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Poverty in Numbers: The Changing State of Global Poverty from 2005 to 2015

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Introduction

Poverty reduction lies at the core of the global development challenge. For the international development community, this objective serves not only as a source of motivation, but as a defining theme across its work. Many of the world's most prominent aid organizations cite poverty reduction as their overarching goal.

But while our common goal of poverty reduction is never disputed, we find it remarkably difficult to measure whether it is happening, and if so how fast. This is especially the case when it comes to producing global poverty data, as the challenges of national poverty data collection are multiplied several times over and then further compounded by the tricky—and unsatisfactory—business of converting national results into internationally-comparable terms. Official global poverty estimates are only rarely produced, and when they do appear, they are out of date by the time they are published. Thus, when world leaders met in September 2010 to assess progress toward reaching the Millennium Development Goal of halving global poverty, they had to rely on poverty data from 2005. This, somewhat ironically, was the year of the last summit on the MDGs; the purpose of the 2010 meeting was ostensibly to review what had been accomplished in the intervening five years.

This problem is serious. The international development community cannot be held accountable for poverty reduction without a clear sense of the scale of the problem and an understanding of where poverty is most prevalent. Moreover, tracking global poverty is not just a niche issue but a matter of global interest. For instance, the G-20 has affirmed that the reduction of global poverty is integral to its *Framework for Strong, Sustainable and Balanced Growth*.[1] While it may be easy for skeptics to dismiss global estimates as an indulgence for statisticians who excel in plucking numbers out of thin air, or bureaucrats who are overly concerned with messaging, the reality is that having a decent grasp on global poverty figures matters.[2]

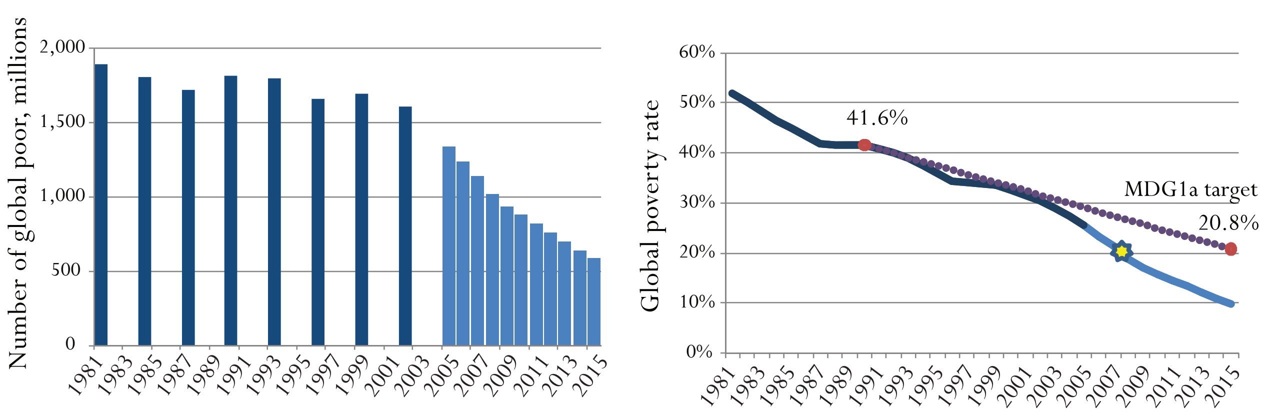
How many poor people are there in the world, and how many are there likely to be in 2015? In which countries and regions is poverty falling? How is the composition of global poverty changing and where will poverty be concentrated in the future? These are central questions for which we currently have few, if any, answers. This policy brief attempts to fill this gap by providing a best approximation in response to each of these questions, before offering policy recommendations based on these findings.

How many poor people are there in the world and how many are there likely to be in 2015?

To calculate the number of people in the world living in extreme poverty, we update the World Bank's official $1.25 a day poverty estimates for 119 countries, which together account for 95 percent of the population of the developing world. To do this, we take the most recent household survey data for each country, and generate poverty estimates for the years 2005 to 2015 using historical and forecast estimates of per capita consumption growth, making the simplifying assumption that the income distribution in each country remains unchanged. Global poverty figures are then calculated by adding together the number of poor from each country. (See the Appendix for a full account of our methodology.)

Our results indicate that the world has seen a dramatic decrease in global poverty over the past six years, and that this trend is set to continue in the four years ahead. We estimate that between 2005 and 2010, the total number of poor people around the world fell by nearly half a billion people, from over 1.3 billion in 2005 to under 900 million in 2010. Looking ahead to 2015, extreme poverty could fall to under 600 million people—less than half the number regularly cited in describing the number of poor people in the world today. Poverty reduction of this magnitude is unparalleled in history: never before have so many people been lifted out of poverty over such a brief period of time.

Figure 1: The Number of the World's Poor is Falling Rapidly... ...and MDG1a May Already Have Been Achieved



Source: Ravallion and Chen (2008) and authors' calculations

When measured as a share of population, progress remains impressive, but is more in line with past trends. In the early 1980s, more than half of all people in developing countries lived in extreme poverty. By 2005, this was down to a quarter. According to our estimates, as of 2010 less than 16 percent remained in poverty, and fewer than 10 percent will likely be poor by 2015.

The first Millennium Development Goal defines a target (MDG1a) of halving the rate of global poverty by 2015 from its 1990 level. In an official report prepared for the U.N. MDG conference this past September, the World Bank stated that we are 80 percent of the way toward this target and are on track to meet it by 2015, though the

Bank warned that "the economic crisis adds new risks to prospects for reaching the goal."[3]

Our assessment is considerably more upbeat. We believe that the MDG1a target has already been met—approximately three years ago.[4] Furthermore, by 2015, we will not only have halved the global poverty rate, as per MDG1a, but will have halved it again.

Over the past half century, the developing world, including many of the world's poorest countries, have seen dramatic improvements in virtually all non-income measures of well-being: since 1960, global infant mortality has dropped by more than 50 percent, for example, and the share of the world's children enrolled in primary school increased from less than half to nearly 90 percent between 1950 and today.[5] Likewise there have been impressive gains in gender equality, access to justice and civil and political rights. Yet, through most of this period, the incomes of rich and poor countries diverged, and income poverty has proven a more persistent challenge than other measures of wellbeing.[6] The rapid decline in global poverty now underway—and the early achievement of the MDG1a target—marks a break from these trends, and could come to be seen as a turning point in the history of global development.

