruptions are equally important. While debt-to-GDP ratios and fiscal deficits remain on aggregate low in the region, a few countries have seen a rising trend in these indicators. For instance, fiscal deficits in Ghana climbed to around 12 percent of GDP in 2012, exceeding the already high target level of 6.7 percent. Given the important contribution of macro stability to the recent robust growth performance in the region, it would be prudent to ensure that debt dynamics remain sustainable—all the more so as an increasing number of countries are exposing their economies to external private funding sources.

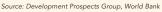
Other risks include disruptions to productive activity from political, civil and labor unrest, as investment, trade and tourism activity—all important growth drivers—are likely to suffer. In 2012, labor unrest in South Africa, terrorist activity in parts of

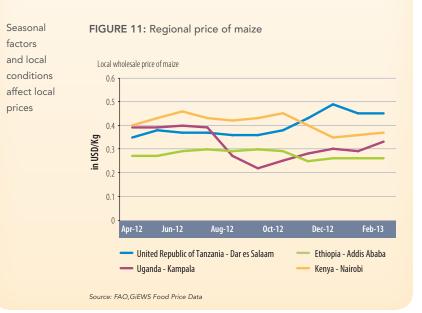
Nigeria, coups d'état in Mali and Guinea-Bissau, and political stalemate in Guinea and Madagascar curtailed economic activity to varying degrees in these countries. Though most economies in the region remain stable, simmering conflicts, particularly in the fragile states, continue to pose an important downside risk to their economic activity in the medium term. Food price spikes are a cause for concern as well.

Food prices

Because of the large share of food in household spending, the poor are particularly vulnerable to food price increases. At the global level, food prices have declined some 9 percent from their peak of last August (World Bank's Food Price Watch, 2013). Lower demand for cereals and an easing of supply conditions have helped to pull global prices down. Prices remain high, however, with the February 2013 price of wheat, maize and rice higher than a year ago by 15 percent, 8 percent and 5 respectively. Although the USDA's latest global outlook is for higher grain production, international prices are vulnerable to a decline in global stocks (and global stocks-to-use ratios) and weather uncertainties, which could disrupt supply.







Prices of staples in Sub-Saharan Africa have generally followed regional seasonal patterns. Improved food availability due to a good 2012 harvest season helped to stabilize and even lower the price of staples in West and East Africa. In Central Africa, food markets continue to be disrupted by the ongoing civil conflict in some areas. Prices are being impacted by the lean season in Southern Africa. In Malawi, maize prices rose significantly in February and are well above their levels a year ago. A below-average harvest and the depreciation of the Kwacha have kept prices high there. Seasonal factors are also keeping maize prices high in Mozambique and Zambia.

While regional prices sometimes reflect world prices, conflict, local weather conditions, low usage of land resources, logistics costs and political economy issues are key price determinants. Seasonal variations and changing weather patterns are not confined to national borders. These weather variations will only become more frequent as the climate changes, making it important to invest in systems and standards for increased regional food trade (Box 3).

D. AFRICA AND THE MDGs

While the region lags on most of the MDGs, the progress made over the past ten years (when growth picked up) has been impressive. Progress on the MDGs was slow in the 1990s, but has accelerated since 2000. So, while the region may African countries have increasingly turned to global markets to meet the growing demand for food. Indeed, only 5 percent of the cereal that is imported by African countries is from other countries in the region. A recent World Bank report (2012) finds that African farmers can meet much of this rising demand. But farmers face major barriers along the value chain that constrain food staples trade among African countries. A key constraint is limited access of farmers to agricultural inputs, such as fertilizers and higher-yielding seeds, and to extension services.

BOX 3:

Boosting intraregional trade in food staples

Improvements to infrastructure for food transportation are necessary but reducing transportation and logistics costs are even more urgent for food security. Outdated transportation regulations such as the "trucking queuing" scheme, where both large and small firms queue and loads are distributed according to the next in line, are inefficient and result in low competition, higher prices and low quality transport services. Most importantly, this system creates transport cartels that are difficult to reform once established.

Opaque and unpredictable trade policies raise transaction costs, inject price volatility and undermine cross-border trade. Small- and medium-size traders are particularly vulnerable to these barriers. Moreover, crossing borders to deliver food is not without danger: Most cross-border traders are women, and they are often subject to payment of bribes and harassment. Reducing the number of agencies and officials at the border and ensuring physical security is imperative to supporting trade.

Open food trade would reduce the profit margin between producer and consumer prices, increasing the smallholder farmers' revenues and reducing intermediary rents for both private and public sector agencies. With demand for food expected to double in a decade, policies to remove regional barriers to trade take on an added urgency. But political economy issues have slowed the implementation of needed reforms to regional food trade.

Source: World Bank. 2012. Africa Can Feed Africa: Removing barriers to regional trade in food staples.

not meet the MDG targets by 2015, it is on a trajectory to achieve the targets soon thereafter (assuming a continuation of strong growth and commitment to reforms).

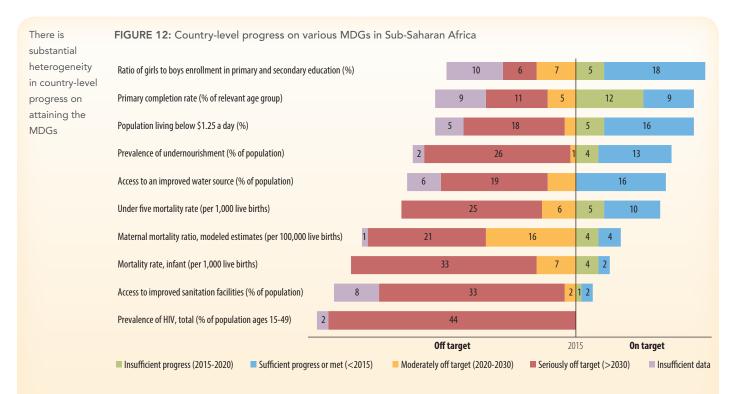
Sub-Saharan Africa started from a worse position on the MDGs than the rest of the developing world. For example, the maternal mortality ratio in the region was 850 deaths per 100,000 live births in 1990 compared to a global (developing countries) starting value of 400. In 2010, the value of this indicator was 500 deaths per 100,000 live births in Sub-Saharan Africa and 210 globally. The under-5 mortality rate in Sub-Saharan Africa has declined substantially as well, from 178 deaths per 1,000 live births in 1990 to 109 deaths per 1,000 live births in 2011. The comparable progress at the global level has been from a starting point of 87 deaths per 1,000 live births in 1990 to 51 deaths per 1,000 live births.

