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INEQUALITY in FOCUS

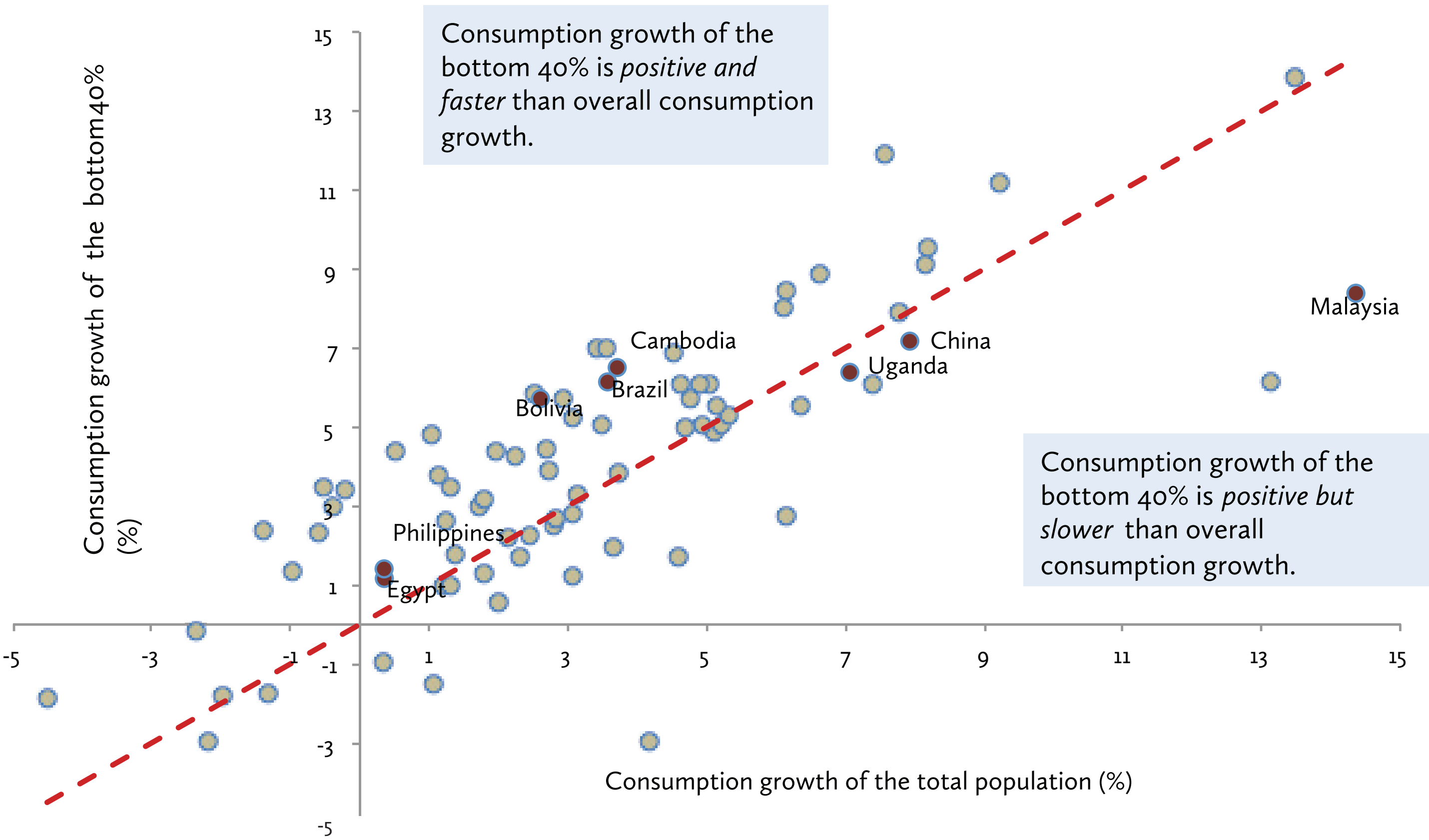
Analyzing the World Bank's Goal of Achieving "Shared Prosperity"

This question-and-answer article was written collaboratively by Inequality in Focus *staff writer Maximillian Ashwill and the three authors of the forthcoming publication, "Shared Prosperity: Links to Growth, Inequality and Equality of Opportunity," Jaime Saavedra-Chanduvi, Ambar Narayan, and Sailesh Tiwari.*

Maximillian Ashwill/World Bank

The World Bank recently adopted new metrics for achieving the goal of ending global poverty. Specifically, this goal is to be reached by ending extreme levels of poverty and promoting "shared prosperity." Ending extreme poverty has been defined as reducing "the percentage of people living with less than $1.25 a day to no more than 3 percent globally by 2030." In contrast, promoting shared prosperity is defined as "fostering income growth of the bottom 40 percent of the population in every country" (World Bank, 2013). This focus on improving the income growth of the poorest 40 percent is a departure from the traditional practice of focusing on per capita GDP growth rates. GDP growth rates are useful summary measures of a society's economic progress but they are unable to capture the distributional aspects of growth: It is entirely possible for a country to be growing rapidly on average while the poor within the country see their incomes stagnate. These goals represent a significant reinvigoration of the Bank's commitment to working toward improving the living standards of the

Figure 1 Growth Rate of the Bottom 40 Percent and Growth Rate of the Total Population



Source: PovcalNet as of September 20, 2013, and micro data from regional databases of LAC and ECA regions.

most downtrodden populations with a sharper equity lens, even in wealthier countries where instances of extreme poverty or destitution may be low. Recently, a group of World Bank economists, Ambar Narayan, Jaime Saavedra-Chanduvi, and Sailesh Tiwari, explored the relationship between shared prosperity with growth, inequality, and inequality of opportunity. They traced potential pathways toward achieving shared prosperity (Narayan, Saavedra-Chanduvi, and Tiwari, forthcoming 2013). The authors discuss their findings below.