In which countries and regions is poverty falling?

Today's massive reduction in global poverty represents the aggregate of a number of individual regional and national success stories.

Table 1: Regional and Global Poverty, 2005, 2010, 2015

	Number of poor (millions)			Poverty rate (% population)		
	2005	2010	2015	2005	2010	2015
East Asia	304.5	140.4	53.4	16.8%	7.4%	2.7%
Europe and Central Asia	16.0	8.4	4.3	3.4%	1.8%	0.9%
Latin America and Caribbean	45.0	35.0	27.3	8.4%	6.2%	4.5%
Middle East and North Africa	9.4	6.7	5.4	3.8%	2.5%	1.9%
South Asia	583.4	317.9	145.2	40.2%	20.3%	8.7%
Sub-Saharan Africa	379.5	369.9	349.9	54.5%	46.9%	39.3%
World	1,337.8	878.2	585.5	25.7%	15.8%	9.9%

Source: Authors' calculations

Unlike previous decades, like the '80s (when the poverty rate increased in Africa) and the '90s (when it increased in Latin America and the former Soviet Union), poverty reduction is currently taking place in all regions of the world (Table 1). The sharpest fall in poverty is occurring in Asia. South Asia alone is expected to see a reduction in the number of its poor of more than 430 million over the 10-year period we study, representing a fall in its poverty rate of over 30 percentage points. East Asia already recorded a vast drop in poverty between 1980 and 2005, and this trend is continuing: a further 250 million people in the region are expected to escape poverty by 2015, two-thirds of whom have likely already done so.

Perhaps the greatest surprise, however, is the one taking place in Sub-Saharan Africa. Between 1980 and 2005, the region's poverty rate had consistently hovered above 50 percent. Given the continent's high population growth, its number of poor rose steadily.

The current period is different. For the first time, Sub-Saharan Africa's poverty rate has fallen below 50 percent. The total number of poor people in the region is falling too, albeit slowly. Better still, by 2015, the poverty rate is expected to fall below 40 percent—a rate China did not achieve until the mid-90s.

At the national level, 85 of the 119 countries in our model see the number of their poor decrease between 2005 and 2015. Fifty-eight countries record drops in their poverty rate of at least five percentage points. Countries home to some of the largest poor populations—such as Bangladesh, Ethiopia, Pakistan, Vietnam, Indonesia and Brazil—see tens of millions of their citizens escape poverty. A number of African countries in which poverty has long been persistent—including Nigeria, South Africa, Mozambique, Ghana and Tanzania—follow closely behind.

Table 2: Poverty Reduction, Select Countries

Reduction in number of poor people (millions)			
	2005-2010	2010-2015	Total
India	230.4	137.4	367.7
China	153.1	50.1	203.3
Bangladesh	18.9	23.8	42.8
Ethiopia	22.8	6.4	29.2
Pakistan	14.6	8.5	23.1
Vietnam	11.6	8.7	20.3
Indonesia	-7.8	21.1	13.3
Brazil	7.2	3.6	10.8
Philippines	3.9	4.4	8.3
Uzbekistan	4.8	3.0	7.8
Nigeria	-2.6	9.1	6.6
South Africa	1.5	2.7	4.1
Mozambique	1.5	2.4	3.9
Cambodia	2.0	1.6	3.5
Ghana	2.4	0.9	3.3
Tanzania	-0.3	3.3	3.0

Source: Authors' calculations

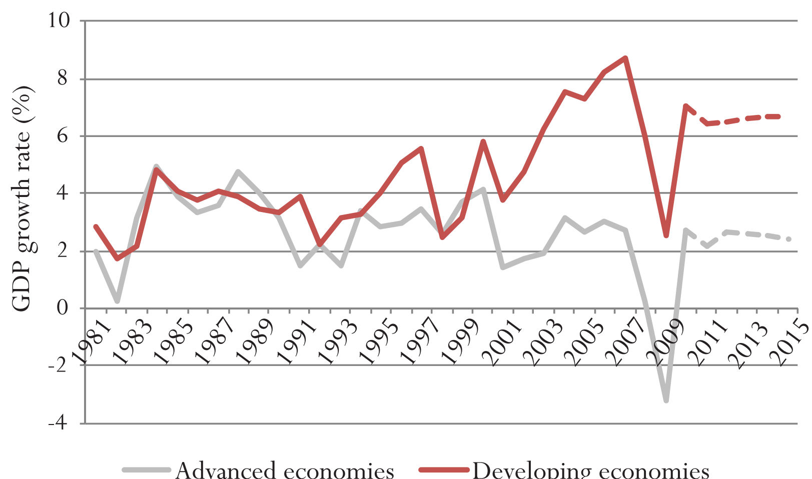
However, the bulk of the fall in global poverty can be attributed to the two developing giants, India and China. They alone are responsible for three-quarters of the reduction in the world's poor expected over the 10-year period. India sees over 360 million people escape poverty, a number equal to that of all other countries combined. Since 1999, India has been home to more poor people than any other country, but in 2015, this burden will be passed to Nigeria. China, for its part, enters the period having already experienced a dramatic drop in poverty, and with the goal of eliminating poverty within sight. By 2015, with a further 203 million reduction in its number of poor people, this objective will effectively be achieved.

The drivers of poverty reduction

To what can we attribute this stunning performance in global poverty reduction? The explanation must start with growth, and more precisely with the rapid and sustained growth the developing world has enjoyed over the recent past.

As a group, developing economies mustered an average annual growth rate in the 80s and 90s of just 3.5 and 3.6 percent, respectively, barely above their population growth. Since the start of the new millennium, however, growth in the developing world has been considerably faster, well above that of advanced economies. From 2003 onwards, developing economies have expanded by more than 6 percent in every year except 2009, during the height of the Great Recession. And unlike advanced economies, who today appear destined for an extended period of below-average growth, developing countries bounced back quickly from the downturn. Growth is once again back above 6 percent and is expected to stay there through at least 2015.[7]

Figure 2: The Rise of Developing Economy Growth (actuals and projections)



Source: IMF (2010)

Moreover, not only is the developing world as a whole growing quickly today, but key countries capable of altering global poverty figures are experiencing uncommon economic success.