Sub-Saharan Africa lags in achieving all the MDGs. However, on under-5 mortality rate, maternal health and undernourishment the region has achieved more than 50 percent of the progress required by 2015, not much behind the rest of the world. On maternal mortality, if the region doubles the effort made during 2005-10 it will be able to reach this goal by 2016. The difference in achievement is not as close on other MDGs.

There is substantial heterogeneity in country-level progress on the MDGs (Figure 12). On the income poverty goal, 16 countries have achieved or made enough progress to achieve the poverty goal; with an additional push, five more countries are likely to achieve the target by 2015 or shortly thereafter. Data on prevalence of undernourishment shows that 13 countries have made enough progress to achieve this MDG, and an additional four countries with some acceleration could also meet the target. Eighteen countries have met or have made sufficient progress to achieve gender parity in primary and secondary education (MDG3a). Health MDGs lag the most, despite solid progress in absolute terms. For example, only 10 countries are on track to meet the under-5 mortality target (MDG4a), and an additional five

countries are anticipated to meet this MDG between 2015 and 2020. We should add, however, that since 2000 over a dozen countries have been reducing their child mortality rates at a pace faster than the rate required to reach the MDG (Demombynes and Trommlerova, 2012). On access to an improved water source, 16 countries have made enough progress to meet the MDG before or by 2015. However, progress on access to improved sanitation facilities is limited, with only two countries (Angola and Cape Verde) on track to meet the goal before or by 2015.

Among fragile states in Sub-Saharan Africa, 12 have met or have made enough progress to meet at least one of the MDGs on time. Two countries (Central African Republic and Sierra Leone) with some acceleration could meet at least two of the MDGs by 2015.



Note: Progress is based on extrapolation of the latest five-year annual growth rates for each country, except for MDG5, which uses the last seven years. Sufficient progress indicates that an extrapolation of the last observed data point with the growth rate over the last observable five-year period shows that the MDG can be attained. Insufficient progress is defined as being able to meet the MDG between 2016 and 2020. Moderately off target indicates that the MDG can be met between 2020 and 2030. Seriously off target indicates that the MDG will not even be met by 2030. Insufficient data points to the fact that not enough data points are available to estimate progress or that the MDG's starting value is missing (except for MDG2) and MDG3).

Source: WDI and GMR team estimates.

Section II. Has Growth Been Good for Reducing Poverty in Sub-Saharan Africa?

- More than a decade of strong economic growth has reduced poverty in Sub-Saharan Africa—but not by enough.
- There is considerable variation in performance, with poverty declining at a slower (despite faster growth) pace in the region's resource-rich countries.
- Results from household surveys show that growth has been much less poverty reducing than in the rest of the world. Resource dependence and high inequality more broadly (Ginis around 45 percent on average) dampen the poverty-reducing effect of growth.
- Prospects of large revenues from mineral exploitation, elevated food prices, rapid urbanization and a demographic dividend hold the promise of accelerating poverty reduction on the continent, but appropriate policies and institutions are required to unleash this potential.

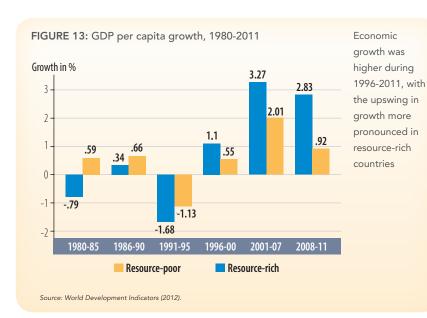
A. Growth and poverty trends in Sub-Saharan Africa

HIGHER ECONOMIC GROWTH, ESPECIALLY IN AFRICA'S RESOURCE-RICH COUNTRIES

After several years of poor performance, economic growth in Africa picked up in the mid-1990s, with per capita GDP expanding at 2.4 percent per year on average since 1996, increasing GDP per person by about 50 percent. There are several reasons for this turnaround, including improved macroeconomic policies, increased foreign aid and the substantial reduction of debts. Buoyant commodity prices and the expansion of mineral resource exploitation in a number of countries

during the 2000s also played an important role, with GDP per capita in resource-rich countries on average growing 2.2 times faster during 1996-2011 than in resource-poor countries¹ (Figure 13). Thirteen of the 21 countries that are middle-income today are also resource-rich. Indeed, resource-rich countries have driven a significant part of Africa's recent growth, and may continue to do so, given the spate of recent mineral discoveries. By 2020, only 4 or 5 countries in the region will not be involved in mineral exploitation.

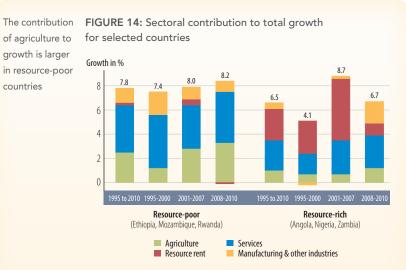
Part of the difference in growth performance between resource-rich and resource-poor countries follows from the higher population growth in resource-poor countries (overall GDP



1 A country is defined as resource-rich if over 1980-2010 on average more than 5 percent of its GDP has been derived from oil and non-oil minerals (excluding forests). The countries included are: Angola, Botswana, Cameroon, Chad, Democratic Republic of Congo, Republic of Vorige, Equatorial Guinea, Gabon, Guinea, Liberia, Mali, Mauritania, Namibia, Nigeria, Sierra Leone, Sudan, and Zambia. Botswana, Namibia and Sierra Leone are further added because the rent database omits diamonds. Cote D'Ivoire and Mali were added because of the rapidly increasing share of resources in total export and government revenues over the past 10 years.

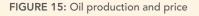
grew only 1.3—as opposed to 2.2—times faster in resource-rich countries relative to resource-poor ones). Nonetheless, the difference remains important and quite different from that observed for the rest of the world, where resource-rich and resource-poor countries during this period grew at similar rates (around 3.2 percent per capita).

Even though resource-rich countries have been growing faster on average during 1996-2011, some resource-poor countries such as Ethiopia, Rwanda, and Mozambique² have also grown fast, driven by services and agriculture (Figure 14). In contrast, in Angola, Nigeria, and Zambia, three of Africa's longstanding resource-rich and faster growing countries, resource rents and services make up the lion's share of growth. The difference in the contribution of agriculture to growth is particularly striking (2.5 percentage points per year in the three fast growing resource-poor countries versus



Source: Staff estimates

Trend in oil production and price contribute to volatility in resource rents





only 1 percentage point in the three fast growing resource-rich countries). These differences in the composition of growth will prove important in understanding differences in performance between the two groups in poverty reduction, as discussed in more detail below. There is also larger volatility in the growth pattern of the resourcerich countries, mainly reflecting the volatility in resource rents (Figure 15). The contribution of manufacturing or other (non-mineral) related industries remained modest in both groups.