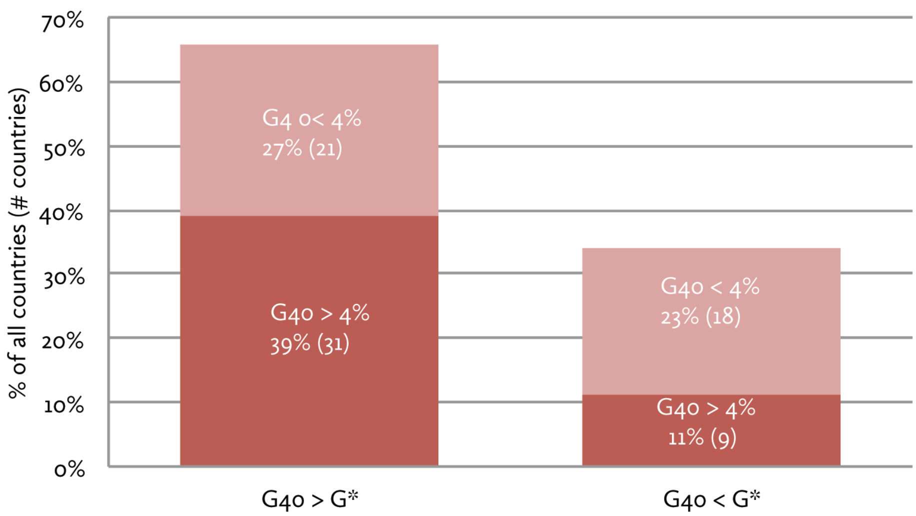
How is "shared prosperity" different from "overall prosperity"?

There is a high, positive association between income growth of the bottom 40 percent and growth in average household income (figure 1). However, in situations where inequality is high or rising, especially when it coexists with limited access to opportunities for those who are less well-off, the growth of average incomes will not accrue proportionately to the bottom segments of the distribution. Thus, shared prosperity, understood in this way, is not an agenda of redistributing an economic pie of a fixed size. Rather, the pie must be expanded continuously and shared in such a way that the welfare of those at the lower end of the income distribution rises as quickly as possible. Shared prosperity also requires that progress is sustainable from generation to generation, in terms of the environment, social inclusion, and fiscal prudence.

How is the goal of shared prosperity related to the goal of poverty reduction?

Given that the bottom 40 percent of incomes in many countries overlaps strongly with those below the poverty line, one can expect a high correlation between the growth rate of the bottom 40 percent and a reduction in poverty rates. Three conclusions can be drawn from our sample of 79 developing countries on this relationship. First, as expected, the growth rate of the bottom 40 percent is correlated with a reduction in poverty based on the two commonly used poverty lines: the extreme poverty line ($1.25/person/day) and the moderate poverty line ($2.50/person/day). Second, the magnitude of the correlation is higher for the moderate poverty line. This suggests that, on average, the bottom 40 percent of a country has a larger overlap with the population living below $2.50/day, which is the poverty line more applicable to middle-income countries, than it does with those living in extreme poverty ($1.25/day). Finally, the correlations are imperfect (-0.28 and -0.44 respectively for $1.25 and $2.50 respectively), regardless of the poverty line used, suggesting that the shared prosperity measure is different from an absolute poverty measure. The lower correlation between reducing extreme poverty and promoting shared prosperity (measured through income changes of the bottom 40 percent) confirms that these are different goals, each with distinct development challenges.

Figure 2 Number of Countries Shown by the Speed of Growth Rate of Bottom 40 Percent



Note: G40 is the growth rate of the bottom 40% of the distribution, while G* is the average per capita growth rate of the entire country.
Source: PovcalNet as of September 20, 2013, and micro data from regional databases of LAC and ECA regions.

What do we know about shared prosperity in recent years?

A number of salient points emerge from analyzing the growth rate of the bottom 40 percent.

First, the growth rate of the bottom 40 percent is very highly correlated with average growth rates, suggesting that overall income growth is necessary for shared prosperity.

Second, the median growth in real per capita income of the bottom 40 percent of the income distribution in a country in the sample is 4.2 percent. This rate is fairly high compared to the median of the annual growth in per capita income of the overall population, which is 3.1 percent. In fact, in roughly two-thirds of the countries in the sample, the growth rate of the bottom 40 percent was higher than the average growth rate. The fact that the bottom 40 percent were "catching up" in some sense implies that inequality was declining in these countries.

A third, related point that emerges is that a faster growth rate of the bottom 40 percent is more likely to occur in countries with declining inequalities, at least in our sample of countries. Sixty percent (31 of 52) of the countries with declining inequality were countries that saw a relatively faster (>4 percent per capita per annum) growth of the bottom 40 percent in comparison to 33 percent (9 out of 27) of the countries where inequality was increasing (figure 2).

Finally, low- and lower-middle-income countries appear to have had less success in boosting shared prosperity than upper-middle and high-income developing countries during this period. The growth rate of the bottom 40 percent in the median country in the richer group was 5 percent, compared to 2.9 percent for the low- and lower-middle-income group. This is fairly comparable to what is observed for the average growth rate as well: The median country in the richer group grew by 4.5 percent, compared to a much slower rate of 2.6 percent for the poorer group of countries. This suggests a more nuanced view on the perception of convergence between the rich and poor countries: While there has been some convergence, other inequalities are being created as incomes within developing countries, particularly for the poor living there, are growing but at much slower rates than for their counterparts in wealthier nations.

How can the shared prosperity indicator be useful in guiding policies to improve the welfare of the less well-off?