Small developing countries have only a negligible effect on global poverty figures, no matter how quickly they grow. Thus, the emergence of the four Asian Tigers—Hong Kong, Singapore, South Korea and Taiwan—from the ’60s to the ’80s represented a remarkable economic breakthrough without shifting Asia’s poverty profile. And Africa’s most compelling growth success stories—Botswana, Mauritius, Seychelles, Cape Verde and Comoros, which have a collective population of under 5 million—have demonstrated Africa’s development potential, but haven’t made a dent in the continent’s poverty figures.

Likewise, the growth trajectories of developing countries with large populations but few poor people bear little influence on global poverty. So when Russia and Iran—both among the 15 most highly-populated developing countries—grew rapidly in the first half of the last decade, their strong performances barely budged global poverty aggregates.

In contrast, today growth is being driven by a number of big countries which are home to large poor populations. Between 2005 and 2015, India (current population of 1,233m,) Bangladesh (169m), Vietnam (89m) and Ethiopia (87m) are each expected to grow by at least 6.3 percent per year, and in the process, each is likely to see a quarter of its population lifted out of poverty.[8] Other developing giants such as China, Pakistan, Indonesia and Nigeria also record marked reductions in their poverty rates attributable to their strong economic performances.

But what about the impact of the food and financial crises? The World Bank has warned that the spike in food prices of 2007-08 pushed an additional 100 million people worldwide below the international poverty line, yet this figure should be taken with a grain of salt. While in some countries the rise in food prices undoubtedly increased poverty, it is problematic to extrapolate from such results to the global impact of higher food prices, as effects will differ from country to country.[9] The widely-held view that higher food prices are an unmitigated bad for the world’s poor is certainly not true, and indeed there is some evidence that in both India and China an increase in food prices would more likely lessen poverty.[10]

Estimating the effect of the financial crisis and the subsequent growth slowdown on global poverty figures is a more straight forward exercise. The World Bank reports that due to the unexpected decline in developing country growth, the economic downturn of 2008-09 will keep an additional 64 million people in poverty. Our analysis accounts for the impact of the Great Recession on poverty, as our data include the lowered expectations of the post-crisis period; in other words, if not for the financial crisis our results would be even more dramatic than they are. Furthermore, it is evident from our findings that the negative effects of the Great Recession on poverty are overwhelmed by the positive effects of several years of high growth. 2009 marked one mediocre year of poverty reduction amidst a decade of extraordinary poverty reduction; why should the former receive so much attention and the latter so little?

The rapid growth of developing and emerging economies—including highly-populated countries with large numbers of poor people—should no longer be news to anyone. The changing global economic balance has been the focus of countless best-selling books in recent years and has emerged as a dominant theme shaping how we view today’s current affairs. Yet due to outdated poverty data, our sense of global poverty has not adapted to this narrative, and remains firmly stuck in the past. It is time we updated our conception of global poverty in line with our conception of today’s global economy, as the two issues are inextricably linked.

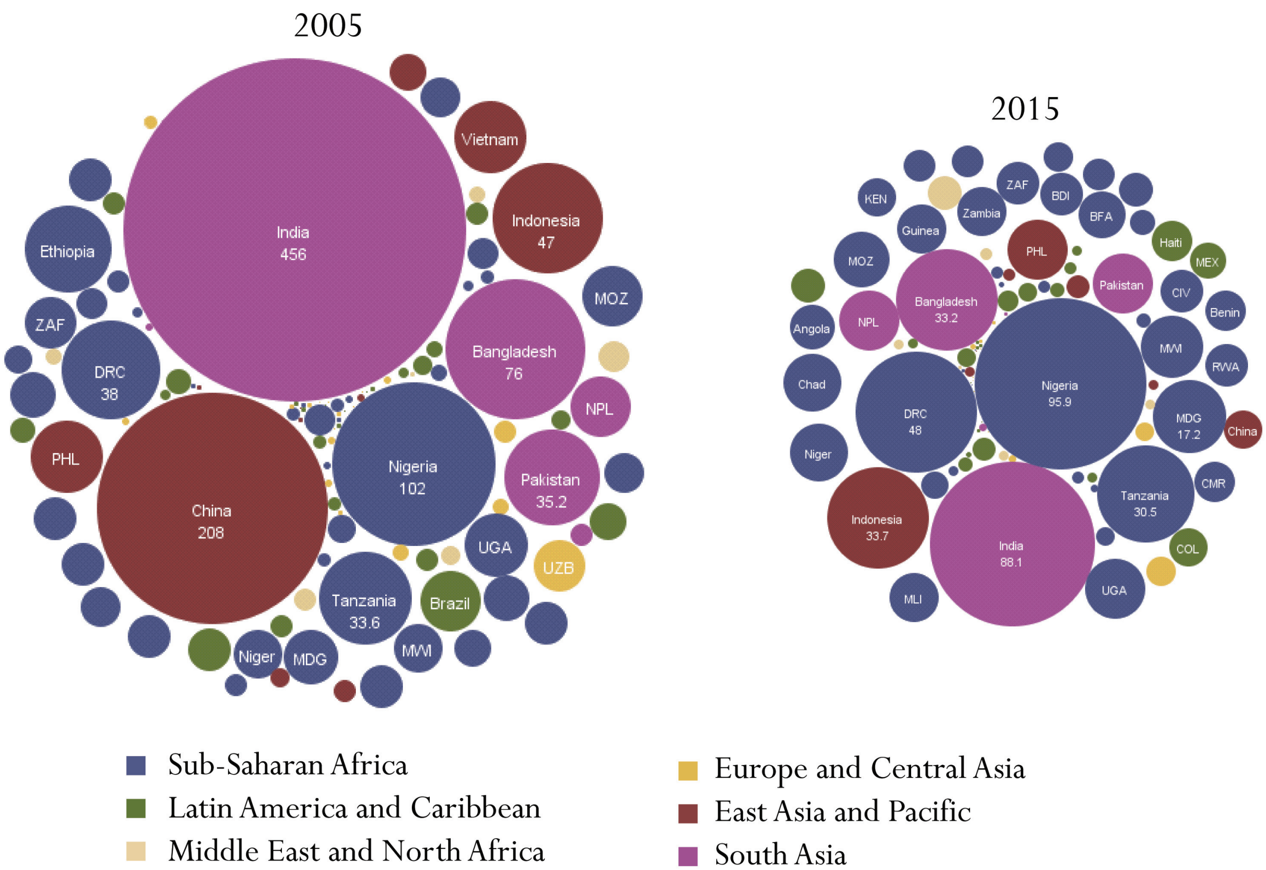
How is the composition of global poverty changing and where will poverty be concentrated in the future?

