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Making the Most of Africa's Growth

LUC CHRISTIAENSEN AND SHANTAYANAN DEVARAJAN

Over the past decade, sub-Saharan Africa has been experiencing economic growth of almost 5 percent per year. Today, 21 African countries are considered "middle income." Ten more are projected to get there by 2025. Large prospective revenues from mineral exploitation, vast land resources in an era of high food prices, a demographic dividend from the world's youngest population, and economic efficiencies associated with rapid urbanization provide further grounds for optimism. "African lives have already greatly improved over the past decade. The next 10 years will be even better," *The Economist* proclaimed in a March 2013 special report, "Emerging Africa: A Hopeful Continent."

Inequality On the Rise

Eighth in a series

But concerns are rising that the newfound momentum is not benefiting the population at large. Bob Collymore, chief executive of Safaricom, Kenya's leading telecom company, recently told *The Financial Times*, "People are now driving bigger and bigger BMWs and bigger and bigger Range Rovers; but [the poor] are in the same place and that, I think, presents us with a bigger challenge." What precisely has Africa's record been in improving livelihoods since the growth recovery began in the 2000s? What role does inequality play in this process? And how could even more be made of growth to reduce poverty?

While the quality of Africa's national accounts and its poverty and price statistics all remain wanting to different degrees and in desperate need of repair, the broad picture emerging is one of robust growth and some progress in poverty reduction, but less than what could have been, especially in many of the region's resource-rich countries. High initial inequality will continue to slow the conversion of Africa's growth to poverty reduction, but important new opportunities for more and more broadly distributed prosperity are also arising, in light of a spate of mineral discoveries, agricultural potential, and the ongoing population and urbanization dynamics.

In particular, ensuring that all citizens share in mineral wealth, focusing on smallholder staple crop productivity, and promoting secondary town development could go some way toward making the most of these opportunities. Above all, African governments will have to become more accountable. Transparent and open-access statistics are just one component of this accountability, but an important one.

RESOURCE-RICH, RESOURCE-POOR

After several years of contraction during the 1980s, economic growth in Africa picked up in the mid-1990s, with per capita GDP expanding at 2.4 percent per year. Better macroeconomic policies, a substantial reduction of debts, increased aid flows, and a sharp reduction in fertility in some countries, most recently in Rwanda, all contributed to this turnaround. Buoyant commodity prices and the expansion of mineral resource exploitation also played an important role: GDP per capita between 1996 and 2011 grew 2.4 times faster in resource-rich countries than in resource-poor countries.

Solid growth performance has also been recorded among some resource-poor countries, such as Ethiopia, Rwanda, and Mozambique (income from mineral rents has only made an impact in Mozambique since 2004). In these countries, services and agriculture have driven growth. Contrast this with the growth pattern in Angola, Nigeria, and

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Zambia, three of Africa's long-standing resource-rich and faster-growing nations, where services and resource revenues 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 only 1 percentage point in the three fast-growing resource-rich countries. There is also larger volatility in the growth pattern of the resource-rich countries, mainly reflecting the volatility in resource prices. The contribution of manufacturing or other (non-mineral) related industries remains modest in both groups.

UNEVEN PROGRESS

Recent trends point to progress in the fight against poverty. Between 1996 and 2008, the share of sub-Saharan Africans living on less than $1.25 per day declined from an estimated 58 percent to 47.5 percent, and the decline accelerated in the latter years (from 52.3 percent in 2005 to 47.5 percent in 2008). As a result, the absolute number of poor people in the region has for the first time begun to fall, despite continuing annual population growth of 2.5 percent. In 2008, the number of poor people was estimated at 386 million, compared with 395 million in 2005.

Concerns are rising that the newfound momentum is not benefiting the population at large.