The indicator itself is a simple monitoring device, while the policy agenda underpinning the idea of shared prosperity is much more complex than simply raising incomes. The WBG policy goals of ending poverty and sharing prosperity take explicit aim at improving not just the monetary, dimensions of welfare over time, but the nonmonetary dimensions as well. Some of these nonmonetary dimensions are education, health, nutrition, and access to essential infrastructure. Empowerment and enhancing voice and participation in economic, social, and political spheres are also included among nonmonetary dimensions. Therefore, shared prosperity is intended to do more than just improve the incomes of the bottom 40 percent; it also aims to improve the many diverse dimensions of poverty and well-being.

Should inequality reduction be an explicit goal in boosting shared prosperity?

While higher growth for the bottom 40 percent has gone hand in hand with reduction in inequality in countries such as Brazil, Bolivia, and Cambodia, the same cannot be said for many other countries like Egypt and the Philippines. As figure 2 shows, if the objective is to boost shared prosperity, then reducing inequality in itself may be neither necessary nor sufficient. This is not to say, however, that the same relationship holds true in the medium to long run as well. In fact, there is a large body of evidence that establishes that economic progress that sustainably improves welfare of those at the bottom is incompatible with a long-term rise in inequality. This is supported indirectly by the fact that no country has transited beyond middle-income status while maintaining high levels of inequality (Ferreira and Ravallion, 2009). This is particularly true if there are deeply rooted structural inequalities or inequality of opportunity for certain social or economic groups (Easterly, 2007).

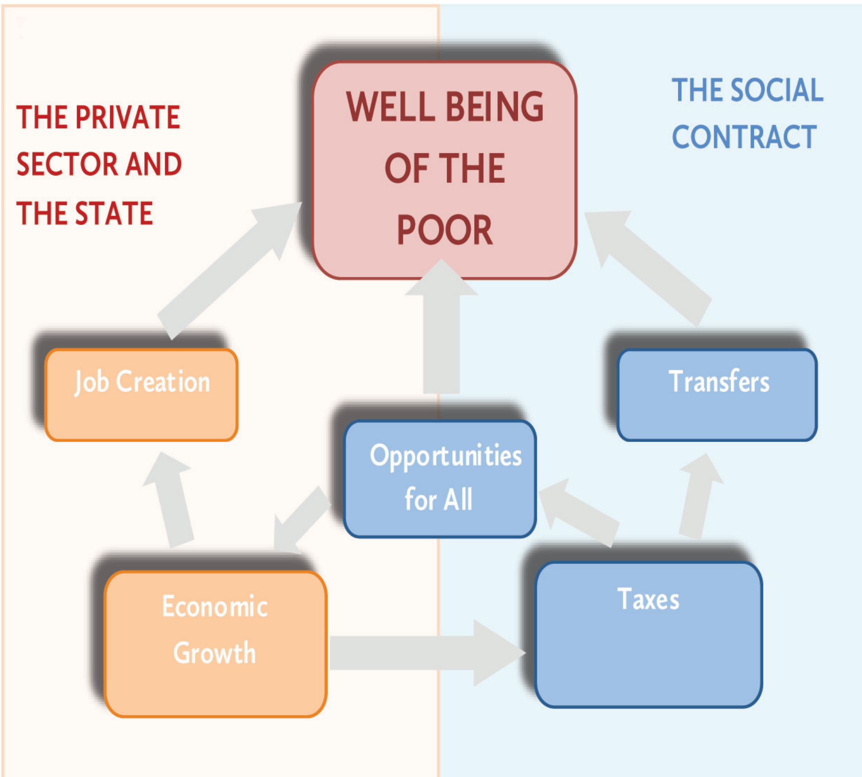
Inequality can catalyze socioeconomic development under some conditions; it can be a serious deterrent in others. Yet increasing the incomes of the poor is a valid development objective in all circumstances, at all times, and at any stage of the development process or the economic cycle. While the question of whether it should be pursued as *the* objective is something that should be evaluated for a particular country and a particular point in time, there seems to be enough evidence to suggest that countries looking to make durable progress on improving the welfare of the least well-off over the medium to long term should be mindful of the degree to which structural inequalities exist in their economies.

What are some of the pathways to achieving shared prosperity?

Economic growth is of course fundamental. Economic growth can lead to broad-based prosperity if the growth pattern generates more and better quality jobs, higher earnings, and economic opportunities for all segments of the population. The *World Development Report 2013* argues persuasively that jobs are also a transformative force—for example, jobs that empower women lead to greater investments in children, and efficiency increases as more productive jobs replace less productive ones. In the decade of the 2000s, most of the reduction in poverty across the globe was related to better labor market engagement in the form of more and better-paying jobs; only to a lesser extent did direct income transfers to the poor, remittances, or changes in demographic patterns contribute (Inchauste, et al., 2012; Azevedo, et al., 2013).

Evidence also suggests that poverty reduction is higher when growth is biased toward labor-intensive

Figure 3 Pathways to Improve the Well-Being of the Poor



opportunities for all, including women and youth, and provide safety nets to protect the vulnerable against extreme deprivation and shocks. The redistribution of resources this implies is not just about transferring income from one segment of the society to another at a particular point in time, but more about investing in improving the capabilities of people over time and across generations, so people can improve their welfare on their own. Economic growth is a necessary condition, generating the resources needed for such investments, which would in turn contribute to higher and more sustainable growth in incomes over time. An effective social contract is about creating such a virtuous, self-sustaining cycle—economic growth leading to higher human capabilities, which in turn feeds back to growth, and so on.

sectors (Loayza and Raddatz, 2010). But for this to occur, growth needs to be diversified and to generate employment opportunities in multiple sectors. While such a process of economic transformation is led by the private sector, the state needs to play a limited but crucial role to improve competitiveness, promote investment climate, and encourage innovation in the private sector. This includes providing a regulatory and macroeconomic environment that provides stability and the right incentives to the private sector, and investing in public goods like physical infrastructure and in people to build a modern workforce.