While the vast majority of countries are showing at least some success in pulling their citizens out of poverty, the rate at which they are doing so varies considerably by continent, income level and degree of fragility. As a result, the global poverty landscape will dramatically change over the decade from 2005 to 2015.

An African problem with fewer big targets

For the past 30 years, the bulk of the world's poor—never less than 94 percent—has resided in three areas: East Asia, South Asia and Sub-Saharan Africa. This can be clearly seen in the image on the left in Figure 3, which illustrates the distribution of global poverty in 2005 and shows a roughly equal distribution between these three regions. With Asia's economic rise, however, its share of global poverty is falling sharply, leaving Africa responsible for a growing proportion of the world's poor. Between 2005 and 2015, Asia's share of global poverty is expected to fall from two-thirds to one-third, while Africa's share more than doubles from 28 to 60 percent. Poverty will thus increasingly be seen as an African problem, despite the clear progress the continent is now making.

Figure 3: The Changing Landscape of Global Poverty (millions of poor)



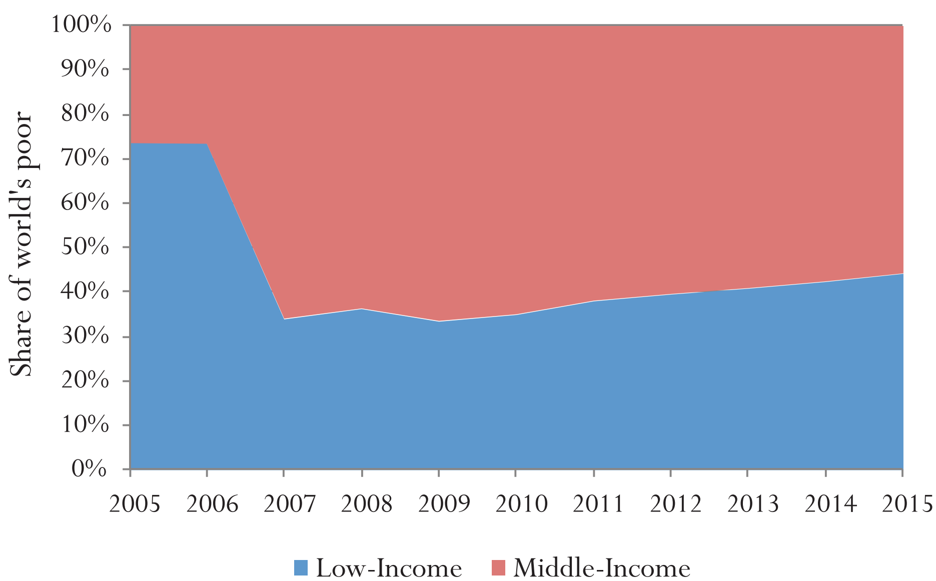
Source: Authors' calculations

While poverty is becoming more concentrated at a regional level, the opposite is true at a country level. In 2005, half the world's poor could be found in just two countries: India and China. By 2015, it is the top five countries, rather than the top two, that account for this share. Similarly, eight countries were home to three-quarters of the world's poor in 2005, compared to 15 countries in 2015. Six years ago, those interested in serving the preponderance of the world's poor could focus on just a handful of countries. By 2015, this will no longer be the case.

A low-income and middle-income country story, but with different implications for each

Recent research has shown that with the graduation of some of the world's biggest developing countries into middle income-country (MIC) status, poverty is no longer concentrated in low-income countries (LIC).[11] This finding is verified by our analysis. Figure 4 illustrates that the 2007 graduation of India, followed by Nigeria and Pakistan the following year—collectively responsible for two-fifths of the world's poor at that time—has brought about a significant shift in how poverty is balanced between the two income groups. According to our estimates, the share of the world's poor residing in LICs hit a low of 33.4 percent in 2009 with the graduation of Vietnam. It has since risen gradually and will reach 44.9 percent in 2015.

Figure 4: Distribution of the World's Poor Between Low-Income and Middle-Income Countries



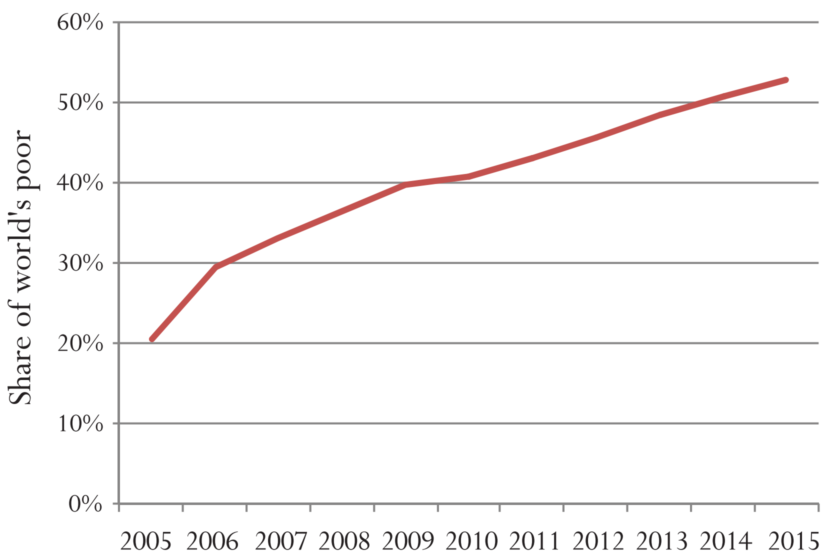
Source: Authors' calculations

Should we be concerned about the rise in poverty in MICs? This is a complicated question to answer, but a useful starting point is to examine whether poverty reduction is occurring at the same speed for LICs and MICs, after controlling for changes in country categories. During the 10-year period we study, the number of poor in MICs is expected to fall at an average rate of 11.0 percent a year, compared to a rate of only 3.4 percent a year for LICs. This suggests that poverty in MICs tends to be more transitory as countries advance along their development path—a finding that makes strong intuitive sense given that many of the poor in MICs today are in countries that have just surpassed the middle-income threshold by achieving strong and sustained economic growth. In contrast, poverty in LICs tends to endure. One positive conclusion from this analysis is that with more than half the world's remaining poor residing in MICs in 2015, there is good reason to believe that the strong rate of poverty reduction currently underway should continue thereafter.

