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Alternative perspectives of the performance of Africa in achieving the Millennium Development Goals

I. Introduction

How is the performance of Africa in achieving the Millennium Development Goals perceived as being a glass half full or a glass half empty? Those that hold the glass half empty view point to the fact that it is off-track with regard to most of the Millennium Development Goals targets. This view, however, is based on a metric that only tracks progress on an indicator in relation to the 2015 target. A typical illustration of this method for assessing progress is as follows: the proportion of people living on less than $1.25 a day in Africa (excluding North Africa) declined from 56.5 per cent in 1990 to 48.5 per cent in 2010; as this is approximately 20.25 percentage points off the 2015 target, the subregion is unlikely to meet the target based on current trends.

This measure of performance, hereafter called the current approach, fails to take into account the progress countries have made in achieving the Goals relative to the benchmark year of 1990. Indeed, by focusing exclusively on the gap between current levels of performance and the targets, the efforts made by countries and/or regions to reach their current level of performance is discounted. It does not take into account that the countries that began the Millennium Development Goals "journey" at very low levels of development undoubtedly required substantial investments in infrastructure and human capital to catch up with those that started at higher levels of development. Hence, in the absence of separate targets for countries or regions with difficult initial conditions, it makes sense to adopt a more nuanced approach to assessing their progress towards achieving the Millennium Development Goals. This would include taking into account how far they have progressed from their initial conditions.

The underlying message of this policy brief is that the current performance of Africa in achieving the Millennium Development Goals should not be separated from its initial conditions. Therefore, as the final year of the Goals approaches, it is important not to lose sight of the historical context that framed the continent's performance. In this context, the adoption of alternative measures of performance on internationally agreed development goals, including the Millennium Development Goals, that take into account both initial conditions and effort is advocated in this brief.

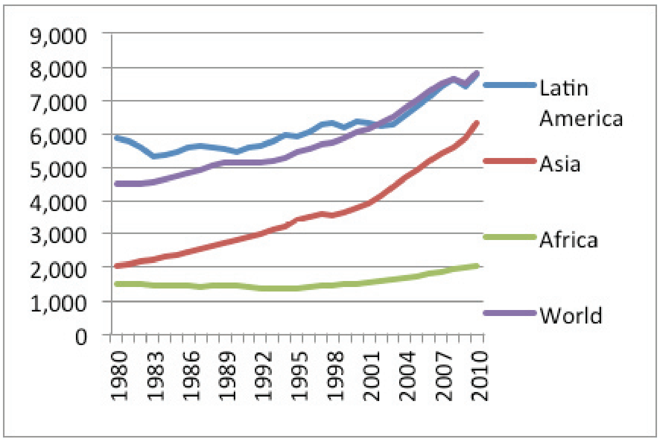
In the next section, the context in which the Millennium Development Goals were adopted in Africa using recent data on selected Millennium Development Goal indicators is described. This is followed by a brief review of alternative measures for assessing the performance in achieving the Goals and an illustration of how a select number of African countries fare with regard to Goal 1 when effort is factored into the performance measure. The paper concludes with a call for effort to be factored into the performance metric for the development agenda beyond 2015.

A. Initial conditions matter

In the benchmark year of 1990, Africa, excluding North Africa, had the lowest per capita gross domestic product (GDP) and scored lower on most Millennium Development Goals indicators than other regions (see figure 1). For instance, Southern, East, Central and West Africa recorded the highest maternal deaths per 100,000 live births, the lowest access to improved water and sanitation facilities, the highest HIV/AIDS prevalence rates and the highest infant mortality rates. Maternal deaths were as high as 870 deaths per 100,000 live births in 1990 (see figure 2) compared with 170 in East Asia and the Pacific; there were 107 infant deaths per 1,000 live births compared to 91.7 in South Asia (see figure 3); and only 47.7 per cent of the population had access to an improved water source (see figure 4). In contrast, other regions had already made significant progress towards achieving the targets. For instance, 66 per cent of the population in Latin America and the Caribbean had access to improved sanitation compared with 23 per cent in Africa, and although extreme poverty in Africa was only slightly higher than in Asia, per capita GDP in Asia was almost double the rate in Africa, implying a greater potential for growth and poverty reduction.