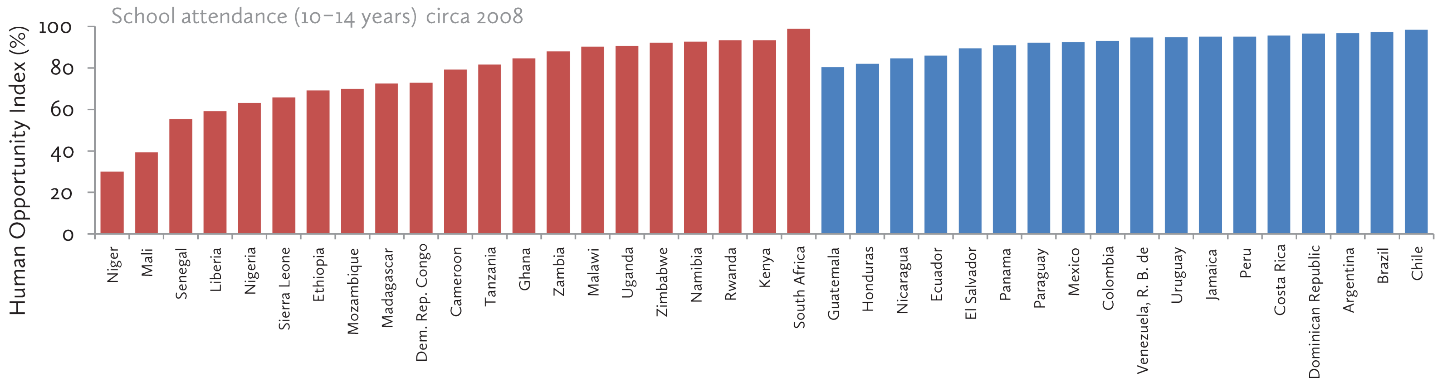
The second channel, in addition to jobs and the labor market, is that of a healthy and stable social contract to ensure that growth includes the poorer segments of society. The country's social contract generates a specific structure of taxation and social expenditures, and social protection programs. A social contract for promoting shared prosperity must allow for societal investments in institutions that improve

What role does inequality of opportunities play?

In many countries, high inequality is a manifestation of a broken social contract with unequal distribution of opportunities. This inequality in opportunities systematically limits the life chances of individuals who draw an unlucky hand in the lottery of life, by being born of a certain gender, or race and ethnicity, or to parents of certain socioeconomic status, and so on. In these cases, closing the opportunity gaps in society, particularly among children, and ensuring that the human and productive potential of every individual is maximized will be critical to achieving further poverty reduction and shared prosperity. Childhood opportunities play a critical role later in life, particularly in opportunities related to labor market participation, entrepreneurship, having access to productive assets, financial services, markets, and infrastructure and being able to exercise voice and agency in social and political spheres.

A focus on equality of opportunity in the social

Figure 4 Opportunities in School Attendance in sub-Saharan Africa and Latin America



Source: Demographic and health surveys for different years (circa 2008), from World Bank (2013, forthcoming).

contract is thus necessary to promote shared prosperity from the point of view of equity and growth alike. Growing evidence suggests that improving access for all and reducing inequality of opportunity is not just about "fairness" and building a "just society," important as these principles are, but also about realizing a society's aspirations of economic prosperity. Notably, the dividends of investing in opportunities among children are likely to accumulate over time and across generations.

How far from universal are basic opportunities for children in developing countries?

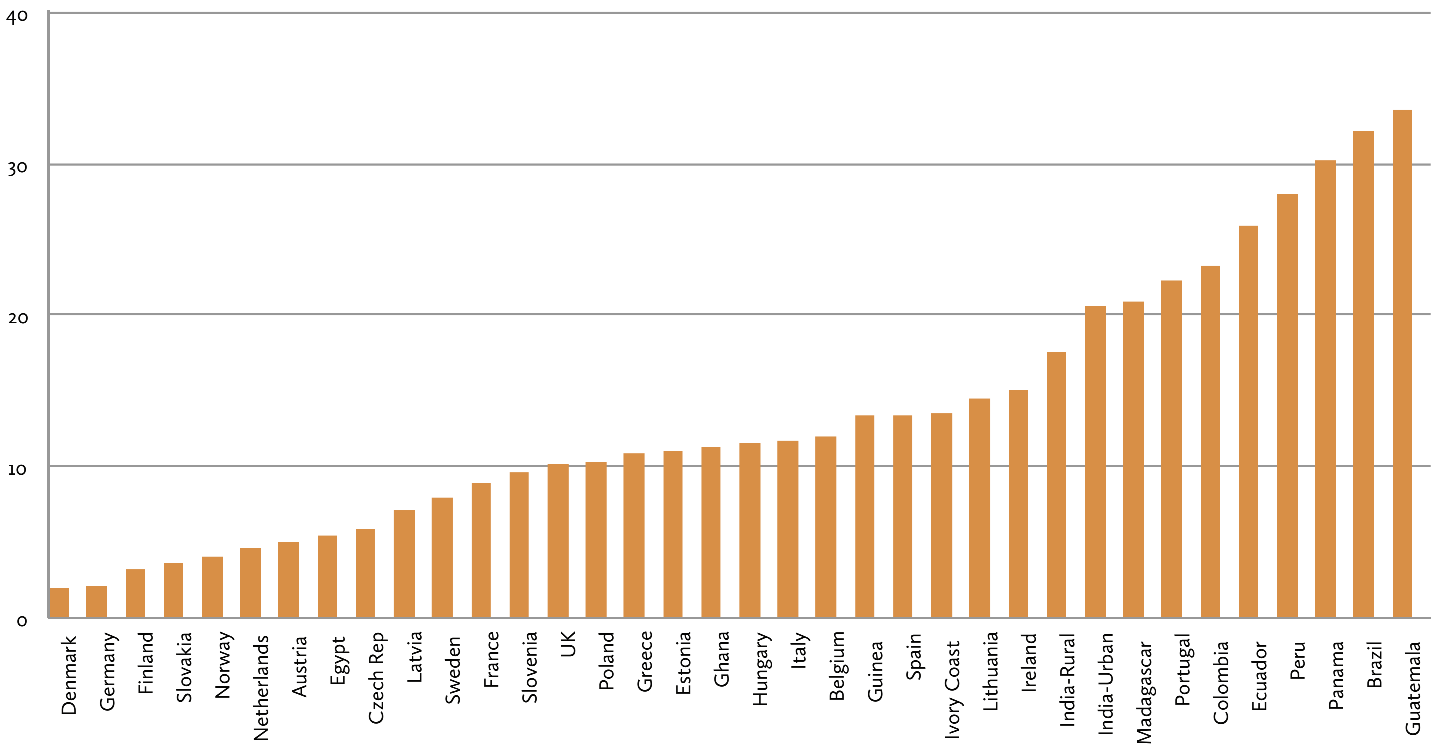
There is a lot of work to be done on this front. A recent analysis for a report on sub-Saharan Africa (World Bank, forthcoming) has found access to even the most basic goods and services (quality primary schooling, adequate sanitation, and the like) among children to be highly inadequate in almost all the countries studied. For example, the school attendance rate among 6- to 11-year-olds is less than 80 percent in 14 out of 20 countries for which the analysis was done. In addition, these opportunities are also inequitably distributed among children of different household wealth, parental education level, urban/rural residency, and so on. In countries such as Cameroon, Nigeria, and Rwanda, the likelihood of completing primary school on time for a girl born in a rural household in the lowest quintile of wealth, where the household head has education below primary level, is roughly *an eighth* of the likelihood for a boy born in an urban household in the highest wealth quintile with a highly educated head (World Bank, forthcoming).

