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AFRICA'S STATISTICAL TRAGEDY

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While Africa may have overcome its growth tragedy, it is facing a statistical tragedy, in that the statistical foundations of the recent growth in per-capita GDP and reduction in poverty are quite weak. In many countries, GDP accounts use old methods, population censuses are out of date, and poverty estimates are infrequent and often not comparable over time. The proximate reasons have to do with weak capacity, inadequate funding, and a lack of coordination of statistical activities. But the underlying cause may be the political sensitivity of these statistics, and some donors' tendency to go around countries' own National Statistical Development Strategies (NSDS). Greater openness and transparency of statistics, and a higher profile for the NSDS, possibly with "naming and shaming" of those who try to circumvent it, may help Africans turn around their statistical tragedy.

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Fifteen years ago, Easterly and Levine (1997) published a paper entitled "Africa's Growth Tragedy," highlighting the disappointing performance of Africa's growth, and the toll it has taken on the poor. Since then, growth has picked up, averaging 5–6 percent a year, and the poverty rate is declining at about one percentage point a year, with the absolute number of poor people falling by 9 million between 2005 and 2008 (Figure 1 and Table 1).

Today, the continent suffers from a different tragedy, Africa's Statistical Tragedy. This may not sound as serious as the growth tragedy, but it too exerts a toll on Africa's poor. I just said that growth has picked up since the mid-1990s and, thanks to that growth, poverty is declining. The "statistical tragedy" is that we cannot be sure of either of these phenomena.[1]

Consider economic growth, which is measured in terms of growth in GDP. GDP in turn is measured by national accounts. While there has been some progress, only half the countries (housing 68 percent of Africa's population) use the 1993 UN System of National Accounts; the others use earlier systems, some dating back to the 1960s (Table 2).

Note: This paper is a revised version of my keynote speech at the 2010 IARIW–SSA conference on "Measuring National Income, Wealth, Poverty and Inequality in African Countries." I am grateful to Derek Blades, Stephan Klasen, Rose Mungai, and Antoine Simonpietri for valuable comments. The views expressed are not necessarily those of the World Bank.

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[1]In this special issue, Jerven (2013) also questions the growth statistics, while Harttgen *et al.* (2013) scrutinize some of the estimates of poverty decline based on changes in asset ownership, such as Young (2010).