Increasingly a problem of fragility

State failure or fragility is recognized as one of the biggest challenges to sustainable development and poverty reduction. No fragile country has yet achieved a single MDG, and fragile states are home to half of all children not in primary school and half of all children who die before reaching their fifth birthday.[12]

Figure 5: Share of the World's Poor Living in Fragile Countries



Source: Authors' calculations

Using the Failed States Index developed by the Fund for Peace to identify fragile states, we find that whereas only 20 percent of the world's poor lived in fragile states in 2005, this share is rising sharply and will exceed 50 percent by 2014 (see Figure 5). As is the case with the changing poverty shares of low- and middle-income country groups, this is a trend that is largely driven by a small number of populous countries. Yet even if we exclude China and India from the dataset, we reach similar results: the share of the poor living in fragile states increases from 41 percent in 2005 to 63 percent in 2015. Moreover, our findings almost certainly understate the true concentration of poverty in fragile states, as data coverage for fragile states is less complete than for other developing countries.[13] With the majority of the world's poor expected to be living in fragile states within the next three years, poverty is likely to increasingly be viewed through a security and governance lens, with potentially important ramifications for rich-world policies on poverty reduction.

How do our projections compare with others?

In its role as the official monitor of global poverty, the World Bank produces poverty forecasts of its own, employing a sophisticated economic model which enables it to project poverty rates many years into the future.[14] While such tools can make important contributions to economic analyses, it is not clear that the Bank's approach is particularly well suited to the task of modeling medium-term changes in poverty levels. Our admittedly more simple approach has the advantage of incorporating the most recently available data and applying country-specific consumption growth forecasts.

Table 3 compares our estimates of global poverty in 2015 with comparable figures from the World Bank. For the majority of the world's regions, our numbers are quite similar to those of the Bank; the discrepancies in projections for Europe and Central Asia, Latin America and the Caribbean, the Middle East and North Africa, and Sub-Saharan Africa are minor for an exercise as necessarily speculative as this one. Yet for China and India, the differences are substantial. While our model suggests China will all but have escaped poverty by 2015, with India following not far behind, the changes forecast by the World Bank are much more conservative. Indeed, the World Bank's 2015 projections for these two countries are even higher than our poverty estimates for 2010. Given the large number of poor people in China and India, these differences generate dramatically different poverty forecasts at the regional and global level.

Table 3: Comparing our Projections with Those of the World Bank

Percentage of the population living under $1.25 a day in 2015		
	Chandy & Gertz	World Bank
East Asia	2.7%	5.9%
China	0.3%	5.1%
Europe & Central Asia	0.9%	1.7%
Latin America & Caribbean	4.5%	5.0%
Middle East & North Africa	1.9%	1.8%
South Asia	8.7%	22.8%
India	7.0%	23.6%
Sub-Saharan Africa	39.3%	38.0%
World (developing only)	9.9%	15.0%

Source: Authors' calculations and World Bank (2010c)

A focus on China and India

With such large discrepancies between the two sets of poverty forecasts for China and India, it is worth examining in greater detail whether our numbers for these countries are realistic.

It will be difficult for some to believe that China has nearly succeeded in escaping poverty. After all, as recently as 1996 the country was home to the largest number of poor people in the world. Yet while the reduction in poverty we forecast for China is dramatic, it is no more so than the country's recent meteoric growth performance or indeed its own past record in poverty reduction. Consider, for example, that in the three years between 2002 and 2005, China's poverty rate fell by 12.5 percentage points, from 28.4 percent to 15.9 percent. In this light, the further decrease of 15.6 percentage points that we project between 2005 and 2015 does not seem so far-fetched. In fact, the World Bank's own East Asia and Pacific Department found that as of 2007 "extreme poverty, in the sense of not being able to meet the most elementary food and clothing needs, has almost been eliminated [in China]."[15] On this basis it seems reasonable to believe that the country could effectively eliminate $1.25 a day poverty within the coming four years.

Turning to India, our estimates show an even more remarkable reduction in poverty and an even larger divergence from the World Bank's projections. We estimate that India could see a decrease in its poverty rate of 34.6 percentage points over the span of 10 years, dropping from 41.6 percent all the way to 7.0 percent between 2005 and 2015. Such a rapid decrease in poverty on such a grand scale and over such a short period would constitute an almost unparalleled achievement in history. Almost, because China experienced nearly an identical drop in poverty a decade earlier: in the 12 years between 1993 and 2005, China reduced its poverty rate by 37.8 percentage points.

But is India capable of following in China's footsteps? With respect to GDP growth, there is good evidence that India is already closely following the path China has set.[16] The extent to which this growth will translate into poverty reduction, however, remains open to debate.[17] China and India are, after all, very different economies. China's poverty reduction was driven by massive migration from inland rural to coastal urban areas. As labor transferred from an unproductive agricultural sector to a dynamic manufacturing base, wages and living standards rose rapidly. While India's labor force is undergoing a significant productivity transformation of its own, as its manufacturing sector begins to match the dynamism of its long-celebrated information-based service sector, the country's economic geography is less dichotomous and defined more by the contours of its 28 states. To date, India has avoided the significant widening of its income distribution which has befallen China, although the limits to the mobility of its poor may present a challenge if rapid poverty reduction is to be sustained. Results from a recently completed household survey will shed more light on India's current poverty trajectory, but cursory evidence from a smaller survey conducted in 2007-8 suggests India is making impressive progress.[18]

Of course, we will not know for many years how successful China and India will ultimately be in reducing poverty in the period leading up to 2015. While we believe our estimates provide a credible baseline scenario for poverty trends, there is a need to approach such work with humility; after all, it was only a few years ago that the World Bank revised its global poverty estimate upwards by a full 40 percent.