Even for middle-income countries, where access to basic goods and services is nearly universal, inequality of opportunity is widely prevalent in access to early childhood inputs, quality schooling, health services, and infrastructure. In Vietnam, for example, even though primary schooling is nearly universal, nearly 40 percent of children in Grade 5 exhibit inadequate mathematics or language skill to progress to the lower secondary level. These children are disproportionately likely to belong to poorer households (bottom two quintiles of wealth), belong to an ethnic minority, live in rural areas, and have parents with low education (primary school or less) (Vietnamese Academy of Social Sciences and the World Bank, 2012). Similarly, in South Africa, completion of primary school on time and exposure to early-childhood programs (among 0–4 year olds) are far less than universal and highly unequal, with most of the differences being associated with socioeconomic background, location, and ethnicity of the children (World Bank, 2012).

How do opportunities during childhood matter for growth and poverty reduction?

These early disadvantages are often compounded in the labor market, and disadvantages early in life translate into restricted employment opportunities when

Figure 5 Proportion of Total Inequality Attributable to Inequality of Opportunity



Note: The plotted values are between group shares of total inequality measured by the mean-log deviation (Theil-L). Theil-T is used in the cases of Ghana, Guinea, Ivory Coast, and Madagascar.
Source: Based on data from Ferreira and Gignoux (2011).

children become young adults. In South Africa, for example, an overall unemployment rate of 25 percent in 2012 is exacerbated by large differences in employment rates among workers with different characteristics. Even after accounting for the effects of education and experience (age) of workers, circumstances at birth contribute almost half of the inequality among groups: Being a resident of an urban township or village, a woman or of non-white ethnicity is associated with a much higher likelihood of being unemployed or underemployed (World Bank, 2012). These disadvantages then manifest themselves in income inequality and other outcomes. A recent paper reports that in countries such as Brazil and Guatemala, up to a third of the total inequality in earnings could be attributed to inequality of opportunity (Ferreira and Gignoux, 2011).

Finally, from an analytical as well as policy point of view, how can a lens of equality of opportunity be useful for shared prosperity?

The equality of opportunity lens gives us a view of the “less well-off” that is broader and more textured than the bottom 40 percent of the income distribution. It could imply, for example, extending the concept of “bottom 40 percent” to include access to basic goods and services, or opportunities, among children. In other words, the relevant population of interest would be not so much *the poorest* two-fifths of society—although that remains critically important—but the most “opportunity-deprived.” The additional focus that the equity lens brings will ensure that any policy designed to address shared prosperity will also address other dimensions of disparity such as parental education, region, urban/rural residence, gender, race/ethnicity, and so on. Additionally, targeting policies toward a group defined by low opportunity (as opposed to low income) broadens the concept of shared prosperity to take into account a more multidimensional view of welfare that includes education, health, and infrastructure services.

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Managing Risk Is Essential to Reducing Poverty and Inequality

Excerpts from the 2014 World Development Report

Over the past three decades, the world's poverty levels have declined. Perpetually impoverished countries like China, India, and Brazil are now emerging global powers. Within these countries and a host of others, the populations of those living in extreme poverty have diminished significantly. Along with the decline in poverty have come improvements in equity. Brazil and other countries known for high levels of economic inequality have made marked improvements in these metrics. As the world changes, a host of opportunities arise. With them, however, old and new risks appear, from the possibility of job loss and disease to the potential for social unrest and environmental damage. If ignored, these risks can turn into crises that reverse hard-won gains and endanger the social and economic reforms that produced them. Furthermore, such risks, if not managed correctly, can play a significant role in keeping or pushing people into poverty and exacerbating inequality, especially because the poor tend to be hardest hit by negative shocks and have the fewest resources to prepare for them (Baulch, 2011; Narayan, Pritchett, and Kapoor, 2009). The solution is not to reject the changes that bring about opportunities along with risks, but to prepare for them. Managing risks responsibly and effectively has the potential to bring about security and means of progress to people in developing countries and beyond.

