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The Global Economic Slowdown

Implications for the Rural Poor

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Over the past 25 years, economic growth in many developing countries has outpaced that of industrialized countries, and per capita incomes of these two groups of countries have started to converge. Growth in developing countries contributed to a dramatic drop in the global extreme poverty rate between 1990 and 2012: from 37 percent to 13 percent. However, the global economic outlook has deteriorated recently. The latest International Monetary Fund (IMF) forecast for the level of world gross domestic product (GDP) in 2017 is more than 5 percent below the level forecast in 2012, and the expected growth rate for 2017 is down by a quarter. Although poverty rates are expected to continue declining, this economic slowdown raises questions about the prospects for achieving the first of the Sustainable Development Goals (SDGs)—ending poverty by 2030.

How will this slowdown, particularly in advanced and emerging market economies, impact the world's poor in coming years? Will it jeopardize achievement of the critically important SDGs? To answer these questions, we use an analytical framework that combines a global computable general equilibrium model (MIRAGRODEP) with a systematic household modeling approach (see box). This framework captures impacts felt not just directly through the productivity of household firms, but also through changes in commodity prices and wages; and it allows us to identify both short- and long-term impacts of the global economic slowdown on poverty, particularly for the rural communities where global poverty is concentrated. We analyze two scenarios involving changes in growth projections which we compare with projections based on the 2012 IMF forecasts. The first focuses on the impacts of a slowdown in the locomotive economies of the rich world plus Brazil, China, and Russia, and the second incorporates changes in growth rates around the world. The results suggest that both the slowdown of emerging market economies, particularly China, and the slow rebound of high-income countries after the global financial crisis that began in 2007–2008 may have important consequences for global growth, commodity prices, global investment dynamics, and global poverty.

DRIVERS OF ECONOMIC GROWTH

Among the many factors that drive changes in economic growth, this study focuses on productivity growth, wage rates, energy and mineral prices, savings and investment rates, and consequent international capital flows.

We begin by comparing the IMF *World Economic Outlook* (WEO) forecasts from April 2012 and October 2015. The 2012 report forecast global growth of 17.5 percent between 2011 and 2015; in reality, growth over this period was only 13.9 percent. The 2015 forecast was less optimistic—the projected growth rate for 2017 fell from 4.7 percent to 3.8 percent, and the projected level of global GDP in 2017 fell by 5 percent relative to the 2012 forecast. Similar projections are derived from other forecasts, such as those provided by the Organisation for Economic Co-operation and Development (OECD). Extrapolating to 2030 from the changes in growth rates at the end of the two WEO forecasts, global GDP will be 15 percent lower than was expected in 2012, although it will still be 60 percent above today's level. A recent OECD study associates the current slowdown with broad declines in productivity growth across sectors.

At the country level, income growth projections to 2017 were reduced for 134 out of 189 countries. Exporters of raw commodities and crude oil (including Gulf countries, Angola, Equatorial Guinea, and the Democratic Republic of the Congo) are among the countries most hard-hit, but projected growth rates for Brazil and China, two of the world's most important emerging markets, were also significantly reduced. In addition, the expected US growth rate dropped by one-third.

MODEL AND SCENARIO DESCRIPTIONS

This analysis looked first at broad macroeconomic changes using the MIRAGRODEP model and then assessed household-level impacts. The model draws on the GTAP 9 database; household simulations rely on an update of a 31-country dataset that includes more than 285,000 representative households in developing countries and covers 76 percent of the world's poor. To extrapolate to global figures, five clusters were created using the poverty headcount at $1.90 per day PPP, the rural population ratio, the adjusted net national income per capita, and cereal yields.

Scenario 0 (baseline) is based on the more "optimistic" projections of the global growth trajectory for 2012–2017 from the 2012 WEO. The change in the economically active population (taken from the UN) is used to define the growth of the labor force. Total factor productivity (TFP) is computed at the country/regional level to match the GDP trajectories. To build the growth trajectory to 2030, the average annual TFP growth rate achieved from 2015–2017 is maintained between 2017 and 2030.

Scenario 1 is based on reduced growth projections from the 2015 WEO in the high-income countries plus Brazil, China, and Russia. The actual growth rate from 2011 to 2014 is used for all countries, and the 2015 WEO projections from 2014 to 2020 for the "leading" economies. For these countries, the projected average annual TFP growth rate for the 2017–2020 period is maintained between 2020 and 2030. For middle- and low-income countries, the TFP growth computed in Scenario 0 is maintained for 2014–2030. In addition, structural reforms in China, leading to a "rebalancing" of the Chinese economy, reduce both domestic investment and the current account surplus. A reduction in energy prices is also included.

Scenario 2 includes all the elements of Scenario 1 but readjusts the TFP growth rate between 2014 and 2030 for both the "driver" economies and other middle- and low-income countries.

Savings rates affect the amount of capital available for investment from both domestic sources and international investors. Compared with the 2012 WEO estimates, the 2015 estimates involve higher savings rates in some high-income countries. Oil-exporting countries experience either increases in savings rates to support investment or decreases in savings rates to support consumption in response to large income shocks. And China's expected 2020 savings rate declines from 50 percent in the 2012 projection to 39 percent in the 2015 projection.