Figure 1

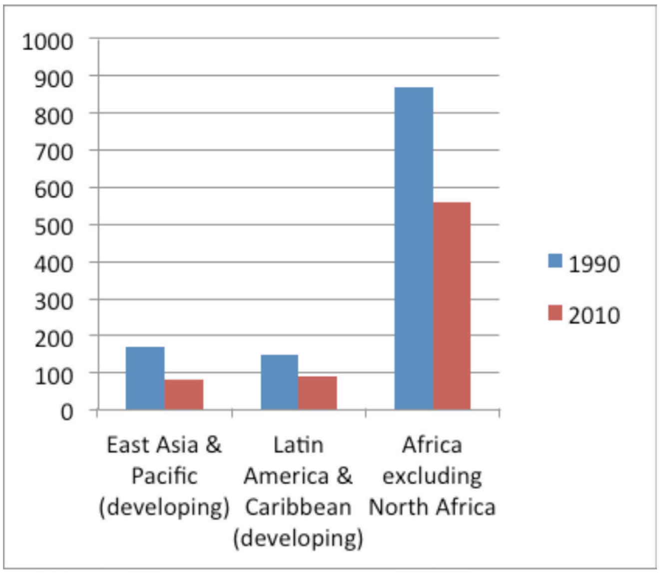
Regional trends in GDP per capita



Source: Authors' calculations based on Bolt and Van Zandem (2013).

Figure 2

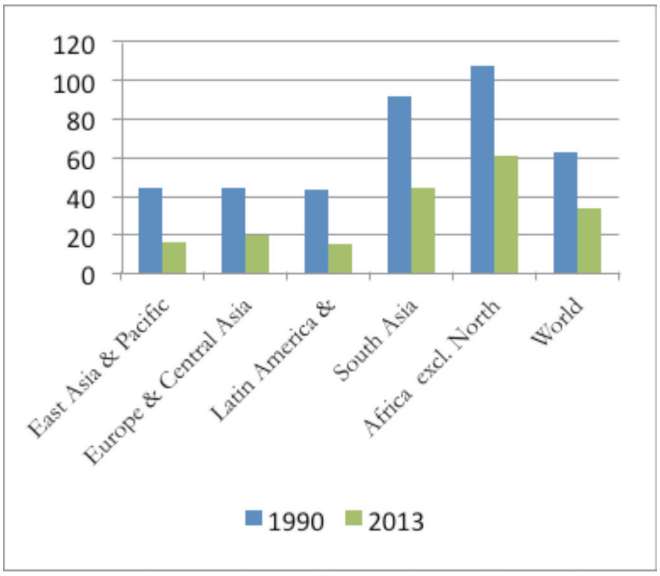
Maternal deaths per 100,000 live births



Source: World Bank World Development Indicators. Available from http://data.worldbank.org/data-catalog/world-development-indicators.

Figure 3

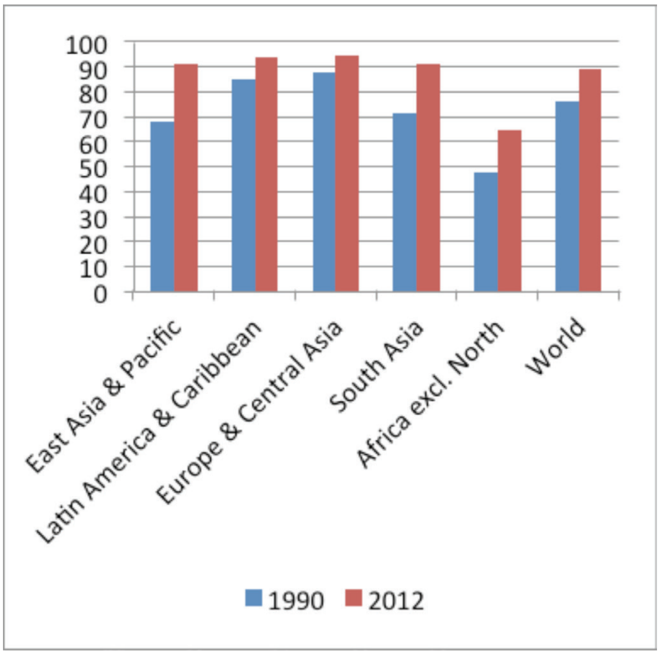
Infant mortality rate (deaths per 1,000)



Source: World Bank World Development Indicators. Available from http://data.worldbank.org/data-catalog/world-development-indicators.