PROGRESS ON REDUCING POVERTY

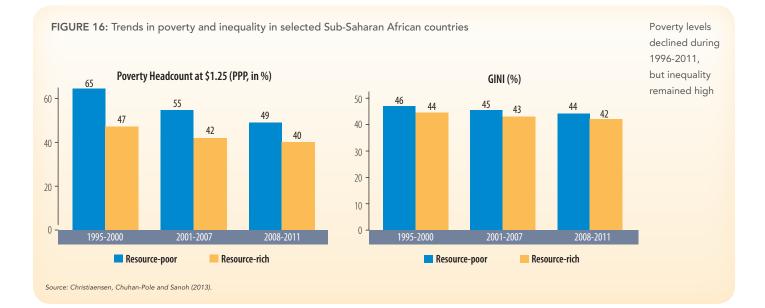
Recent trends point to progress in the fight against income poverty. Between 1996 and 2010, the share of people living on less than \$1.25day in Sub-Saharan Africa has declined from an estimated 58 percent to 48.5 percent (data are provisional). While the broad picture emerging from the data is that Africa's economies have been expanding robustly and poverty is coming down, the aggregate hides a great deal of diversity in performance, even among Africa's faster growers. By way of example, during the second half of the 2000s, Ethiopia and Rwanda saw their economies expand at an annual average rate of 8 to 10

percent, resulting in a 1.3 to 1.7 percentage point annual reduction in the national poverty headcount. Despite equally robust annual economic growth of 6 to 7 percent, the national poverty headcount declined only by an estimated 2.2 percentage points in Tanzania during this period, and it was little changed in Zambia, a resource-rich country.

The difference in performance between resource-rich and resource-poor countries also appears to hold more broadly and continues till today, though important caveats remain in terms of survey coverage and data quality (see Box 4 for

² Income from mineral rents has only come on board in Mozambique from 2004 onwards.

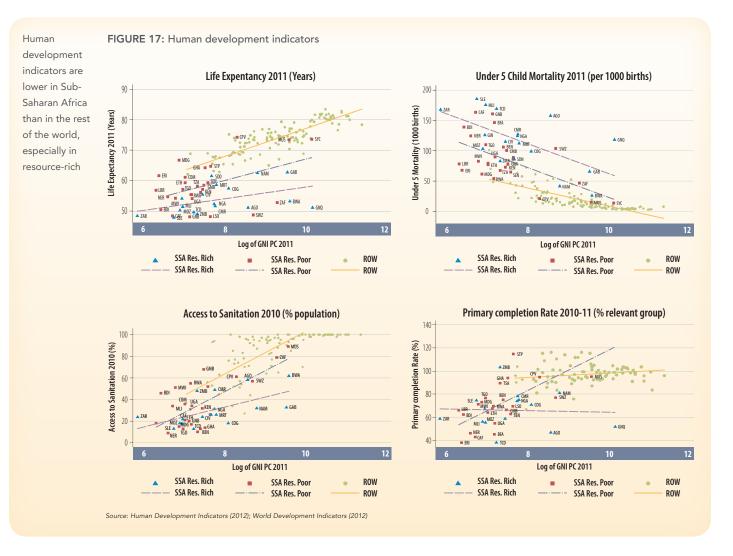
more detail on poverty data in Sub-Saharan Africa).³ Data limitations are more pronounced in resource-rich countries and especially evident in Africa's fragile states. To begin, poverty levels (\$1.25-day headcounts) tend to be lower in resource-rich countries, which are also richer, than in resource-poor countries. However, despite on average 2.2 times faster growth, poverty declined substantially more in resource-poor than in resource-rich countries. In the former group, the estimated \$1.25 a day poverty headcount declined from about 65 percent during 1995-2000 to an estimated 49 percent during 2008-2011 (Figure 16). In the seven resource-rich countries covered in the data, it only declined by an estimated 7 percentage points. Higher economic growth does not automatically translate into higher poverty reduction. Overall, despite the global food crisis of 2007/8 and the global financial crisis of 2008/9, poverty seems to have continued its downward trend, though given the limited number of actual household surveys during 2008-2011, the numbers for that period remain indicative at this stage.



With Gini coefficients close to 45 percent, inequality in Sub-Saharan Africa remains high, especially given that all Gini coefficients are calculated based on consumption measures as opposed to income measures as in Latin America, where even higher Gini coefficients have been recorded. Somewhat surprisingly, inequality in resource-poor countries appears slightly higher than in resource-rich countries. This may partly reflect difficulties in capturing incomes of the very rich by the household survey instrument. Overall, Africa's high inequality raises important questions regarding the poverty-reducing powers of its future growth, as high inequality dampens the poverty-reducing effects of economic growth (Ravallion, 2007).

Finally, as documented in Section I, substantial strides have been recorded in Africa's human development as well, coinciding with the region's higher economic growth. Again, resource-rich countries such as Gabon, Equatorial Guinea, and Nigeria are disproportionately among the poorer performers, despite GDP growth rates that have on average been twice as high over the past 15 years as those in resource-poor countries (Figure 17). By way of illustration, while at similar levels of income per capita, inhabitants of Cameroon live on average 7.7 years less than inhabitants of Senegal. This is largely due to much lower child mortality in the latter (68 per 1000 live births compared with 127 per 1000 in Cameroon). And there are more extreme examples such as between Tanzania and Zambia where life expectancy is 58.2 and 49 years respectively despite similar per capita income (in PPP terms). Similarly large discrepancies (on average 6 percentage points) are observed when it comes to access to sanitation, with a mixed picture in terms of primary school completion rates, where some resource-rich countries

3 There are on average 1.7 household expenditure surveys over the 1995-2011 (averaged over all 49 countries, including those with no survey at all).



are performing well (e.g. Zambia), but others dismally (e.g. Angola and Equatorial Guinea), despite high GNI per capita. Achieving better human development from economic growth remains an important challenge in resource-poor countries as well. Controlling for income, many continue to lag in their human development compared to the rest of the world.

B. The link between growth and poverty reduction

ON METRICS AND MEASURES

To gauge Africa's potential for future poverty reduction it is important to better understand how growth translates in poverty reduction. From the Sub-Saharan African sample covering 1980-2010, there appears to be a weak relationship between changes in poverty and GDP per capita (national accounts). A different picture emerges between change in poverty and per capita consumption expenditure from household surveys, which are at least internally consistent in terms of metrics and measures.