This picture of average progress hides a great deal of diversity in performance, even among Africa's faster growers. During the second half of the 2000s, Ethiopia and Rwanda saw their economies expand between 5 percent and 7 percent per capita, resulting in a 1.3 to 2.4 percentage point *annual* reduction in the national poverty headcount. In contrast, the national poverty headcounts were estimated to have declined by only 1 to 2.5 percentage points *during the whole period* of 1996–2008 in Nigeria, Zambia, and Tanzania, despite robust annual growth per capita of about 4 percent.

Leaving out the most fragile countries, the poverty rate declined substantially more among resource-poor countries compared with resource-rich countries (from an estimated 65 percent during 1995–2000 to an estimated 48.7 percent during 2008–11 among the former group, compared with an estimated decline of only 7 percentage points among the six resource-rich countries for which data are available). On average, poverty seems to have continued its downward trend since 2008, despite global food, fuel, and financial crises.

Progress has also been recorded in Africa's human development, especially in education, with (net) primary school enrollment increasing from 52 percent to 70 percent between 1995 and 2010. Average child mortality declined from 175 to 125 per 1,000 births between 1990 and 2010. But at 37 percent and 22 percent, levels of adult illiteracy and child malnutrition, respectively, remain high. Resource-rich countries continue to underperform their resource-poor counterparts, despite higher GDP growth over the past decade and a half, and higher income levels on average.

Inequality in sub-Saharan Africa is already high. The Gini coefficient (a widely used measure that ranges from zero, which represents perfect equality, to 1, which represents perfect inequality—that is, one person controlling all resources) is .45. While higher Gini coefficients have been recorded elsewhere, especially in Latin America (for example, between .55 and .60 in Brazil), these are typically based on income, as opposed to consumption measures, which are more commonly available in sub-Saharan Africa. Given that part of income is usually redistributed (via taxation), income-based Ginis are typically higher than consumption-based Ginis.

Surprisingly, according to the data available, inequality in sub-Saharan Africa appears to have edged up in resource-poor states. This may partly reflect difficulties in capturing incomes of the very rich with the household survey instrument. But, overall, Africa's high inequality raises important questions regarding the poverty-reducing power of its future growth.

FIX THE STATISTICS

How much poverty reduction has Africa's growth brought compared with similar growth performances in the rest of the world, and what does this imply for the future? Could more rapid poverty reduction be attained, and if so, how? In addressing these questions, the dire state of Africa's statistics deserves attention first.

Disconcertingly, and contrary to experience in the rest of the world, no statistically sound relationship can be discerned between changes in poverty

and changes in GDP per capita from the sub-Saharan African sample for the 1980–2010 period. To be sure, no one-to-one correlation should be expected, given that private consumption is only one component of GDP. Also, the situation is not totally unique to Africa—similar discrepancies have been observed recently in India. However, these discrepancies do highlight the continuing shortcomings of development statistics in Africa. There is also little correlation between growth in the private consumption part of the national accounts and private consumption recorded in the household surveys. In the rest of the world, a 1 percent increase in GDP in the national accounts yielded on average a 0.85 percent increase in average private consumption in the surveys.

The statistical foundations for GDP per capita, inequality, and poverty estimates on the continent remain wanting, a situation dubbed by one of us (Devarajan, in the January 2013 *Review of Income and Wealth*) as "Africa's statistical tragedy." GDP accounts often use old methods. More often than not, population censuses are out of date. Poverty estimates are irregular, especially in resource-rich countries and fragile states. There have been on average 1.7 household expenditure surveys during 1995–2011 (averaged over all 49 countries, including those with no surveys at all).

Household survey coverage is generally lower in resource-rich countries and least adequate in fragile states. And the results often are not comparable over time due to changes in survey design and inadequate adjustments for inflation. 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, the lower frequency of household surveys in resource-rich countries may not be a surprise.

Poverty and Growth

Looking at changes in poverty and per capita consumption expenditure from household surveys instead of GDP data, measures that are at least internally consistent, we find that 1 percent growth in consumption per capita is estimated to reduce poverty by 0.69 percent in Africa. This is the growth elasticity of poverty. The comparable figure for the rest of the world is 2.02 percent. As a taxi driver in Senegal put it, "I can't eat growth."