Figure 4

Access to improved water source (% of population)



Source: World Bank World Development Indicators. Available from http://data.worldbank.org/data-catalog/world-development-indicators.

B. Africa has made good progress despite initial conditions

Despite adverse initial conditions, Africa is making progress towards attaining the Millennium Development Goals through commitment and innovative policy measures. In Southern, East, Central and West Africa, as a group, maternal deaths (per 100,000 live births) declined by 47 per cent between 1990 and 2013, infant mortality rates declined by 39 per cent between 1990 and 2013, the HIV/AIDS prevalence rate fell from 5.8 to 4.7 per cent during the period 2000 – 2012, and access to improved drinking water sources increased by 16 percentage points between 1990 and 2012.

The aggregate performance at the regional level, however, masks remarkable country-level achievements. For instance, Swaziland achieved more than a 75 per cent reduction in malaria incidence between 2000 and 2012 through: indoor spraying in most at-risk areas; the use of insecticide-treated nets, especially among vulnerable groups; improvements in health facility surveillance; and information-sharing and awareness-raising efforts. The paying-for-performance scheme of Rwanda contributed to significant improvements in health indicators through improvements in the incentive structure for health workers. In the Niger, the School for Husbands initiative has increased the rate of antenatal visits, tripled the use of family planning services and doubled childbirths attended by skilled health personnel, by fostering behavioural change in a patriarchal and male-dominated society. Algeria increased female employment by approximately 20 per cent and created 1.3 million new jobs between 2004 and 2009, largely through fiscal incentives to the private sector. Ethiopia increased net primary school enrolment from 50 per cent in 1990 to 86.5 per cent (2009/10) through, among other measures, massive investments in the construction of classrooms, mostly in rural areas, with 16,000 classrooms built in 2004 and 25,000 between 2008 and 2009. The introduction of the Free Health Care Initiative in Sierra Leone for pregnant women, lactating mothers and children under five years old contributed to the reduction in the country's maternal mortality ratio from 1,800 deaths per 100,000 live births in 2000 to 857 deaths per 100,000 live births in 2008 (ECA and others, 2014).

What emerges from the above discussion is that initial conditions are important but what matters most are the efforts that various countries have undertaken towards achieving the Millennium Development Goals, despite the disadvantaged initial conditions.

II. Capturing effort in performance assessments

In a departure from the most common used assessment metric, a number of alternative methodologies have been developed to track progress and assess performance on achieving the Millennium Development Goals by taking into account the initial conditions and efforts of countries. Notable among those methods are studies by Fukuda-Parr and Greenstein (2010) and Leo and Barmeier (2010), in which progress is assessed based on the rate of change in performance between two points in time to determine whether progress on any given target is accelerating or decelerating relative to the baseline. The studies reveal that least developed countries and African countries, particularly those in the Southern, East, Central and West subregions, have accelerated progress in achieving the Goals.

Building on this method, other studies, including Hailu and Tsukada (2011), are based on the assumption that progress on the Millennium Development Goals indicators is non-linear; the effort required to achieve a target increases as more progress is made. In effect, the assumption is that it takes more effort to increase net primary school enrolment from 85 to 90 per cent than it does to increase it from 20 to 30 per cent (Osorio, 2008a and Osorio, 2008b). As a result, in the estimation of progress, this methodology places more weight on the effort of countries at the higher end of the performance curve than those at the relatively lower ends. Using the latter method, Hailu and Tsukada (2011) found that 8 of the top 10 good performers, for example, those experiencing the most rapid acceleration, are in Southern, East, Central and West Africa. Burkina Faso ranked the highest in Millennium Development Goals acceleration. Progress was more rapid in least developed countries than in non-least developed countries, and the most progress was made on indicators for Goals 1, 2, 4, 6 and 8. For Goal 1, the rate of GDP per person employed showed the most rapid acceleration. For Goal 8, official development assistance disbursements to social services offered in small island developing States experienced rapid acceleration. The least progress was made on the indicators for the share of women in the non-agricultural sector and gender parity in primary enrolment (Goal 3), reducing maternal mortality (Goal 4) and increasing access to sanitation (Goal 7).