This article comprises excerpts from the *2014 World Development Report,* written by the 2014 WDR team. The team includes Norman Loayza (director), Inci Otker-Robe (deputy director), Rasmus Heltberg, Ana Maria Oviedo, Xubei Luo, Martin Melecky, Stéphane Hallegatte, César Calderón, and Kyla Wethli. The full *World Development Report 2014* can be downloaded at www.worldbank.org/wdr2014. Mr. Loayza, Mr. Helberg, Ms. Oviedo, and Ms. Wethli provided helpful suggestions for this article, which was compiled, arranged, and modified by Maximillian Ashwill.

The newly published *2014 World Development Report* focuses on the theme of managing risk for development. It argues that not only can better risk management avert loss of life, costly damages, and setbacks, but it can also unleash opportunity for growth and advancement. Although the purpose of the 2014 WDR was not to analyze the impacts of risk management, or lack thereof, on inequality, there are nevertheless many impacts and solutions that emerge. This article comprises modified excerpts from the report, as well as some unpublished material provided by the WDR team.

Shocks can exacerbate inequality by more negatively affecting the poor

Risk and shocks do not affect all people in the same way, and can have the consequence of exacerbating inequality. Households that are better off or that have access to strong risk management tools are typically able to take on more risk, and therefore can expect higher returns (Carter, et al., 2007). Poor households, by contrast, are often compelled to avoid risk because they fear the potential for negative outcomes. Realizing that a negative shock can push them into destitution, bankruptcy, or crisis, poor people may stick with technologies and livelihoods that appear relatively safe but are also stagnant.

Other risks, such as those stemming from economic crisis or crime, are "imposed" and do not reflect opportunities. Several of the "imposed" risks and hazards affect the poor disproportionately—either because they have higher exposure than those who are better off, lose a larger share of their wealth in shocks, are less able to afford protection and insurance to prepare for risks, lack access to important markets and public services, or suffer from social exclusion. As a result, when hit by a shock, the poor are far more likely to rely on adverse coping responses that can negatively affect their long-term prospects, such as reducing food consumption or taking children out of school (Ashwill and Heltberg, 2013). An overarching conclusion that emerges is that many people, and not just the poor, are exposed and vulnerable to risk and that although many people are able to escape poverty every year, many others fall into poverty because of shocks and a lack of protection.

Alongside systemic risks, such as economic crises and natural disasters, idiosyncratic risks, which are specific to individuals or households, are equally important for people's welfare. Losing a job or not finding one because of inadequate skills, falling victim to disease or crime, or suffering a family breakup from financial strain or forced migration can be overwhelming, particularly for vulnerable families and individuals. Households in Ethiopia whose members experienced serious illness, for example, were forced to cut their consumption by almost 10 percent, and they continued to be negatively affected three to five years later (Dercon, Hoddinott, and Woldehanna, 2005). Health costs from high levels of crime and violence amount to 0.3–5.0 percent of gross domestic product (GDP) a year for countries in Latin America, without even considering the impact of crime on lost output because of reduced investment and labor participation (Buvinic and Morrison, 2000). Loss of employment in countries as different as Argentina, Bulgaria, and Guyana has not only lowered income and consumption but has also reduced people's ability to find new work, worsened social cohesion, and in some cases increased domestic violence (World Bank, 2012).

Community-based insurance provides people with partial compensation for the impact of shocks, but many shocks nevertheless cause serious hardship, especially for the poor. Studies of households that face income shocks show that their consumption falls less than income: In other words, some risk is insured away and some is retained (Fafchamps and De Weerdt, 2011; Morduch, 2002; Ravallion and Chaudhuri, 1997; Townsend, 1994). The

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poorest are the least insured. For example, in rural China, for the poorest tenth of the population, a loss of income of 100 yuan led people to cut food and other expenditures by 40 yuan, while for the richest third of households, the same shock resulted in a consumption cut of only 10 yuan (Jalan and Ravallion, 1999).

Whether adverse consequences come from systemic or idiosyncratic risks, they may destroy lives, assets, trust, and social stability. And it is often the poor who are hit the hardest. Despite impressive progress in reducing poverty in the past three decades, a substantial proportion of people in developing countries are vulnerable to falling into poverty when they are hit by negative shocks (figure 1). The mortality rate from illness and injury for adults under age 60 is two-and-a-half times higher for men and four times higher for women in low-income countries than in high-income countries, while the rate for children under age five is almost 20 times higher (WHO, 2013). There is growing evidence that adverse shocks—above all, health and weather shocks and economic crises—play a major role in pushing households below the poverty line and keeping them there (Baulch, 2011).

Risk management can unleash opportunity

Yes, risk is a burden, but it is also necessary to the pursuit of opportunity. Risk and opportunity go hand in hand in most decisions and actions taken by countries,