Discrepancies between the national accounts and the households surveys are not unique to Africa—they have also been documented elsewhere, most recently for India (Datt and Ravallion, 2011). There are also good conceptual reasons why there should not be a one-to-one correlation. Poverty concerns private consumption, while GDP comprises private consumption, government spending, investment and net exports. Nonetheless, when looking at the experience in the rest of the developing world, the relation between the change in poverty and growth in GDP per capita was statistically significant, with 1 percent growth in GDP per capita associated with a 2 percent decline in poverty (or in technical terms,

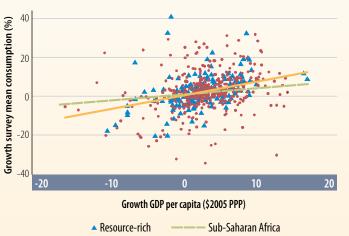
yielding a growth elasticity of poverty of -2).⁴ Both statistical as well as structural issues underpin this discrepancy between growth in GDP per capita observed in the national accounts, growth in consumption per capita recorded in the household surveys, and changes in poverty.

The statistical foundations of both GDP per capita and poverty estimates in the continent remain wanting, a situation most recently dubbed by Devarajan as "Africa's statistical tragedy"⁵. GDP accounts often use old methods. More often than not, population censuses are out of date. Poverty estimates are irregular⁶ and often not comparable over time due to changes in survey design and inadequate price deflators (Christiaensen, Lanjouw, Luoto and Stifel, 2012). The proximate reasons are weak capacity, inadequate funding and lack of coordination of statistical activities. Deeper reasons may relate to the political sensitivity of statistics and donors' tendency to go around countries' own National Statistical Development Strategies. From this perspective, lower frequency of household surveys in resource-rich countries may not be a surprise. The continuing poor guality of Africa's statistics is in need of urgent attention (Box 4).

The importance of accurately measuring progress is increasingly being recognized. In his 2013 annual letter, Bill Gates underscores the importance of innovations in measurement in improving outcomes. In a recent paper, Devarajan (2013) calls attention to the continuing poor quality of Africa's statistics, which he coined "Africa's statistical tragedy". The challenges are many and not confined to any particular data collection instruments. They concern the national accounts, price deflators as well as household surveys and censuses. They permeate the overall statistical systems. Against this background, the observed weak correlation in Sub-Saharan Africa between growth in GDP per capita and average consumption from the household surveys illustrated below is not really surprising (Figure 18). There is also little correlation between the private consumption component in the national accounts and the evolution of consumption from the household surveys.

One problem with the reported GDP numbers is the use of outdated base years, which leads to the omission or underestimation of new parts of the economy. Ghana's upward revision of its GDP by 60 percent in 2010, for example, can be largely attributed to the inclusion of new data for sectors previously ignored or underestimated. Several countries have recently been in the process of rebasing their national accounts and revising their methods. Substantial upward revisions of GDP are expected in other countries as well, which in turn will also affect the estimated growth rates (Jerven, 2013).

The use of outdated base years further affects the calculation of the GDP price deflators, as the weights accorded to each sector determined in the base year may no longer reflect reality today. As a result, price



Rest of the World

Resource-poor

of development statistics in

Africa

BOX 4:

Shortcomings

FIGURE 18:

Growth in GDP per capita and survey mean consumption

movements in shrinking sectors may still be unduly influential in the calculation of the deflator, while price movements in expanding sectors are not fully reflected. The importance of accurate deflators (beyond issues related to the base years), for reconciling discrepancies in the evolution of GDP and poverty reduction has been identified by practitioners and researchers. For instance, in documenting why rapid GDP growth during the 2000s in Tanzania was accompanied only by modest poverty reduction, Sandefur (2012) emphasizes that price increases recorded in the CPI (80 percent between 2000 and 2009) were much lower than those observed in the household surveys (170 percent) (Figure 19). Given that the CPI is used to deflate the consumption component of nominal GDP figures, real GDP growth may have been overestimated, providing one possible explanation for the seeming discrepancy. Substantial differences between CPI-based inflation numbers and inflation numbers derived from the household surveys have also been reported in Burkina Faso (Grimm and Gunther, 2006), Kenya (Christiaensen et al., 2012) and most recently Malawi, where it has prompted a revision of the methodology and current CPI.

6 There have been on average 1.7 household expenditure surveys during 1995-2011 (averaged over all 49 countries, including those with no survey at all). Coverage is generally lower in resource rich countries and least in fragile states.

Box 4 continues

⁴ This is after controlling for country fixed effects and omitting outliers using the BACON procedure.

⁵ Devarajan, Shantayanan. 2013. "Africa's Statistical Tragedy," Review of Income and Wealth, January



Because of limitations of the data, one needs to go beyond the national accounts to directly explore the link between the evolution of poverty and average consumption growth from the household surveys and to assess Africa's prospects for further poverty reduction.

HOW INCOME GROWTH, INITIAL INEQUALITY, AND RESOURCE ENDOWMENT HAVE AFFECTED POVERTY MEASURES

Survey data show a significant link between the change in poverty and per capita consumption. The estimated growth elasticity of poverty is -0.69, implying that a one percent growth in consumption is estimated to reduce poverty by 0.69 percent (Figure 20). This is still substantially less than in the rest of the world, where the same elasticity is estimated at -2.02 (Box 5). Three factors underpin this difference. First, given that poverty levels in Sub-Saharan Africa are higher and incomes lower, equivalent absolute changes in poverty and incomes translate to smaller and larger relative changes respectively, which arithmetically reduce the growth elasticity of poverty in Sub-Saharan Africa.

Second, high initial inequality has been shown to reduce the poverty-reducing effects of economic growth (Ravallion, 2007) and as indicated above, initial inequality is on average already high in the region. Finally, beyond the growth rate, the sources of growth also matter for poverty reduction, with growth in labor intensive sectors such as agriculture and manufacturing typically more poverty reducing than growth in capital intensive sectors such as mineral exploitation (Loayza and Raddatz, 2010; Christiaensen, Demery and Kuhl, 2011).

Once these three factors are controlled for, the growth elasticity of poverty in Sub-Saharan Africa approaches that of the rest of the world (-3.1 versus -3.8). The results further confirm that the effect of growth on poverty is lower when initial inequality and mineral resource dependence at the beginning of the spell are higher (Box 5). It is important to note that the effects of the latter are in addition to any possible effects that growth driven by mineral extraction may have on inequality itself, which is already controlled for in the analysis. In sum, while mineral extraction might lead to faster growth, the poverty reduction generated per percentage point growth is likely to be less than in the past.