Three factors underpin this difference between Africa and the rest of the world. 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 reduces the consumption elasticity of poverty. But this is just arithmetic. Second, high initial inequality dampens the poverty-reducing effects of economic growth. Third, the sources of growth also matter for poverty reduction, with growth in labor-intensive sectors (such as agriculture and manufacturing) typically having greater poverty-reducing effects than growth in capital-intensive sectors (such as mineral exploitation).

In addition, when two development strategies generate the same amount of economic growth, a strategy that also increases inequality will be less effective at reducing poverty, while one that reduces inequality will be more effective. Econometric evidence suggests that in Africa, growth in resource dependence is associated with increasing inequality. No similar patterns are found in the rest of the world. This counsels further caution about the expected effects of mineral-driven growth on poverty. Not only does growth in more mineral-dependent economies have less of an effect on poverty today, but by increasing inequality it also undermines the poverty-reducing effect of future growth.

Revenue Sharing

Continued demand for Africa's natural resources, as well as the recent discoveries of oil, gas, and minerals in, among other countries, Ghana, Uganda, Kenya, Tanzania, and Mozambique, make mineral exploitation an important source of (nonagricultural) growth for Africa moving forward. In fact, by 2020, only four or five countries in the region will not be involved in large-scale mineral exploitation. Neglecting these resources is not an option. Governments will want to exploit their natural resource bases to build and fuel their economies and improve the lives of their people—and the world will want them to do so, too. Given that poor people generally do not work in mineral extraction industries, the question is how more of the resource wealth can be converted into effective public spending for rapid poverty reduction and better human welfare outcomes.

Increasingly the debate has turned to how institutions and natural resources interact. Three areas of governance challenges in converting resource

wealth into human development have been highlighted. One is extraction and the importance of transparency regarding terms of contracts. Second is taxation and the efficiency of tax collection. Finally there is the investment of resource rents and the prioritization of public investments. Recent Publish What You Pay proposals and the so-called Extractive Industries Transparency Initiatives (EITI) have focused on the first area, with mining companies and governments disclosing what they pay and what they earn. Nineteen African countries are now part of the EITI, of which eight are compliant with all requirements.

Bottom-up accountability (addressing all three areas) could be strengthened, as several scholars have suggested, by directly distributing a small share of the resource wealth universally and uniformly to the citizens. This proposal rests on the observation that mineral rents are fundamentally different from other forms of fiscal revenues—they go directly from the extracting company to the government. As a result, citizens may not know how much resource revenue is reaching the public coffers, let alone how it is being spent. And since it does not immediately concern their hard-earned and reluctantly paid tax dollars, citizens have less incentive to find out, further reducing scrutiny of public spending. This only encourages the tendency innate in human nature to spend easily obtained income less carefully, as reflected in the global saying, "easy come, easy go." Taken together, these factors foster inefficient public spending, or worse, corruption, which in turn fosters inequality, as more money ends up in the hands of entrenched elites.

UNIVERSAL AND UNIFORM

To break this cycle, a portion of resource revenues could be transferred directly to the citizens—more specifically, a *fixed proportion* to *everyone* (universal) and in the *same* amount (uniform), with all three elements being essential. It would then be in the citizens' immediate interest to scrutinize the amount of mineral wealth received by the government, because misreporting and leakages would reduce the dividend they receive. Under greater scrutiny, governments might well become more effective in the provision of public goods. And by directly increasing citizens' incomes, this system would also empower them and help them overcome financial constraints in, say, buying fertilizer and modern seeds, setting up a business, or investing in their children's education.