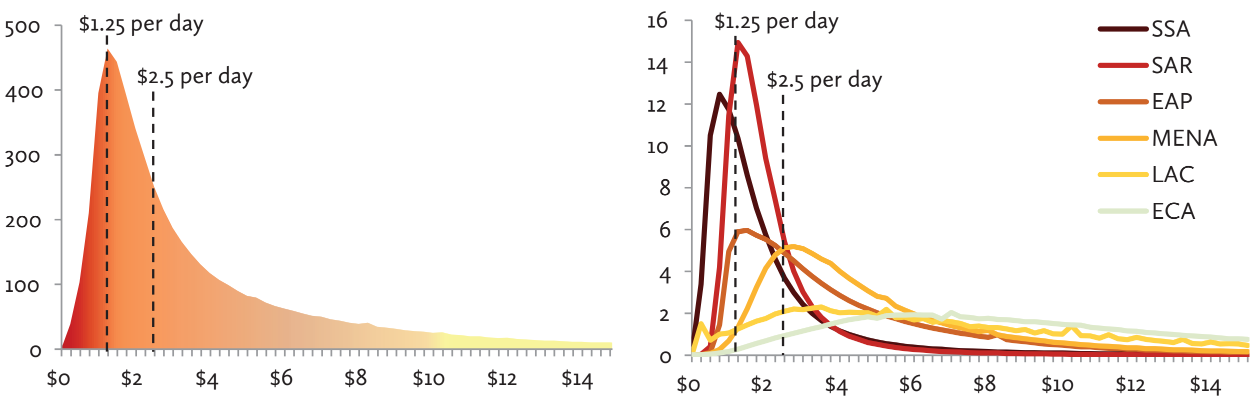
Figure 1

Many people around the world live very close to poverty, and are vulnerable to entering into poverty when they are hit by negative shocks.

More than 20 percent of the population in developing countries live on less than $1.25 a day, more than 50 percent on less than $2.50, and nearly 75 percent on less than $4.

a. All developing countries, 2010
total population, in millions

b. Developing countries in selected regions, 2010
percent of population in each region



Source: WDR 2014 team based on data from PovcalNet.
Note: $1.25 per day is a widely used measure of extreme poverty. However, $2.50 per day is considered a more relevant measure of extreme poverty for some regions, such as Latin America and the Caribbean. See Ferreira and others, 2013.

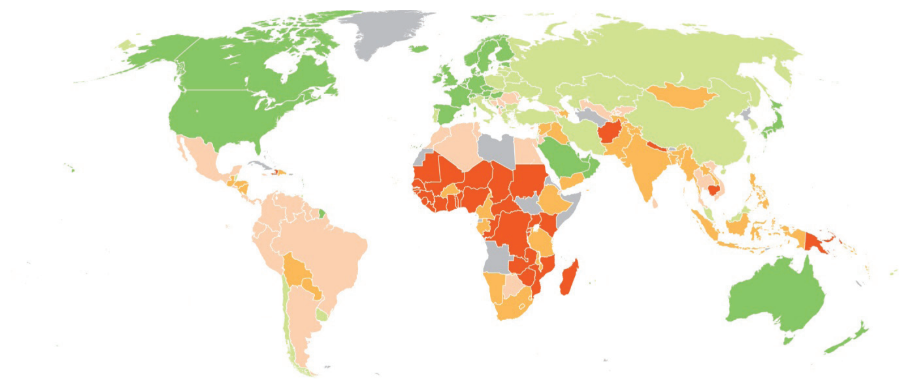
enterprises, and families in the process of development. Consider a few examples. Since the 1990s, most developing countries have opened their borders to seek international integration and higher economic growth, but in the process have also increased their exposure to international shocks. Firms around the world have made investments to upgrade their technologies and increase profitability, but the debt required to do so has made them more vulnerable to changes in demand and credit conditions. From Brazil to South Africa, millions of families have migrated to cities to seek better job opportunities and health and education services, but have also become more exposed to higher crime even as they have less communal support. The motivation behind these actions is the quest for improvement, but risk arises because favorable outcomes are seldom guaranteed.

Risk management is the process of confronting risks, preparing for them, and coping with their effects. Having risk management tools—such as improved information, crop insurance, and employment diversification—can help people mitigate risk. In turn, this can allow people, especially the poor, to be more willing to undertake new and promising, but risky, ventures. Some farmers in Ethiopia, for instance, choose not to use fertilizer because they fear drought and other potential shocks, and thus prefer to retain savings as a cushion rather than investing in intermediate inputs (Dercon and Christiaensen, 2011). In contrast, farmers in Ghana and India who have access to rainfall insurance have been less reluctant to taking on risk in search of higher yields—switching to higher-return but more sensitive cash crops, and increasing their investments in fertilizer, seeds, pesticides, and other inputs (Karlan, at al., 2012, for Ghana; and Cole, et al., 2013, for India).

Much of the emerging literature on risk in a development context emphasizes the important role that risk management can play in increasing resilience to negative shocks. However, to increase prosperity and well-being, risk management also has an essential role in helping people and countries successfully manage positive shocks. Indeed, successfully managing positive shocks is a critical part of increasing people's resilience to negative shocks over time. For example, a farmer's ability to withstand a drought may be substantially influenced by how the yields from years of good rainfall were managed. Thus the goal of risk management is to both decrease the losses and increase the benefits that people experience when they face and take on risk. Overall, preparation for risk tends to be correlated with income across countries, although interesting variations within regions highlight the important role of policy in determining preparation for risk (box 1).

Box 1 How Does Preparation for Risk Vary Across Countries?

Extent of risk preparation around the world.



The map shows an index of preparation for risk, developed for the World Development Report 2014. The index comprises measures of assets and services that influence preparation for risk. The component indicators for the index include: average years of schooling, and the immunization rate for measles (human capital); the proportion of households with less than $1,000 in net assets, and an index of access to finance (physical and financial assets); the percent of the workforce who contribute to a pension scheme, and the proportion of respondents stating that "in general, people can be trusted" (social support); and the percent of the population with access to improved sanitation facilities, and gross public debt as a percentage of revenues (state support).

This index shows that the extent of households' preparation for risk tends to be correlated with national income across countries. Households tend to be the most prepared in high-income countries (particularly in North America and western Europe), and least prepared in low-income countries (especially in Africa). On average, however, substantial variation exists within regions and across countries with similar GDP per capita, highlighting the importance of policies, over and above access to resources, in determining preparation for risk.

Source: Foa 2013 for the WDR 2014. Map number IBRD 40097.