In addition, when inequality itself rises, so does poverty. In other words, when two development strategies generate the same amount of economic growth, the one that also increases inequality, will be less poverty reducing, while those that

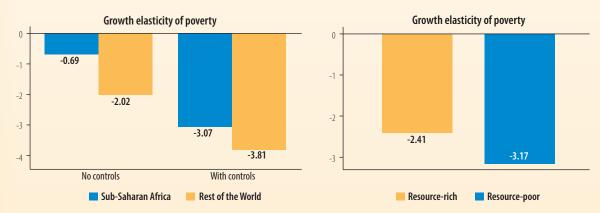
reduce inequality, will be more poverty reducing. Signs are that in Sub-Saharan Africa, growth in resource dependence is associated with increasing inequality. Controlling for initial income and inequality levels, inequality (as measured by the Gini) goes up as the share of mineral rents in the economy increases. No similar patterns were observed in the rest of the world. This counsels further caution about the expected effects of mineral driven growth on poverty. Not only has growth in more mineral dependent economies had less effect on poverty, partly through the inequality channel and partly through other channels, but by increasing inequality it also undermines the poverty-reducing effect of future growth.

The link between changes in poverty and growth in average consumption is examined using data from a sample of 78 spells (where a spell in the period between two consecutive surveys) for African countries and 450 for other countries.

To explore how initial consumption levels, inequality and resource dependence affect the growth elasticity of poverty, the initial level of consumption, initial inequality and an indicator taking the value of 1 if the share of resource rents in GDP is larger than 5 percent at the beginning of the spell (and zero otherwise) are included. These capture their average and independent effects on changes in poverty. In addition, household consumption growth is interacted with the reciprocal of initial consumption, as well as with initial inequality and the resource dependence indicator to explore their marginal effects on the rate of poverty reduction.

The growth elasticity of poverty in Sub-Saharan Africa rises from being only a third to being about 80 percent of that of the rest of the world, when controlling for the consumption level, inequality and resource dependence at the beginning of the spell. Together they thus explain most of the difference. The coefficient on the interaction term between consumption growth and initial inequality, shows that higher inequality is found to reduce the poverty-reducing effect of growth, which is consistent with the literature. Somewhat surprisingly, the sign on the interaction term of growth with resource-richness is negative, suggesting that growth is more poverty reducing when resources are at least 5 percent of GDP at the beginning of the growth spell. As changes in inequality are already controlled for, it concerns here changes beyond the inequality channel. However, regression results for the rest of the world also show that poverty reductions during spells with higher initial resource dependence are on average 10 percent less. No effects were found in Sub-Saharan Africa, possibly also related to the limited number of observations with higher resource dependence.

To explore the effect of resource dependence further, the sample was pooled across all regions and split by resource dependence. The larger growth elasticity of poverty in resource-poor countries (by -0.7) confirms the lower poverty-reducing impact of economic growth in countries that are (or become) more resource dependent. Finally, growth processes that come along with increases in inequality, are less poverty reducing.



Initial inequality and resource dependence dampen the povertyreducing effect of income growth

FIGURE 20: Income growth and poverty reduction

Controls include initial consumption, inequality and natural resource share >5 % of GDP indicator. All results control for country fixed effects.

Source: Christiensen, Chuhan-Pole and Sanoh (2013), "Africa's Growth, Poverty and Inequality Nexus - Fostering Shared Prosperity."

BOX 5:

The growth elasticity of poverty and its conditioning factors

C. Making growth more poverty reducing

Africa's human development and poverty reduction over the past fifteen years has made progress, but it is uneven. Moreover, converting resource wealth into human welfare has proven particularly challenging, despite fast growth in these countries. Given the spate of recent mineral discoveries and Africa's high levels of initial inequality, concerted efforts will be needed to enhance Africa's growth elasticity of poverty. Three opportunities present promise.

MANAGING MINERAL WEALTH BETTER

Continued demand for Africa's natural resources as well as the recent discoveries of oil, gas and minerals in, among others, Ghana, Uganda, Kenya, Tanzania and Mozambique, together with an improved macro-economic environment, sustain prospects for robust economic growth. The pertinent question is how more of the new found resource wealth can be converted into fiscal revenues and effective public spending to foster sustainable development, improve human welfare, and generate more rapid income poverty reduction. In other words, how can we avoid another "resource curse." Increasingly the debate has turned to how institutions and natural resources interact, how institutions and governance can explain policy failure. A useful framework for better understanding the governance challenges in converting resource wealth in human development is the value chain approach described in Alba (2009) and Barma et al. (2012). Three core legs of natural resource management, each embodying their own political dynamics, are highlighted: 1) extraction—transparency regarding terms of contracts; 2) taxation—efficiency in tax collection; and 3) investment of resource rents—careful prioritization of public investment. Some recent initiatives have focused on the first leg. In particular, under the "Publish What You Pay" and the "Extractive Industries Transparency Initiative" (EITI) mining companies and governments disclose mandatorily or voluntarily (EITI) what they pay and what they earn. Nineteen African countries are now part of the EITI, of which 8 are compliant with all requirements.

The third leg is probably the most important and also the most difficult. The oil-rich countries of Africa have a poor track record in prioritizing expenditures, implementing projects and getting value for money. Gabon and Equatorial Guinea, with per capita incomes of \$10,000 and \$20,000 respectively, have among the lowest child immunization rates in Africa. The leakage rate of non-salary expenditures in Chad's health system is 99 percent (Gauthier and Wane, 2009). The problem may be due to the fact that oil revenues pass directly from the oil company to the government, without passing through the citizens. As a result, citizens may not know the extent of oil revenues, and have fewer incentives to scrutinize how they are spent. Several people have advocated mechanisms by which African citizens, especially poor citizens, can better share in their country's mineral wealth. Sala-i-Martin and Subramanian (2007) and Moss (2011) have suggested that cash transfers to all citizens, along the lines of the practice in the U.S. state of Alaska or the Canadian province of Alberta, could benefit citizens more than the equivalent spending by the government. These proposals need to be examined more closely, but they offer the possibility of increasing transparency and accountability for public spending—arguably the weakest link in the chain in resource-rich countries. Finally, technological developments, such as biometric cash cards and mobile money, make it possible to transfer money to people, even in remote areas.