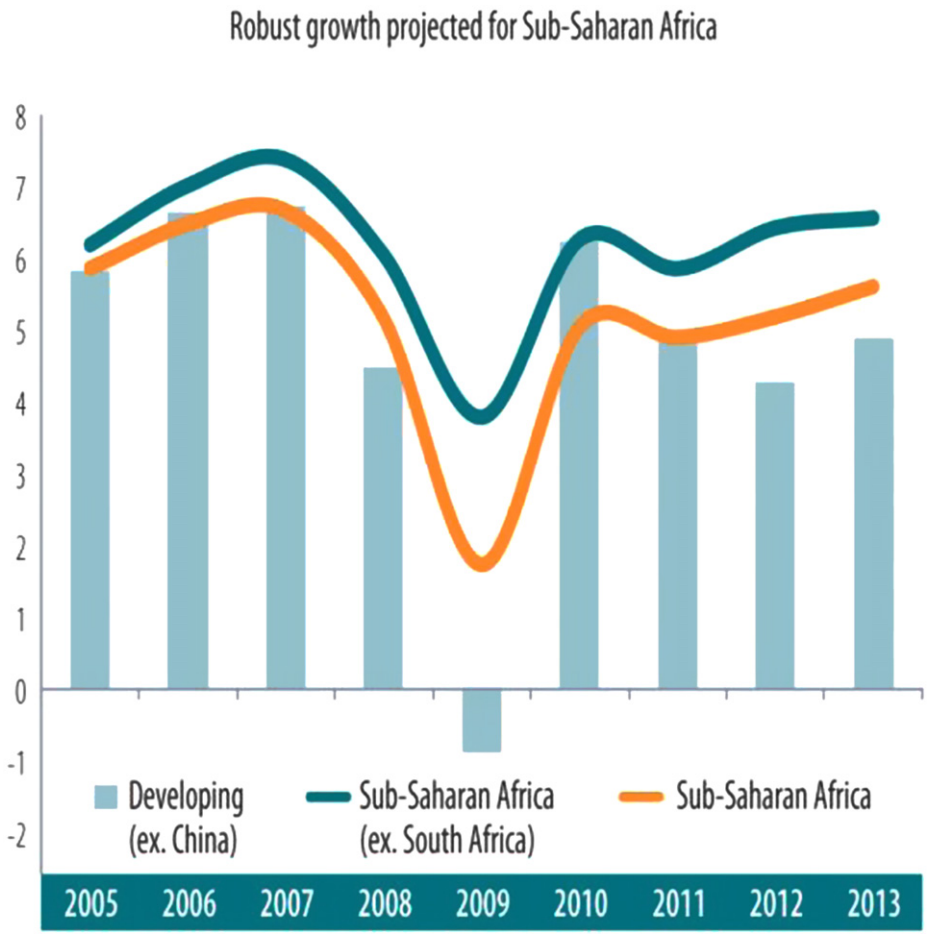

Figure 1. Growth in Africa

Source: *Africa's Pulse*, April 2012.

That this is not an arcane point is illustrated by the case of Ghana, which decided in 2010 to update its GDP to the 1993 system.[2] The update also provided an opportunity to review in-depth the basic data underlying the country's GDP estimates. The combination of improved basic data sources and adoption of the 1993 system led to Ghana's GDP being 62 percent higher than previously thought. Ghana's per capita GDP is now over $1000, making it a middle-income country. Their debt-to-GDP ratio is much lower. Newspaper reports of Ghana's remarkable "growth" in GDP prompted several other countries to consider revising their national accounts. Malawi, for example, recently revised its GDP estimates by over 30 percent (Young, 2010).

[2]The paper by Jerven (2013) in this special issue discusses the issue of the unreliability of the GDP statistics (and its causes) in more detail.

TABLE 1
POVERTY IN AFRICA

$1.25 Per Day Per Capita			$2 Per Day Per Capita	
Year	Headcount	Number of Poor (Million)	Headcount	Number of Poor (Million)
2008	47.5	386.0	69.2	562.1
2005	52.3	394.8	74.1	558.9
2002	55.7	390.2	76.1	533.2
1999	57.9	376.0	77.4	502.7
1996	58.1	349.2	77.5	465.8
1993	59.4	330.0	78.1	433.9
1990	56.5	289.7	75.9	389.1
1987	54.4	256.6	74.3	350.4
1984	55.2	239.1	74.7	323.8
1981	51.5	204.9	72.2	287.6

Source: PovcalNet.

TABLE 2
USE OF SNA METHODOLOGIES: NUMBER OF COUNTRIES, SHARE OF AFRICAN GDP AND POPULATION

	SNA68	SNA93	SNA2008	Total
Countries	20	27	1	48
Countries (%)	42%	56%	2%	100%
GDP	21%	79%	0%	100%
Population	31%	68%	0%	100%

Source: Country websites (accessed in July 2012), DECDG.

The "tragedy" is that the development community was happily publishing GDP statistics and growth figures for Ghana over the last decades, pointing out how well the country had been doing. Now we have to revise those figures. So in fact we did not know how well Ghana was doing.

There is a related problem with population statistics. Most of these are extrapolated from the last census. Since the standard for population census periodicity is 10 years, extrapolation is largely the rule. However, in Africa, only 32 countries representing 65 percent of the total population have had a census during the last 10 years. In Angola, for instance, the most recent census was in 1975. Ethiopia, Africa's third most populous nation, had its first census covering the whole country only in 2007. In Nigeria, population head-counts are prone to inflation (because they affect fiscal transfers to states) and often controversial. In short, in presenting GDP per capita for many African countries, we cannot be sure of either the numerator or the denominator.

The quality and timeliness of GDP and population statistics are actually reasonable when compared with poverty statistics. As we said earlier, Africa's poverty rate, defined as the percentage of people living on $1.25 a day, declined from 58 percent in 1999 to 47.5 percent in 2008. Inasmuch as this was the period of relatively rapid economic growth, economists and others have welcomed these results, not least because they confirm the basic principle that growth reduces poverty.