While new to Africa, such schemes are already used in Alaska and Alberta. Simple simulations indicate that 10 percent of the expected resource rents uniformly and universally distributed across the population could more than eliminate the poverty gap among the poor, that is, the distance at which the poor find themselves under the (national) poverty line, in some of the smaller traditionally resource-rich countries (such as Equatorial Guinea and Gabon), or substantially reduce it in the larger countries (Angola and Nigeria). Sizable reductions in the poverty gap could also be achieved in nations with emerging mineral riches (Tanzania, Mozambique).

An oft-heard objection holds that identifying recipients and transferring money will be technically difficult and costly. But governments have gathered considerable experience in distributing transfers to large parts of their populations through social assistance programs, as well as seed and fertilizer voucher programs. Universal and uniform distribution will also be much easier now that biometric identification (as in India) and mobile money transfer services (such as M-Pesa, popular in Kenya and Tanzania) are cutting costs dramatically.

On the political front, incumbent rulers, parties, or interest groups would have little incentive to give up control over natural resources. But with political competition in Africa expanding, opposition parties might find calling for direct resource transfers to be a popular message. Moreover, by making the transfers uniform and universal, nobody will be excluded and everyone will get his or her "fair" share.

In terms of economic efficiency, some governments may need any additional revenue to supply public goods (infrastructure, vaccination programs, primary schooling) before engaging in private transfers. Yet transfers in resource-rich countries are already a reality today. For example, in 2011, the government of Zambia spent over 2 percent of its national GDP in supporting maize production through purchasing crops at above-market prices and subsidizing inputs. And fuel subsidization has been common in oil-rich countries like Nigeria, where it amounted to 30 percent of the government's expenditure or about 4 percent of GDP in 2011, compared with 2.9 percent of GDP for the transfer of 10 percent of resource rents proposed above.

Moreover, while poor and rich alike would equally benefit from direct dividend transfers,

fertilizer and fuel subsidies are regressive. They go disproportionately to the richer segments of the population. Small farmers (less than 1 hectare) received on average 24.1 kilograms of subsidized fertilizers in 2010–11 in Zambia; large farmers (10–20 hectares) 345.6 kilograms. And when it comes to fuel subsidies, the poor use primarily public transport. Direct dividend transfers could finance private goods more equitably and efficiently, while simultaneously increasing the efficiency of public good provision through increased citizen scrutiny. By fixing it as a proportion of total revenues, the effect of fluctuations in international commodity prices on fiscal revenues is also mitigated.

Critics suggest that, for the same reason governments may apply less scrutiny to spending from resource windfalls, so may citizens spend their transfers more freely on non-basic goods (including non-staple foods), as for example demonstrated in Tanzania. While real, however, the differences in spending patterns remain relatively small in practice. Moreover, if this extra spending translates into increased demand for locally produced goods and services as opposed to imports, which is more likely when handed out to the population at large, the local multiplier effects can be large.

High initial inequality dampens the poverty-reducing effects of economic growth.

Direct dividend transfer programs are promising as an additional instrument to reduce inequality and increase the poverty-reducing powers of economic growth in resource-rich countries. They reduce pressures to nationalize resources, which often weakens incentives for private investment and production efficiency, while strengthening the accountability links between the state and its citizens. Just as Mexico pioneered conditional cash transfer programs through the introduction of Progresa in 1997, an African country could show the world how to manage a direct dividend transfer program.

STRENGTHEN 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 the region's urban food markets also set to quadruple over the next two decades, domestic and regional markets offer additional, attractive opportunities for African 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). And last but not least, growth coming from agriculture *on average* has proved to have at least twice the poverty-reducing impact of growth coming from other sectors.

Much of this opportunity in agriculture has yet to be captured. In the mid-2000s, Africa converted from a net exporter of agricultural products to a net importer, with many of the mineral-dependent economies becoming large net importers. Much of the growth in imports concerns staples, especially rice, but also wheat and sugar, for the rapidly expanding urban populations, as well as milk products and poultry. Except for wheat, which is a temperate-zone crop, these are all products in which Africa enjoys a comparative advantage.