In this policy brief, the performance of selected African countries in achieving the Millennium Development Goals is estimated by using more recent data and applying both the current United Nations methodology and the annual rate of change methodology of Fukuda-Parr and Greenstein (2010).[2]

2 This involves comparing the indicator in 1990 or the earliest date that it is available after 1990 to its level after 2001. The rate of change is then computed for the two points in time to determine whether improvement in the indicator has accelerated or decelerated. Fukuda-Parr and Greenstein (2010) formalize this methodology as follows:

Table 1
Comparison of the rate-of-change based methodology and the traditional approach used by the United Nations

	Methodology based on the rate of change			Current United Nations methodology	
	Annual poverty change 1990-2001	Annual poverty change 2001-2010		Percentage point change 1990-2010*	% change 1990-2010
Burkina Faso	-1.63	-1.98	accelerated	-26.60	-37.35
Côte d'Ivoire	2.33	0.08	accelerated	6.00	33.69
Guinea	-3.03	-4.33	accelerated	-49.30	-53.23
Madagascar	0.48	-2.13	accelerated	-4.70	-6.48
Mali	-3.56	-1.20	decelerated	-35.70	-41.46
Morocco	0.38	-0.63	accelerated	0.00	0.00
Mozambique	-0.84	-3.78	accelerated	-51.00	-63.27
Senegal	-1.34	-1.46	accelerated	-36.20	-55.01
Swaziland	-2.62	-2.79	accelerated	-38.00	-48.34
Uganda	-1.26	-2.77	accelerated	-32.00	-45.71
Zambia	0.36	1.30	decelerated	13.40	20.52

Source: Author's calculations based on United Nations Statistics Division, Millennium Development Goals Indicators. Available from http://mdgs.un.org/unsd/mdg/Data.aspx. Accessed 21 October 2014.

Note: The poverty rate considered in the table is: population below $1 (PPP) per day, percentage

*Some countries do not have data for 1990, 2001, 2010. In such cases, calculations are based on the earliest data available after or before those years.

The results indicate that with few exceptions, such as Mali and Zambia, the rate of poverty reduction was more rapid during the period 2001-2010 than during the preceding period 1990-2001. Based on the current method, the last column of Table 1 gives an assessment based on whether countries have succeeded in achieving the target of halving the 1990 poverty level. These computations suggest that only Guinea, Mozambique and Senegal have achieved the target. However, this conclusion ignores the accelerated effort by Burkina Faso, Côte d'Ivoire, Madagascar, Morocco and Swaziland in achieving this target. This information is, however, important for identifying countries for targeted Millennium Development Growth acceleration interventions.

III. Conclusion

Success in achieving the Millennium Development Goals has varied by country and subregion. Some subregions are closer to meeting the targets than others. However, not all countries and subregions had the same starting points. With 34 out of the 54 African countries classified as least developed countries, the region accounts for a disproportionate share of low income countries and not surprisingly had one of the lowest starting points. It is, therefore, inappropriate to assess the continent's performance on the same basis as the more advanced regions. This does not mean that the region should not be assessed, but indicates that such assessments must take into account the developmental context within which the Millennium Development Goals were implemented in Africa. Operationally, this implies measuring the effort that the continent has made in achieving the Goals. The analysis has demonstrated that initial conditions matter in measuring progress towards achieving the Millennium Development Goals. As the international community ponders the substance and format of the successor development agenda, the methodology for measuring progress should take into account regional heterogeneity.

If ((DMID-DFST)/(YMID-YFST)>=(DLST-DMID)/(YLST-YMID), "No Acceleration", "Acceleration" (1).
Where YFST is the earliest year to 1990, YMID is 2001-2010, YLST is the recent available year, DFST is the first year indicator value, DMID is the second year indicator value, and DLST is the third year indicator value.

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