Policy implications

The new estimates of global poverty presented in this policy brief pose a number of questions for how the international community addresses the challenge of global poverty reduction. As alleviating poverty is at the heart of foreign assistance efforts, **aid donors must adapt to the evolving poverty landscape and update their policies and programming to reflect current needs and priorities**. In order to stay relevant and have the greatest impact, both bilateral and multilateral donors should be thinking about poverty in a dynamic, forward-looking sense, concentrating their efforts where they are most needed.

Our evidence suggests that **there are two particular areas on which aid agencies should be focusing their attention over the medium term: Sub-Saharan Africa and fragile states**. The former has long been recognized as one of the front lines in the war on poverty. This view was enshrined at the 2005 G8 Gleneagles Summit, where world leaders promised to boost their annual aid to the continent by $25 billion over the following five years, in recognition that poverty was a more intractable and persistent challenge in Africa than in other regions. But the Gleneagles commitments were not fully realized, as only $11 billion of the promised $25 billion was ultimately delivered.[19] Since 2005, the number of poor people in Africa has fallen by just 2.1 percent, relative to a decline of 38.6 percent globally. As poverty becomes further concentrated in Africa between now and 2015, aid agencies must do better at delivering on their commitments to the continent.

Fragile states represent a more recent priority for the development community, with donors increasingly coming to recognize the spillover effects these states can impose on others, and the need for a clear policy to engage with them. This growing focus is being matched with more aid; much of the recent increase in aid flows has been directed to fragile states and further increases are expected.[20] And yet, while our poverty estimates suggest donors are right to focus on fragile states, there is still remarkably little consensus on which interventions are most likely to succeed in such environments, how they should be implemented under such challenging conditions, and most importantly, how the problem of fragility itself can be tackled.

In addition to deciding on which countries and regions to focus, donors must also choose which projects and programs they will spend their money on. Amidst these complicated budgetary decisions, one simple idea has recently garnered considerable support from both politicians and development economists: just give money to poor people.[21] Basic cash transfer payments, sometimes conditioned on behavior such as attending school or routine medical checkups, can serve as a safety net for the poor, providing social protection to ensure basic necessities are met and shocks are overcome.

Our results suggest that **providing every person in the world with a minimum income of $1.25/day—in other words guaranteeing the right not to live in absolute poverty—is rapidly becoming feasible**. In 2005, supplementing the income of each poor person in the world to bring their daily income up to $1.25 would have cost $96 billion, or 80 percent of the total volume of foreign aid disbursed that year. In 2010, with poverty less widespread and larger global aid volumes, the cost of such a global safety net would be just $66 billion, or slightly more than half of all official aid.[22] While the logistics of distributing cash to poor populations would not be without challenges, recent advances in biometric identification technologies—such as fingerprint and iris scanning—have greatly expanded the promise of implementing large-scale welfare programs in poor countries.[23] Given the success of many cash transfer programs, significantly scaling up their use to provide a minimum income for all individuals living in poverty might be a fruitful new direction for donors to pursue.

One final policy recommendation revealed by this analysis is the need to improve the quantity, quality and timeliness of poverty data, at both the national and the global level. For both developing country governments and aid agencies working to fight poverty, it is impossible to efficiently allocate resources toward this goal using poverty data that is incomplete, unreliable or out of date.

At the country level, there has already been a significant uptake in the use of household surveys and an improvement in their quality. Yet in remarkably few countries is there a standardized, recurrent—and therefore consistent—approach to household survey data collection and analysis. **A renewed, long-term commitment to build capacity in domestic statistical agencies would be a valuable use of aid agencies' resources**. Given its global reach and expertise in statistics and capacity development, the World Bank is the appropriate agency to lead this effort. While greater investment in national poverty statistics may not answer some of the long-standing questions in poverty analysis—*At what level should the global poverty line be drawn? How should national accounts and household survey data be reconciled?*—many of which are more normative than positive, it would provide a richer empirical foundation for these debates.

At the global level, **one concrete policy recommendation that could be implemented immediately is for the World Bank to begin producing global poverty estimates every year**.[24] The World Bank currently produces updated poverty estimates every three to four years, and each new release suffers from a three-year lag attributable to time spent on data collection and analysis. This means that when we are near the end of the data production cycle—as we hopefully are today—our estimates of "current" global poverty are six years out of date. While the lags in data collection and analysis may prove difficult to close (though greater investment in domestic statistics agencies would help on this front), we see no reason why global poverty estimates could not be produced annually, incorporating any new survey data whose analysis has been completed in the previous year. If these releases were timed to coincide with major international meetings, such as U.N. or G-20 summits, and sufficiently well-publicized, they could go a long way in ensuring the fight against poverty remains a priority on the global agenda, and in making sure the World Bank remains an engaged and relevant voice in discussions on the future of the global economy.[25] Moreover, regular updates of global poverty levels would also lead to greater collective accountability and heighten popular awareness in the global fight against poverty, potentially leading to better development results.

Conclusion

For many years, a debate raged amongst development academics, advocates and policymakers on the role of growth in poverty reduction and development, with some suggesting issues such as inequality and redistribution merited greater attention. Today, the development community has thankfully largely moved beyond this debate, with a broad consensus rightfully asserting the role of growth at the center of poverty alleviation.

This analytical evolution has happily coincided with a period of rapid economic growth in the developing world, even despite the setback of the Great Recession. The new estimates of global poverty presented in this brief serve as a reminder of just how powerful high growth can be in freeing people from poverty. In the span of a decade, the share of the world's population living in poverty could be cut by two-thirds, the number of countries where more than 1 in 6 people live in poverty could drop from 60 to 35, and 19 countries are poised to eliminate poverty altogether.[26]

Of course, it is far too early to declare success in the fight against poverty. To begin with, our estimates are just that; they are not hard numbers that can be calculated in real time, and the gains we imagine might not be realized if projections of future consumption growth turn out to be overly optimistic or if the poor do not share in this growth. Moreover, even if our figures are broadly accurate, in 2015 there will still be close to 600 million people—twice the population of the United States—living on less than the meager sum of $1.25 a day. Their fates are far from secure and represent a strategic and moral failure for the rest of the world, arguably all the more so as millions of others escape poverty.