TABLE 3
REGIONAL AVERAGES FOR $1.25/DAY POVERTY (2008)

Region	Pov. Line (PPP$/mo)	Headcount (%)	Pov. Gap (%)	Squared Pov. Gap	No. of Poor (mil.)	Population (mil.)	Survey Coverage
East Asia and Pacific	38.00	14.34	3.41	1.18	284.36	1983.01	93.60
Europe and Central Asia	38.00	0.47	0.15	0.13	2.23	473.74	89.90
Latin America and the Caribbean	38.00	6.47	3.26	2.34	36.85	569.54	94.50
Middle East and North Africa	38.00	2.70	0.60	0.24	8.64	320.03	46.70
South Asia	38.00	35.97	8.63	2.94	570.73	1586.69	97.90
Sub-Saharan Africa	38.00	47.51	20.62	11.75	386.02	812.50	71.90

Source: http://iresearch.worldbank.org/PovcalNet/index.htm (accessed Oct 22, 2012).

The situation becomes gloomier when we examine what those percentages represent. The 2008 estimate, for instance, represents robust statistics from a sample representing only 72 percent of the African population (Table 3). For the rest of the countries, the poverty estimates were extrapolated from the most recent survey.

To be sure, such extrapolation is necessary when trying to obtain a global or regional estimate of poverty. What about poverty within a country over time? The situation is not much better here. Over half the African countries have poverty estimates that are not comparable over time. For only 33 percent of the countries are the data comparable. The remaining 16 percent only have one estimate. I recall presenting an assessment of the Poverty Reduction Strategy Paper for Guinea-Bissau at the World Bank's Board. Because of conflict and other difficulties, Guinea-Bissau had only one household survey and hence only one estimate of poverty. The Board Chair turned to me and said, "Shanta, how can you talk about poverty *reduction* with only one data point?"

Even when there are two data points, the most recent estimate is typically five years old (Table 4). Whereas the developing world has an average of 3.9 estimates of poverty since 2001, Africa has 1.7.

In short, even the economists' celebratory estimate of poverty declining in Africa during a period of growth needs to be taken with a grain of salt. There are many countries for which we do not know.

The obvious question is: What is going on here? I would like to suggest that Africa's statistical tragedy is closely linked to its difficulties in sustaining broad-based growth.

The proximate causes of the problem with statistics are:

(i) *Weak capacity in countries to collect, manage, and disseminate data.* An estimate of statistical capacity, the Statistical Capacity Index, is lower for African countries than the average for low-income countries (Table 5). Furthermore, the index has scarcely changed since 2004.

(ii) *Inadequate funding.* Whenever there is an effort to increase the frequency of surveys or a census, funding becomes a binding constraint. Funding is also limited for long-term investments in training statistical staff.

TABLE 4

Within-Country Data Availability

	No. (Proportion) of Developing Countries[a] for which Data are Available since 2001	Year of Most Recent Data Available since 2001 (median)	No. of Years for which Data are Available since 2001 (mean[b])
World	113 (77)	2008	3.93
Region			
Africa	43 (90)	2007	1.70*
East Asia	11 (46)	2008	3.73
Europe and Central Asia	21 (91)	2009	6.67*
Latin America	21 (70)	2010	7.33*
Middle East and North Africa	10 (77)	2006	1.60*
South Asia	7 (88)	2010	2.86*

Notes:

[a]Refers to the Bank having a reasonably documented national poverty figure or a Bank-produced PPP figure for a specific country-year (that also indicates the existence of a household survey of reasonable quality, as vetted by the Bank's Global Poverty Working Group).

[b]Groups of countries for which the mean is significantly different at the 99% confidence level from the overall mean for developing countries (4.15) are denoted with an asterisk.

Source: http://povertydata.worldbank.org and http://iresearch.worldbank.org/PovcalNet/index.htm (accessed Jan 2012).

TABLE 5

Statistical Capacity in African Countries

Countries (2012)	SCI Level
Somalia, Equatorial Guinea, Eritrea, Gabon	20–40
Dem. Rep. Congo, Liberia, Comoros, Sudan, Angola, Rep. of Congo, Guinea-Bissau, Sao Tome and Principe, Zimbabwe, Benin, Burundi, Sierra Leone	41–55
Namibia, Central African Republic, Togo, Chad, Guinea, Kenya, Mauritania, Ghana, Cameroon, Seychelles, Zambia, Botswana, Côte d'Ivoire, Ethiopia, Senegal, Cape Verde, Madagascar, Swaziland, The Gambia, Mali, Lesotho, Niger, Tanzania	55–69
Uganda, South Africa, Burkina Faso, Malawi, Nigeria, Mozambique, Rwanda, Mauritius,	70–84
Sub-Saharan Africa	59
Low income	62
Middle income	75

Source: Bulletin Board on Statistical Capacity, http://www.worldbank.org/data/bbsc (accessed Oct 26, 2012).