However, just as with overall economic growth, not all agricultural growth is poverty-reducing. Results differ across subsectors, as well as with farming methods and agrarian structure. Agriculture's GDP growth rate in Brazil, for example, has substantially exceeded that of the rest of the economy over the past 15 years. But given the large-scale, capital-intensive nature of this expansion, with limited use of mainly higher skilled labor, it has not been a major contributor to poverty reduction. The latter in Brazil was mainly driven by transfers and the generation of rural nonfarm employment.

In Africa, the key lies in increasing productivity in staple crop production. Staple crop yields remain way below potential, with maize yields reaching only 20 percent of their (experimental station) potential and cash crops reaching 30 to 50 percent. Progress appears to be on the way in some countries. In Rwanda over a five-year period (2006–11), cereal yields and the yields of roots and tubers increased by 73 percent and 52 percent respectively; the poverty headcount rate dropped by 12 percentage points.

Country-specific, model-based simulations for a number of African countries confirm that increasing smallholder staple-crop productivity (as opposed to export crops) generates the largest poverty reduction. While export crops typically have higher value and growth potential, staple crops are usually more effective at producing economy-wide growth and reducing national poverty. This follows from their larger economy-wide

multiplier effects and their larger poverty-to-GDP elasticities—1 percent growth in agriculture driven by cereal or root/tuber productivity growth generates a larger decline in national poverty than a 1 percent increase in agriculture driven by growth in export crops. The results also hold in resource-rich countries such as Zambia and Nigeria, underscoring agriculture as another oft-neglected but important avenue to increase poverty-to-GDP elasticity in resource-rich countries.

Dramatically increasing staple output and yields is possible, as demonstrated by Zambia and Rwanda, which reported doubling their maize and cereal output respectively between 2006 and 2011, with more than half of the expansion coming from higher yields. Yet poverty remains virtually stagnant in Zambia, whereas it is declining rapidly in Rwanda. Zambia has emphasized subsidizing inputs to farmers and purchasing maize at above-market prices, with the bulk of the inputs and benefits going to a smaller group of larger farmers who also produce most of the marketed surplus.

In Rwanda, on the other hand, 45 percent of the reduction in poverty between 2001 and 2011—most of which happened between 2006 and 2011, after the adoption of the country's Crop Intensification Program (CIP)—has been accounted for by expansion of agricultural production and increased marketing of harvests. The CIP has been the workhorse of the Rwandan government's new agricultural strategy. Under the program, subsistence farmers, who traditionally grow an array of crops on very small fields (on average less than 0.3 hectares), were invited to pool their land and specialize in one crop, depending on the agro-ecological environment. In addition, they receive concerted extension services and are provided with fertilizer (at first at no cost, then after the first harvest they are charged full price).

Nonfarm self-employment also has played an important role in Rwanda (13 percent of total poverty reduction), as has a decline in the dependency ratio—the ratio of very young and very old to the working-age population (this factor accounted for 9 percent of poverty reduction). Nonfarm wage employment only accounted for 3 percent of the poverty reduction.

To be sure, no dominant agricultural success model has emerged so far, and adaptation to local circumstances remains key. Rwanda's extremely high population density (416 persons per square kilometer), for example, is quite distinctive. At the same time, the different experiences of Zambia and Rwanda are illustrative of the importance of the right mix of rural public and private good provision by the state.

TOWN AND COUNTRY

Africa's youth bulge and ensuing demographic shifts provide 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 stood at 84 percent in 2011, compared with 94 percent at its peak in 1986–87. As the youth bulge is about to enter the labor force, Africa is poised to capture a demographic dividend that has been estimated to account for about a third of the rapid growth among East Asian nations. But once again, productively absorbing the youth bulge into the labor force is not automatic.

In Africa, growth in resource dependence is associated with increasing inequality.

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 renewed decline more recently. How to continue and accelerate the fertility transition remains an important policy challenge, with a complementary role for family planning programs.