Nevertheless, the rate at which the developing world is now pulling people above the $1.25 threshold is tantalizing. The "dream of a world free of poverty," the oft-ridiculed motto emblazoned at the entrance of the World Bank, is, year by year, coming closer to reality.

Appendix: Methodology

Poverty estimates and projections

Our estimates are based on the 119 countries for which the World Bank provides household survey data. For each country, we take the most recently available survey data, which in most cases are found in the PovcalNet database. Where more recent survey data is available, we use the World Development Indicators (WDI) database.

For each country, we produce a set of estimates of mean per capita private consumption for the years 2005-2015. We do so by applying the Economist Intelligence Unit's (EIU) historical, estimated and forecast growth rates of per capita private consumption (national accounts data) to the survey mean per capita consumption level for each country. (For survey data taken from the WDI database, the mean consumption level is derived using the income distribution, the poverty headcount ratio and the poverty gap.) The EIU provides private consumption growth data for 113 of our 119 countries up to 2011, and for 46 of the largest economies up to 2014. Where EIU private consumption growth data is not available, we use GDP per capita growth forecasts from the IMF's World Economic Outlook (WEO) database as a proxy for per capita private consumption growth.

Next, we use our per capita private consumption data to estimate the poverty headcount ratio and poverty gap for every country for the years 2005-2015. We do so using the World Bank's PovcalNet software. The PovcalNet software generates a headcount ratio and poverty gap for any given poverty line, mean consumption level and income distribution. Keeping the poverty line fixed at the international poverty line of $1.25 a day measured in purchasing power parity (PPP) terms, and the income distribution fixed according to that of the most recent household survey for each country, we calculate changes in poverty based on the changes in mean private consumption per capita.[27] (For countries which have had more than one survey since 2005, we use the most recent survey to forecast forward changes in poverty, use data directly from earlier surveys for each survey year, and average data for the years in between surveys. For example, if a country has survey data for the years 2005 and 2007, the 2005 headcount ratio and poverty gap will come directly from the 2005 survey, the 2006 headcount ratio and poverty gap will be an average of the 2005 and 2007 data, and the 2007 survey data will then be used as the basis for determining and estimating values for the years 2007-2015.)

The final step is to estimate the number of people living in poverty in each country, which simply requires combining our poverty headcount ratios with population data. For the years up to 2009, we use population data from the WDI; for the years 2010-2015, we apply population growth rates from the IMF's WEO database to the WDI data. The lone exceptions are China and India, where, in order to derive separate data for rural and urban populations, we apply population growth rates from the U.N. Urbanization Prospects database to 2005 population data derived from PovcalNet.

Our methodology implicitly assumes that the income distribution in each country remains constant over the forecast period. While in reality this is unlikely to hold, and for any given country our estimates might overstate or understate the true level of poverty based on changes in the income distribution, it is the best assumption that can be made given the absence of any systematic relationship between growth and the distribution of consumption or income. From a practical standpoint, the large terms of trade improvement in favor of the world's rural populations recorded over the past decade gives us confidence that many of the world's poor have shared in the benefits of the recent economic expansion.

The 119 countries we study account for 5.5 billion people, or 95 percent of the population of the developing world today. Coverage is greater for middle-income than low-income countries. Our estimates cover 79 of the 104 countries currently classified as middle-income, capturing 98 percent of their total population, compared to 33 of the 40 countries currently classified as low-income, capturing 85 percent of their total population. Our estimates therefore likely underestimate the true extent of poverty and this bias may become more significant over time, given our finding that poverty reduction occurs at a faster speed in middle-income countries compared to low-income countries. That said, the size of these countries together is sufficiently small that their inclusion would not alter the overall shape of our results.

We recognize that there is a long-standing and unresolved debate surrounding the inconsistencies between survey-based and national accounts-based estimates of mean consumption.[28] Given the lack of alternatives, we believe that growth in the national accounts mean is the best proximate for growth in the survey mean. The fact that the World Bank uses growth in the national accounts mean in order to update its survey-based measures to a given reference year adds confidence to this assumption.[29] In fact, the methodology we adopt is almost identical to that used by the World Bank to update its official global poverty estimates; this is why our 2005 estimate is very close to that of the Bank.[30]

Finally, it is worth stating that we acknowledge there are caveats to this methodology—most importantly the reliance on national accounts data—and want to be clear that we do not believe our approach should supplant that currently used in producing the World Bank's official poverty count. When producing global poverty data there are unavoidable trade-offs between timeliness and accuracy, and our results should be read with this in mind. This becomes more pertinent as we move further away from 2005, as (forecast) national account data increasingly shape our overall results. Given how dramatically the world has changed since the era captured in the most recent official figures, however, we believe this trade-off is one worth making, and that our analysis provides a useful baseline for understanding the current state of poverty and its medium-term outlook.

Income level country classifications

Country classifications for 2005 to 2009 are taken from the World Bank. To project changes in country classifications up to 2015, we assume that GNI per capita grows at the same rate as GDP per capita, measured in constant dollars, based on the most recent estimates and projections from the IMF's WEO database. The thresholds for country classifications from 2010 to 2015 are held constant.

Fragility

We use the Fund for Peace's Failed States Index to classify state fragility. From 2005 to 2010, countries are considered fragile if they are classified under "Alert" in the respective year. In contrast to most other fragility rankings, the Failed States Index is an absolute—as opposed to relative—measure, with the share of countries deemed fragile changing from year to year. For 2011 to 2015, we assume the same country classification holds as in 2010.

Poverty gap

In order to estimate the cost of a global safety net—defined as guaranteeing every person a minimum income of $1.25 a day—we rely on poverty gap estimates, which are also produced using the PovcalNet software. The poverty gap—the mean distance below the poverty line as a proportion of the poverty line—is first calculated for each country and year based on the poverty headcount ratio and mean income level. We then calculate the total funds needed to guarantee all citizens a minimum income of $1.25 by multiplying our poverty gap results by the total population. In order to compare these values to data on international aid flows from the OECD's Development Assistance Committee (DAC), we convert our poverty gap estimates from constant 2005 PPP exchange rates to constant 2010 USD, using the LCU/USD and LCU/PPP exchange rates for household final consumption from the World Bank's International Comparison Program (ICP) database and the U.S. GDP deflator.