ADVANCING AGRICULTURE – THE CASE FOR STAPLES

A second opportunity to enhance the poverty-reducing powers of Africa's future growth lies in agriculture. World food prices are high and expected to stay so in the medium term. With urban food markets set to quadruple over the next two decades, domestic and regional markets offer attractive opportunities for Africa's producers. Agriculture and agribusiness together are projected to be a \$1 trillion industry in Sub-Saharan Africa by 2030 (up from \$313 billion in 2010) (World Bank, 2013a). And growth coming from agriculture has *on average* been shown to be more poverty reducing than growth coming from other sectors (Diao, Hazell and Thurlow, 2010; Christiaensen, Demery and Kuhl, 2011).

But many of the opportunities have yet to be captured. In the mid-2000s, Africa switched from being a net exporter of agricultural products to becoming a net importer, with especially many of the mineral dependent economies⁷ being large net importers. Much of the growth in imports concerns staples, especially rice, but also wheat and sugar, for its rapidly expanding urban populations, as well as milk products and poultry, whose imports have exceeded \$2 billion in recent years. Except for wheat, which is a temperate-zone crop, these are all products in which Africa should have a comparative advantage, given its abundant land. In addition, just like not all growth is equally poverty reducing (natural resource exploitation being just one example), neither is all agricultural growth. Its success in reducing poverty differs across its subsectors as well as the modalities and agrarian structure.

A particularly fruitful area for increasing Africa's productivity is staple crop production. While agriculture's growth has picked up during the 1990s and 2000s, it remains largely driven by unsustainable area expansion, which accounts for two-thirds of the growth in agricultural output, with total factor productivity growth and increased input use accounting for the remainder (Fuglie, 2011). Staple crop yields remain way below potential, with maize yields reaching only 20 percent of their (experimental station) potential and cash crops reaching 30-50 percent (World Bank, 2007). More progress appears on the way. In Rwanda, over the past 5 years (2006-2011), cereal yields and the yields of roots/tubers increased by 73 and 52 percent respectively while the poverty headcount dropped by 12 percentage points (World Bank, 2013b).

A recent study (Diao et al., 2012) confirms that greater poverty reduction is generated by increasing smallholder staple crop productivity, as opposed to export crops. While exports crops typically have higher value and growth potential than food crops, the latter are usually more effective at generating economy-wide growth and reducing national poverty. This follows from their larger multiplier effects and their larger growth elasticities of poverty—one percent growth in agriculture driven by cereal or root/tuber productivity growth generates a larger decline in national poverty than a one percent growth in agriculture driven by growth in export crops (Table 1). When smallholders are engaged in growing the export crop, the gaps are usually smaller (such as cotton exports in Zambia and tobacco in Malawi). The results also hold in resource-rich countries such as Zambia and Nigeria, underscoring agriculture as another important and oft-neglected

	Staple crops	Growth multiplier	Growth elasticity of poverty	Export crops	Growth multiplier	Growth elasticity of poverty
Ethiopia	all cereals	1.13	-1.40	all export crops	1.04	-1.16
Malawi	maize	1.11	-0.74	Tobacco	1.05	-0.62
	Horticulture	-	-0.85	Other export crops	1.06	-0.57
Mozambique	Maize	1.42	-0.73	Traditional exports	1.48	-0.29
	All cereals	-	-0.65	Biofuel crops	0.83	-0.43
Rwanda	Maize	-	-2.39	Coffee	-	-1.81
	Pulses	-	-2.59	Теа	-	-1.63
				Other export crops		-2.27
Uganda	Roots	-	-1.07	All export crops	0.62	-0.64
	Horticulture	1.39	-1.38		-	-
Zambia	All cereals	1.63	-0.27	All export crops	0.30	-0.25
	Roots	1.88	-0.33		-	-

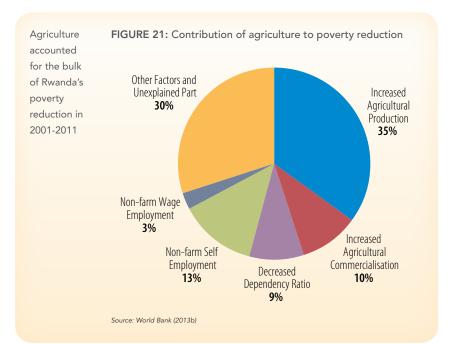
TABLE 1: Growth and poverty impact of different agricultural sub-sectors

⁷ African countries standing out for their strong agricultural export orientation include Côte d'Ivoire and Kenya, with Ethiopia, Ghana and Zambia recent African successes in terms of significant increases of their export shares, albeit from a low base.

avenue to increase the growth elasticity of poverty in these countries. In sum, while agricultural growth is generally propoor, policy should pay attention to growing smallholder staple crop productivity, despite the obvious political appeal of the fast growing agricultural niche markets, such as those of export-oriented horticultural products.

Different countries are pursuing different models to increase staple crop productivity, with varying degrees of success. For example, both Zambia and Rwanda report to have doubled their maize and cereal output respectively between 2006 and 2011 (Mason et al., 2011; World Bank, 2013b), with more than half of the increase coming from yield increases. The models followed to reach these outcomes were however quite different, including in their effects on poverty—which remained virtually stagnant in Zambia but declining rapidly in Rwanda. Zambia subsidized inputs to farmers and purchased maize at above-market prices, with the bulk of the inputs and benefits going to a small group of larger farmers who also produced the bulk of the marketed surplus. The 42 percent of households cultivating less than one hectare of land, who are also among the poorest of the poor, produced only 7 percent of the expansion in production. Also, while maize output per agricultural household nearly doubled, the mean household net value of total crop production (maize and non-maize) increased by only 20 percent due to substitution away from other high-value crops and higher input costs.

The Rwanda Crop Intensification Program, whereby (subsistence) farmers, who traditionally grow an array of crops on very small fields (on average less than 0.3 ha) are invited to pool their land and specialize in one crop depending on the agro-ecological environment, has been the workhorse of the new agricultural strategy of the government. In addition,



they get specialized extension services and are provided with fertilizer (at first at no cost; after the first harvest they buy at full price). Decompositions show that almost half (45 percent) of the reduction in poverty in Rwanda between 2001 and 2011 (most of which happened between 2006 and 2011, after the adoption of CIP) has been accounted for by developments in agricultural production (35 percent) and increased marketing of harvests (10 percent) (Figure 21).

Yet, no dominant agricultural success model has emerged so far, and adaptation to local circumstances remains key. The differential experiences of Zambia and Rwanda are illustrative in highlighting the importance of the right mix of rural public (extension services, coordination) and private good provision.