(iii) *Diffuse responsibilities.* One reason for the inadequate spending is that it is often not clear who is accountable for statistics in a country. Usually, it is the minister of planning, but it is one of a number of activities for which the minister is responsible. In some cases, ministers are not aware that statistics is their responsibility. Furthermore, when the survey is financed by a donor, it is often assumed that the donor agency is responsible, further diluting the accountability of the statistics staff to the domestic policymaker.

(iv) *Fragmentation.* Surveys and data gathering exercises, especially when they are donor-funded, are not especially well coordinated. Sometimes,

you have two surveys on the same topic—or even the same households surveyed twice. Different initiatives will use different methods, making comparability across time or even between regions of the same country difficult.

While these may be the proximate causes, I would submit that the underlying cause is that statistics are fundamentally political. This is the sense in which the factors that are standing in the way of African statistics are the same as those standing in the way of sustained, broad-based growth: both are about politics.

Consider the poverty estimates. They assess whether people are better off today than they were five years ago. If the estimate takes place during an election year, there is a strong tendency to keep the results under wraps. Worse still, there is a tendency to drag one's feet in completing the survey.[3] Funding for surveys becomes an easy target for budget-cutting. These are not the conditions that will attract the best students, and statistical capacity remains weak.

The reason is similar to why it has been so difficult to get broad-based growth because the latter is also fundamentally a political problem. All the proximate reasons for broad-based growth—the infrastructure deficit, weak skills and health conditions, lack of productive employment, low productivity in agriculture—have their roots in politics. Examples include the difficulties in rationalizing electricity tariffs or fertilizer subsidies, or getting teachers and doctors to show up for work, or reforming labor regulations.

There is another, equally political, aspect to the statistical tragedy. After a lot of bad experiences, countries and their regional and international partners agreed that African countries should develop their own National Statistical Development Strategies (NSDS), and that all statistical activities should be consistent with the NSDS. The analogy is with Poverty Reduction Strategy Papers (PRSP) and all development activities' being consistent with the PRSP.

So far, some 22 countries have developed NSDSs. However, not all statistical activities fall under the NSDS. Many donors, including the World Bank, undertake statistical activities without ensuring that they are consistent with the NSDS. Why? Because donors may want the data for their own purpose—to publish a report, for example. Their incentive is to collect the data as quickly as possible, whereas building statistical capacity takes time. Even though the country owns the data, donors often behave as if they do. They often publish the data without any recognition of the source of the data.

Again, the analogy with development problems is apt. While the international community agreed on PRSPs being the framework for all development assistance to a country, we frequently see donors bringing their favorite project to a country and asking the country to do it even if it is not in the government's own public investment program. In one country, the planning minister told me he accepted the project because he was afraid the donor might otherwise leave the country. However, by accepting the project, he undermined the whole public investment planning process.

[3]These problems are not necessarily confined to Africa. The United States, for example, has been debating changing its problematic poverty line for over 15 years. Political paralysis, budget cutting, and political interests prevent the change. Recommendations by Citro and Michael (1995) have been incorporated as an experimental poverty measure, but not the official one.

If the problem is political, how can it be addressed? Let me suggest three things. First, we should insist that all data be openly accessible and transparent. Kenya just did this (and so did Bangladesh's central bank). If these countries, not known for their strong governance performance, can do it, so can others. By making data open and accessible, the public will see their value—and the value of timely and up-to-date data—which could put pressure on policymakers to properly fund and carry out data collection. Second, we should put in place standards akin to those with PRSPs, whereby all statistical activities have to be filtered through the NSDS. The NSDS should be reviewed at the highest level—analogously with the PRSP—and deviations from it should be reported at an equally high level. And third, the behavior of donors with respect to statistics should be evaluated, much like the commitment-to-development index (Center for Global Development, 2012) and made public.

Just as Africans turned around their growth tragedy, they can turn around their statistical tragedy.

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