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Endnotes

1. Clause 47 of the Seoul Summit Communiqué reads "At the same time, narrowing the development gap and reducing poverty are integral to achieving our broader Framework objectives of strong, sustainable and balanced growth by generating new poles of growth and contributing to global rebalancing."

2. For an excellent elucidation of the importance of global poverty estimates, see Deaton (2002). The World Bank states four reasons to measure poverty: to keep poor people on the agenda; to identify poor people and so to be able to target appropriate interventions; to monitor and evaluate projects and policy interventions geared to poor people; and to evaluate the effectiveness of institutions whose goal is to help poor people. Haughton and Khandker (2009).

3. World Bank (2010b).

4. We are not the only ones to believe that the prospects for achieving MDG1a are strong. Pinkovskiy and Sala-i-Martin (2010) believe that Sub-Saharan Africa could, as a region, meet the target by 2013 if peace is established in DRC and it falls in line with the "African trend" trajectory, as other African countries have immediately post-conflict. Even more audaciously, Bhalla (2002) has argued that the goal was already achieved by the time of the Millennium Declaration in 2000.

5. Kenny (2011).

6. Pritchett (1997).

7. IMF (2010).

8. Each records a fall in its poverty rate of 24 percentage points or more between 2005 and 2015.

9. The widely-cited "100 million" statistic is produced through exactly this type of calculation. The original source of this statistic is a paper (Ivanic and Martin 2008) which assesses the effect of high food prices on poverty for nine developing countries and then assumes that the average poverty impact for these nine countries can be applied to the developing world as a whole. Yet there is no reason to believe these nine countries – collectively home to just 7 percent of the world's poor in 2005 – are representative of all developing countries.

10. See Polaski (2008) for a discussion of the impact of higher food prices on poverty in India and China. For a broader discussion on the shift from viewing low food prices as a problem to viewing high food prices as a problem, see Swinnen (2010).

11. Sumner (2010).

12. DfID (2009).

13. In 2010, 20 percent of the total population living in fragile states were in countries for which there exists no official poverty data.

14. To produce its poverty forecasts, the Bank uses an economic model known as the Global Income Distribution Dynamics (GIDD), which links a computable general equilibrium (CGE) model with a microsimulation (household) model. This tool allows the Bank to carry out complex exercises, such as modeling the economic effects of shocks or policy changes, or estimating how long term structural changes in demographics and education affect income inequality. For a discussion of the model, see Bussolo, De Hoyos and Medvedev (2008).

15. World Bank (2009) p. iv. It is worth noting that a considerable source of controversy over efforts to measure poverty in China stems from new estimates of China's purchasing power parity (PPP) exchange rate, which some believe understates Chinese incomes, and hence overstates the level of poverty. While we are not in a position to make any judgment considering the validity of the new PPP exchange rate, we adopt it in order to maintain consistency in our global data set. However, even using the conservative new PPP values, our estimates suggest the country could still escape poverty within a few years.

16. Chandy, Gertz and Kharas (2009).

17. There is a longstanding debate within India concerning the apparent disconnect between growth and poverty reduction, as measured in household surveys. For an overview of these issues, see methodology and Deaton and Kozel (2005).

18. Bhalla (2010).

19. OECD (2010b).

20. Kharas, Jung and Makino (2011). Also note DfID's pledge in 2009 to allocate at least 50 percent of all new bilateral country funding to fragile countries. DfID (2009).

21. See Hanlon, Barrientos, and Hulme (2010).

22. Cost expressed in U.S. dollars at market exchange rates. Note that the cost is the net total to be distributed to poor populations, and excludes any overhead and distribution costs.

23. See Gelb (2010).

24. When the MDGs were initially launched, many assumed an annual count of global poverty would also be necessary in order to monitor progress. Writing in 2003, Angus Deaton commented, "[G]iven the greatly increased attention that has come with the MDGs, the poverty counts must surely now be performed on an annual basis." (Deaton, 2003, p 364).

25. This could complement the creation in 2009 of the U.N.'s new global monitoring system, "Global Pulse", which is intended to address the need for more timely and actionable information on vulnerable populations.

26. There are 19 countries which have poverty rates above 2 percent in 2005 and below 2 percent in 2015.

27. For each income distribution/consumption level/poverty line set the PovcalNet software solves two different Lorenz curve equations - the General Quadratic (GQ) and the Beta equation - and identifies which of the two equations is a better fit for the data; we include the results of the better-fit equation. If neither Lorenz curve is found to be valid, the poverty headcount ratio is considered to be 0 percent. For a detailed discussion of these calculations, see Datt (1998).

28. Of particular interest for our work is the question, discussed in Ravallion (2003) and Deaton (2005), of whether growth in the national accounts mean is systematically higher than that in the survey mean, which would imply that our poverty projections understate the extent of poverty that future surveys would find. There appears to be some evidence that during the 1990s this was the case, though Ravallion (2003) suggests the effect was concentrated in Eastern European countries, which implies its effect on our global figures would be minimal.

29. Chen and Ravallion (2008).

30. One difference between our approach and that of the Bank is the treatment of countries with missing data. In producing its regional and global poverty totals, the World Bank assumes that countries without data have the same poverty headcount ratio as the weighted-average for their region. (For example, the Bank estimates that there are 388 million poor people in Sub-Saharan Africa in 2005, based on a total population of 763 million and a poverty headcount ratio of 50.91 percent. However the Bank only has data for 39 Sub-Saharan Africa countries, which collectively have a total population of 698 million and a poor population of 355 million. Hence the regional headcount ratio is derived from the countries for which data exist (355/691=0.5091), and this headcount ratio is then applied to the population figure for the entire continent, including those countries with missing data, to produce the total number of poor for the region.) Given the shortcomings of such an approach—there are obvious reasons to believe the poverty profiles of countries in which there has never been a household survey differ systematically from the mean—we prefer to simply exclude countries with no data, recognizing that we are missing 5 percent of the developing world population, and thus our regional and global estimates slightly understate the true number living in poverty. This discrepancy largely explains why our 2005 estimate of global poverty is 36 million below that of the World Bank.