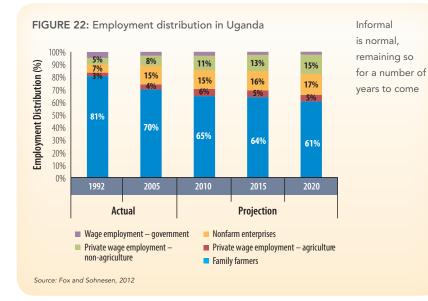
USHERING URBANIZATION - THE ROLE OF SECONDARY TOWNS

Africa's youth bulge and ensuing demographic dividend provides a third opportunity to convert its growth potential into more poverty reduction. After many years of rapid population growth, fueled by a decline in child mortality, fertility has also started to decline, resulting in a falling dependency ratio, which stands at 84 percent in 2011, compared with 94 percent at its peak in 1986-87. As Africa's youth bulge is about to enter the labor force, the continent is poised to capture a demographic dividend, which has been estimated to account for about a third of the rapid growth between 1960 and 1990 among East Asia's early growers. But productively absorbing the youth bulge into the labor force is not automatic.

First, and taking one step back, while fertility has come down substantially in some countries (such as Botswana and South Africa), it has essentially not yet started to decline in others (Niger and Uganda), and appears to have stalled for some time in yet others (Tanzania and Kenya), though with signs of a rejuvenated decline more recently. How to continue and accelerate the fertility transition remains an important policy challenge. Without exception, the most important proximate determinant of fertility remains girls' education. Africa's progress in closing the gender gap in primary school enrollment provides hope in this regard. Schooling postpones age at marriage and increases the use of modern contraceptives. The second is declining child mortality. On the supply side, family planning programs are often the intervention of choice to reduce fertility, with several studies suggesting that exposure to such programs could reduce completed fertility by up to one child.⁸ There are further indications that family planning programs may act as a substitute for formal education. This is especially important, given that they could have immediate effects among women currently of child-bearing age, many of whom have only limited formal schooling. They would thus form a timely, complementary intervention, while efforts continue in closing the gender gap in primary and secondary schooling and in reducing child mortality.

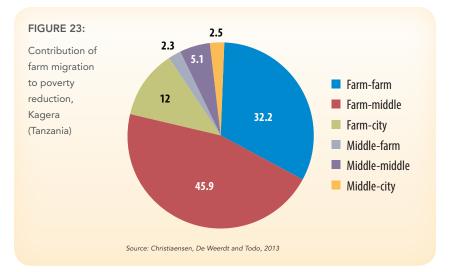
Second, when it comes to employment, the primary challenge is not unemployment per se, but rather to increase productivity in the informal sector. Formal unemployment rates are only 3 percent in Sub-Saharan Africa's low-income countries and, with the exception of South Africa, 8 percent in the lower-middle-income countries. Meanwhile, the vast majority of the population in low-income countries continues to be employed in the informal sector, both in agriculture (70 percent) and non-farm household enterprises (18 percent), with only 5 percent of the population engaged in formal wage employment. In lower-middle-income countries, the shares are 54, 21 and 15 percent respectively. In short, "informal is normal" and will remain so in the years to come as illustrated for Uganda (Figure 22), even under optimistic projections of growth in wage jobs, because they start from a very low base.

Third, along with the generation of off-farm jobs needed to employ Africa's youth bulge comes a spatial transformation, with people moving out of agriculture into urban settings. Even though urbanization rates remain well below those observed in the rest of the world, urbanization in Africa has accelerated over the past couple of decades, with much of the new urban population concentrating in the larger cities. Using census data from 42 Sub-Saharan countries. Dorosh and Thurlow (2013) find that in 2010 two-fifths of Africa's urban population already lived in big cities (i.e. one million or more), while two-fifths lived in small towns (less than 250,000 people). Moreover, urban growth is much faster in the big cities (6.5 percent per year during 1990-2010 versus 2.4 percent in the smaller towns).



Just as with agricultural growth processes, not all processes of urbanization are equally poverty reducing. The debate about the effects of urbanization in development has mainly been between (urban) proponents, emphasizing the benefits for economic growth from economies of scale and agglomeration externalities, and (rural) opponents, underscoring congestion effects and slum formation, seeing them primarily as forebears of new sources of poverty. We

⁸ Angeles et al. (1998, 2005), Miller (2010), Pörtner, Beegle, and Christiaensen (2012).



need to move beyond this rural-urban dichotomy to maximize the effects of urbanization on poverty. Indeed, there are increasing indications that the nature of urbanization (secondary town development versus metropolitization) may be more important for poverty and inequality reduction than urbanization itself.

There are at least three channels through which different urbanization patterns may lead to different poverty outcomes. On the one hand, as emphasized in the new economic geography literature, urban concentration or metropolitization may generate faster economic growth and more jobs given larger economies of scale and

agglomeration than in secondary towns. Secondly, the magnitude of the positive spillover effects (for example through remittances and rural nonfarm employment generation) on rural poverty in the hinterlands of metropoles may be larger, though the space and number of people affected may be smaller than those affected by secondary towns. On the other hand, the poor may find it easier to migrate to, and find jobs in, secondary towns in their proximity than in distant cities. Lower migration costs, the ability to maintain closer social ties with the areas of origin and possibly also the higher chance of finding a job, given better skill matching, might all lead the poor to favor migration to nearby towns to find off-farm employment and exit poverty.

There is both cross-country and case study evidence emerging supporting the view that migration out of agriculture into the rural nonfarm economy and secondary towns is conducive to faster poverty reduction. The findings from a unique, representative survey of rural Kagera, a region in northwestern Tanzania, spanning almost two decades (1991/4-2010) illustrate the point most strikingly. Tracking the welfare, occupation and location of 3301 individuals, 82 percent of whom were in agriculture when first surveyed during 1991/4, the researchers found that poverty declined by 28 percentage points, from 58 percent to 30 percent in 2010. More strikingly, close to half of the poverty reduction realized in the sample came from farmers moving out of agriculture into rural nonfarm activities and secondary towns, while 32 percent (304 out of 945) came from farmers who remained in farming. Only 12 percent came from farmers moving to cities. To be sure, incomes among those moving to the city (Dar es Salaam, Mwanza or Kampala) grew on average much faster than among those moving to the "middle" (by 233 percent versus 134 percent respectively). But the contribution to poverty reduction was much less, because many more found their way to the neighboring towns, where unemployment rates were also slightly lower.

In sum, Africa's youth bulge provides a unique opportunity for a demographic dividend provided jobs can be generated to productively absorb the world's new workforce. Most of these jobs will be in the informal sector, requiring sufficient attention to education and skill development, access to credit, and land tenure security to enable farm consolidation. Moreover, where these jobs will be located will be equally important to reducing poverty, calling special attention to the spatial prioritization of infrastructure development across different urban settings.