Low-income countries are improving their ability to manage risk

Developing countries have made substantial improvements in some aspects of their risk management in recent decades. The percentage of people in low- and middle-income countries with access to improved sanitation, for instance, has increased from 36 percent in 1990 to 56 percent in 2010; meanwhile, the immunization rate for measles doubled from 41 percent to 83 percent between 1985 and 2010 (World Development Indicators). Improved sanitation and increased vaccination, along with other preventive health measures, have helped reduce infant and maternal mortality rates. Similarly, following repeated cycles of high inflation during the 1970s and 1980s, many middle-income countries developed sound fiscal and monetary policy frameworks, which have helped reduce the incidence of economic shocks.

While knowledge of risks often has been lacking in developing countries, it is increasing in several key areas, such as dealing with disease and natural hazards. And new technologies are greatly helping to improve knowledge of potential shocks and inform responses to them. Farmers in Ghana and 15 other African countries, for example, receive specific market information through their mobile phones, which helps them to improve their response to changes in agricultural prices and demand (Khokhar, 2013).

Several factors limit people's ability to manage risk

If risk management can save lives, avert economic damages, and unleash opportunity—and, furthermore, if risk management is cost-effective and its fundamentals are well understood—then, why aren't people and societies better at managing risk? Although the specific

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reason varies from case to case, it is always related to the obstacles and constraints from which individuals and societies suffer. These constraints include:

- A lack of resources: Even when a risk management strategy is cost-effective, individuals and groups may find it difficult to undertake because of large upfront costs and limited access to credit. Shortages of assets and finance, especially acute in poor and developing countries, can make the trade-offs inherent in risk management harder to handle.
- A lack of information or cognitive failures: Relevant information may not exist or be available to decision makers, or they may lack the ability to understand this information.
- Behavioral failures: Even if information exists, decision makers may be unable to turn knowledge into actions and behaviors that prepare them for risk. In many cases, decision and policy makers seem to have short memories regarding the origins of crises of various sorts. Systemic financial crises, for instance, are almost always preceded by unusually high credit concentration and growth, and this process seems to be well understood (Gourinchas and Obstfeld, 2012; Schularick and Taylor, 2012). Yet policy makers often do little to control credit booms. A false sense of security may underlie people's inability to manage preparation for risk in normal times (by saving for a rainy day or completing disaster preparedness plans, for instance). And a "paradox of protection" can arise: Risk protection that suppresses losses for a long period creates a false sense of security, leading to decreased vigilance and risk awareness and potentially resulting in larger future losses (Hallegatte, 2012).

There are also obstacles to risk management beyond the control of individuals. First, there may be missing markets and public goods. Markets in areas critical for effective risk management—credit, insurance, jobs—are weak or even missing in many developing countries. So are public goods and services essential for risk management—economic and political stability, law and order, and basic infrastructure. In fact, well-developed markets may be missing because supportive public goods are flawed. If, for instance, contracts are not enforced by the justice system, it makes little sense to buy health, vehicular, or house insurance, and no such market will exist (La Porta, et al., 1998). There are a large number of reasons as to why public goods are missing, but consider only the most pertinent ones for risk management. The first, lack of resources, has been mentioned. Another problem is related to the political economy of risk management: Governments may be reluctant to spend on risk preparation because its costs are immediate and observable while its benefits, even if substantial, are longer term and less visible.

Second, there may be government failures or other political economy issues, including corruption and distortionary policies. One example is policy capture, when government policy favors the interests of particular constituencies. Firms and people that are negatively affected by risk management will naturally tend to oppose any constraint and be vocal about it, while the people protected by prospective regulation are often not aware of it and therefore do not support it, or lack the commensurate influence of powerful lobbies. Sometimes well-intentioned policies can impair risk management by distorting people's incentives to manage their own risk. An example is the creation of ill-designed post-disaster support that creates moral hazard and discourages risk management by individuals and firms. Similarly, overly generous safety nets or financial sector bailouts can undermine risk management incentives.

Third, social and economic externalities may present risk management obstacles. Risk management actions undertaken by some people may impose losses on others. For instance, overuse of antibiotics is creating ever more drug-resistant bacteria. Other risk management actions can actually generate benefits for people other than those bearing their cost. This is the case, for instance, for countries that take costly measures to reduce greenhouse emissions, which can benefit the rest of the world. Both negative and positive externalities may complicate the process of risk management, making it less predictable and distorting the incentives for action.

Conclusion: Shared risk management can unleash opportunity and reduce inequality

People can successfully confront risks that are beyond their means by sharing their risk management with others. They can pool their risk collectively through various overlapping social and economic groupings (*systems*). These systems extend in size and complexity—from the household to the international community. They have the potential to support people's risk management in different yet complementary ways. Their different scope may allow them to handle shocks and exposures that match their scale.

- The *household* is the primary instance of support, protecting its members (especially the vulnerable), pooling resources, and diversifying risks.
- *Communities* provide informal networks of insurance and protection, helping people deal with idiosyncratic risks and pooling resources to confront common risks.
- *Enterprises* can help absorb shocks and exploit the opportunity side of risk, contributing to stable employment, growing income, and greater innovation and productivity.
- *The financial system* can facilitate useful risk management tools such as savings, insurance, and credit, while managing its own risks responsibly.
- *The state* has the scale and tools to manage systemic risks at the national and regional levels, to provide an enabling environment for the other systems to function, and to procure direct support to vulnerable people.
  - » It can provide social protection (social insurance and assistance), public goods (national defense, infrastructure, law and order), and public policy (sound regulation, economic management).
  - » Through macroeconomic policy, the state can help maintain economic stability and ensure funding of public services and infrastructure.
- *The international community* can offer expertise, facilitate international policy coordination, and pooling of resources when risks exceed national capacity or cross national boundaries.

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