Second, when it comes to employment, the primary challenge is not unemployment per se, but rather to increase productivity in the informal sector. The vast majority of the population in low-income countries continues to be employed in the informal sector, both in agriculture (70 percent) and informal household enterprises (18 percent). In short, informal will remain normal for many years to come, even under optimistic projections of growth in wage jobs, because they start from a very low base.

Third, much of Africa's youth bulge will be employed in urban centers. Indeed, urbanization in Africa has accelerated, with big cities (1 million plus) growing much faster over the past two decades than smaller towns (less than

250,000), at 6.5 percent versus 2.4 percent, respectively. And just as not all nonagricultural and agricultural growth processes are equal in poverty reduction, so are processes of urbanization unequal in their effects. There are at least three channels through which different urbanization patterns (secondary town development versus "metropolitization") may lead to different poverty outcomes.

As emphasized in new economic geography scholarship, urban concentration or metropolitization may generate faster economic growth and more jobs given larger economies of scale and agglomeration than in secondary towns. In addition, the magnitude of positive spillover effects (for example, through remittances and rural nonfarm employment generation) on rural poverty in the hinterlands of large cities may be greater, though the space and number of people affected may be smaller than those affected by secondary towns. Finally, the poor may find it easier to migrate to and find jobs in secondary towns in their vicinity, instead of going to distant cities. Lower migration costs, the ability to maintain closer social ties with their areas of origin, and possibly also the higher chance of finding a job, given better matches of skills, might all lead the poor to favor migration to nearby towns in search of nonfarm employment and an escape from poverty.

Today, there is emerging evidence supporting the view that migration out of agriculture into the rural nonfarm economy and secondary towns is conducive to faster poverty reduction. For example, by tracking a representative sample of individuals from rural Kagera, a region in northwestern Tanzania, it was found that poverty among them had declined from 58 percent in 1991–94 to 30 percent in 2010. Close to half of this decline had come from farmers moving out of agriculture into rural nonfarm activities and secondary towns, 32 percent from farmers who had remained in farming, and only 12 percent from farmers who had moved to the big cities (Dar es Salaam, Mwanza, or Kampala).

While those moving to the cities also saw their incomes grow much faster, the critical finding from a poverty perspective is that most of those who exited poverty did so by finding their way to neighboring towns. Recent econometric analysis of experience across countries confirms that rural diversification and secondary town development are associated with more inclusive growth patterns and faster poverty reduction than metropolitization, which is associated with faster growth and higher inequality.

While more investigation is needed to better understand these mechanisms, it seems likely that the ability of the rural poor to connect with growth in nearby towns will be key to poverty reduction and reduced inequality in Africa. This calls for the spatial prioritization of infrastructure development across different urban settings. Given the irreversibility of urbanization patterns once infrastructure is locked in place, these patterns deserve much more attention than they currently get. The debate needs to shift from the dichotomy between rural and urban development to the nature of a country's urbanization and its degree of urban concentration.

ACCOUNTABILITY, PLEASE

Success in each of these three trajectories aimed at reducing inequality and increasing the poverty-reducing effects of Africa's future economic growth (sharing of mineral wealth, smallholder staple crop productivity, and secondary town development) will critically depend on greater accountability of governments to their citizens. That economic growth has not led to faster poverty reduction is mostly due to the fact that citizens, especially poor citizens, have not been able to discipline governments in the scarce use of public resources, or to compel reform of policies that traditionally have supported elites.

A fundamental aspect of greater accountability is the provision of regular and reliable statistics on the basic economic and welfare indicators, which are necessary to monitor progress and analyze the reasons for success and failure. Especially in resource-rich countries and fragile states, the statistical base remains weak. Mandatory openness of all government data (as recently adopted in Kenya) as well as mandatory alignment of all statistical activities with the national statistical development strategies (including, or especially, those funded by donors) would go some way toward instilling accountability. It would help Africa turn the unprecedented opportunity of economic growth into more sustained reduction of poverty and inequality. ■