Good governance will need to underpin efforts to make growth more poverty reducing. Indeed, success in each of the above identified trajectories will critically depend on greater government-citizen accountability to discipline use of scarce public resources. This will require among others more regular and reliable statistics on the basic economic and welfare indicators to monitor progress and analyze the reasons for success and failure, especially in resource-rich countries and

fragile states, where the statistical base remains particularly wanting. Openness of all data of governments (as recently launched in Kenya) as well as effective alignment of all statistical activities with the national statistical development strategies (including, or especially, those funded by the donors) could already go some way. It would help Africa avoid another tragedy, this time statistical, after finally having turned the corner on its tragedy of growth.

References

- Alba, Eleodoro Mayorga. 2009. "Extractive Industries Value Chain: A comprehensive integrated approach to developing extractive industries." Africa Region Working Paper Series #125.
- Angeles, Gustavo, David K Guilkey, and Thomas A Mroz, 1998. "Purposive Program Placement and the Estimation of Family Planning Program Effects in Tanzania." *Journal of the American Statistical Association* 93(443): 884–899.
- -----,2005. "The Effects of Education and Family Planning Programs on Fertility in Indonesia." *Economic Development* and Cultural Change 54(1): 165–201
- Barma, N., K. Kaiser, T.M. Le, and L. Viñuela. 2012. *Rents to Riches? The Political Economy of Natural Resource -Led Development*. World Bank, Washington, D.C.
- Christiaensen, Luc, Joachim De Weerdt, and Yasuyuki Todo, 2013. "Urbanization and Poverty Reduction – The Role of Rural Diversification and Secondary Towns." *Agricultural Economics*, forthcoming.
- Christiaensen, Luc, Lionel Demery, and Jesper Kuhl. 2011."The (Evolving) Role of Agriculture in Poverty Reduction." *Journal of Development Economics*, 96-2: 239-254.
- Christiaensen, Luc, Peter Lanjouw, Jill Luoto, and David Stifel. 2012. "Small area estimation-based prediction methods to track poverty: validation and applications." Journal of Economic Inequality, Springer, vol. 10(2), pages 267-297, June.
- Christiaensen, Luc, Punam Chuhan-Pole, and Aly Sanoh. 2013. "Africa's Growth, Poverty and Inequality Nexus - Fostering Shared Prosperity." Forthcoming.
- Datt, Gaurav, and Martin Ravallion. 2011. "Has India's Economic Growth Become More Pro-Poor in the Wake of Economic Reforms?" *World Bank Economic Review*, vol. 25(2), pages 157-189, February.
- Demombynes, Gabriel, and Sofia Karina Trommlerová. 2012. "What has driven the decline of infant mortality in Kenya?" Policy Research Working Paper 6057. World Bank, Washington, D.C.
- Devarajan, Shantayanan. 2013. "Africa's Statistical Tragedy." *Review* of *Income and Wealth*, January.
- Diao, X. P. Hazell, and J., Thurlow. 2010. "The Role of Agriculture in African Development. *World Development*, 38(10): 1375-1383.
- Dorosh, Paul, and James Thurlow. 2012. "Can Cities or Towns Drive African Development? Economy-wide Analysis for Ethiopia and Uganda. "Working Papers UNU-WIDER Research Paper. World Institute for Development Economic Research (UNU-WIDER).
- FAO. 2013. GIEWS Food Price Data.
- Fox, Louise, and Thomas Sohnesen. 2012. "Household Enterprise in Sub-Saharan Africa - Why they matter for growth, jobs and livelihoods." Policy Research Working Paper 6184. World Bank, Washington, D.C.

- Fuglie, K. 2011. "Agricultural Productivity in Sub-Saharan Africa." In *The Food and Financial Crises in Sub-Saharan Africa*, D. R. Lee and M. B. Ndulo, eds. Wallingford, UK: CAB International.
- Gauthier, Bernard and Waly Wane. 2009. "Leakage of Public Resources in the Health Sector: An Empirical Investigation of Chad." *Journal of African Economies*, vol. 18(1), pages 52-83, January.
- Grimm, Michael, and Isabel Günther. 2006. "Growth and poverty in Burkina Faso – a reassessment of the paradox." *Journal of African Economies*: 16(1), 70–101.
- Jerven, Morten. 2013. Poor Numbers. How We Are Misled by African Development Statistics and What To Do About It, Cornell University Press, Ithaca, NY, 2013.
- Loayza, Norman and Claudio Raddatz. 2010. "The Composition of Growth Matters for Poverty Alleviation." *Journal of Development Economics* 93 (1): 137–151.
- Mason, Nicole, William J. Burke, Arthur Shipekesa, and T.S. Jayne. 2011. "The 2011 Surplus in Smallholder Maize Production in Zambia: Drivers, Beneficiaries, and Implications for Agricultural and Poverty Reduction Policies." Food Security Research Project Working Paper No. 58.
- Miller, Grant, 2010. "Contraception as Development? New Evidence from Family Planning in Colombia." *The Economic Journal* 120 (545): 709–736.
- Moss, Todd. 2011. "Oil-to-Cash: Fighting the Resource Curse through Cash Transfers." Center for Global Development Working Paper 237.
- Pörtner, Claus, Kathleen Beegle, and Luc Christiaensen. 2011. "Family Planning and Fertility – Estimating Program Effects Using Cross-Sectional Data." Policy Research Working Paper 5812. World Bank, Washington, D.C.
- Ravallion, Martin and Shaohua Chen. 2007. "China's (Uneven) Progress Against Poverty." *Journal of Development Economics*, 82(1): 1-42.
- Sala-i-Martin, Xavier, and Arvind Subramanian. 2003. "Addressing the Natural Resource Curse: An Illustration from Nigeria." IMF Working Paper WP/03/139.
- Sandefur, Justin. 2012. "Statistical Independence and the missing macro-economics of Africa." CSAE Newsletter 07: 8-10, Oxford University: Oxford.
- World Bank, 2007. World Development Report 2008: Agriculture for Development. World Bank, Washington, D.C.
- World Bank. 2012. Africa Can Feed Africa: Removing barriers to regional trade in food staples. World Bank, Washington, D.C.
- World Bank. 2013a. Growing Africa Unlocking the Potential of Agribusiness. World Bank, Washington, D.C.
- World Bank. 2013b. "Rwanda Economic Update. Fourth Edition. Maintaining the Momentum – With a Special Focus on Rwanda's Pathway out of Poverty. "World Bank, Washington, D.C.
- World Bank. 2013c. "Food Price Watch Issue 13." World Bank, Washington, D.C.