A look at the larger investment picture (that is, current account balances) in the 2015 projections shows overall surpluses in several leading economies disappearing by 2017. Consequently, less foreign savings are available for middle- and low-income countries, which reduces their economic growth.

METHODOLOGY AND SCENARIOS

To assess the impacts on poverty—especially poverty in rural areas—we examine how changes in growth patterns will affect specific drivers of poverty, including both short- and long-term effects: (1) direct impacts on producers' incomes; (2) changes in the cost of living; (3) impacts on factor returns, such as wage rates for unskilled labor sold outside the household's business activities; and (4) changes in remittances coming into the household.

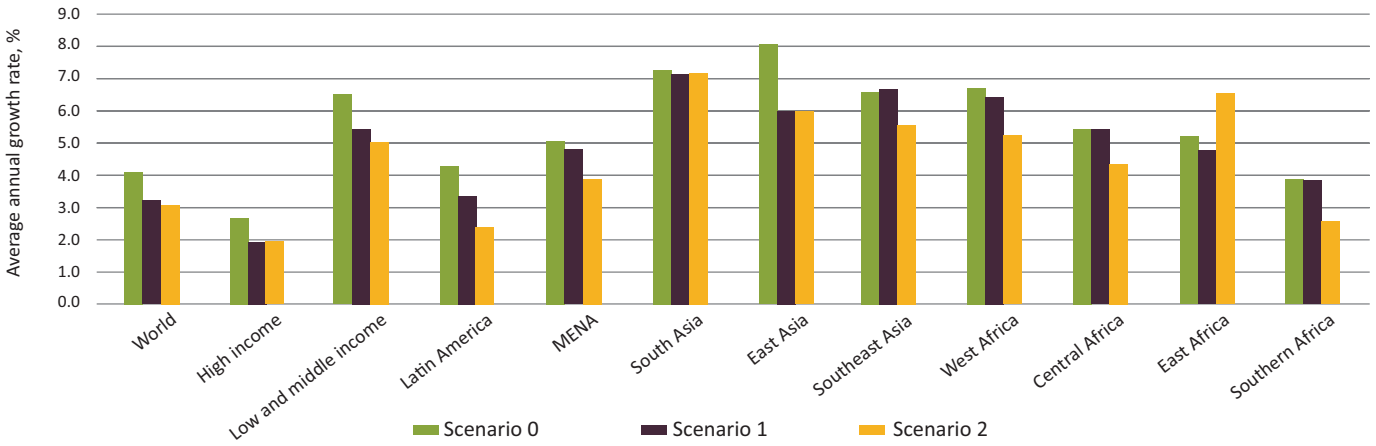
The three scenarios considered for the period 2011 to 2030 involve qualitative and quantitative changes in growth leading to differentiated impacts across different economic actors and products. Scenario 0 (baseline) is based on projections from the 2012 WEO, which are globally more "optimistic" than the other scenarios. Scenario 1 is based on reduced growth projections from the 2015 WEO for the high-income countries plus Brazil, China, and Russia. Scenario 2 includes all the elements of Scenario 1 but readjusts total factor productivity (TFP) growth rates for middle- and low-income countries. Growth rates of real GDP under the three scenarios are illustrated in Figure 1.

While GDP grows overall in each of these scenarios, GDP growth rates are substantially lower in most emerging economies under Scenarios 1 and 2. For example, China's annual GDP growth rate falls from 8 percent to 6 percent, while Brazil's falls from 4.4 percent to 2 percent and Russia's from 4 percent to 1.5 percent relative to the baseline. High-income countries like Canada, Japan, Korea, and the United States also see sizable reductions in GDP growth. East Africa, however, has higher growth under Scenario 2 as a result of recent growth performance.

RESULTS

These scenarios illuminate the impact of the global slowdown on prices, incomes and wages, and remittances, and the resulting impact on poverty levels in different sectors and regions.

Figure 1 Average annual growth rate of real GDP under alternative scenarios, 2011–2030



Source: MIRAGRODEP model projections **Note:** MENA = Middle East and North Africa.

World Prices

The price of minerals falls sharply under Scenarios 1 and 2 as demand declines relative to resource availability. Real agricultural prices rise when growth slows because spending shifts away from agriculture less rapidly than under Scenario 0, the high growth scenario. Outcomes will vary for different poor populations—increased agricultural prices will be good for farmers, as will the resulting increase in real wages, but food consumers will face higher costs.

Incomes

Real incomes experience the greatest direct impact in the economies most seriously affected domestically by the downturn. These include Brazil (-36 percent by 2030 in Scenario 1 compared to Scenario 0), China (-31 percent), Russia (-40 percent), and the United States (-20 percent). The impact on other economies under Scenario 1 depends on whether these countries are suppliers of mineral products (which tend to lose under this scenario) or agricultural products (which tend to benefit).

Incomes in regions that depend on global demand, particularly from OECD markets, are also adversely affected by the global slowdown. In Scenario 1, these include the West African Economic and Monetary Union (WAEMU) countries (-19 percent of real income compared to the Scenario 0 projection for 2030), Ghana (-8 percent), South Asia other than India (-19 percent), and Central America (-9 percent). In Scenario 2, real incomes are affected in a wider range of countries, including Nigeria (-26 percent) and South Africa (-21 percent).

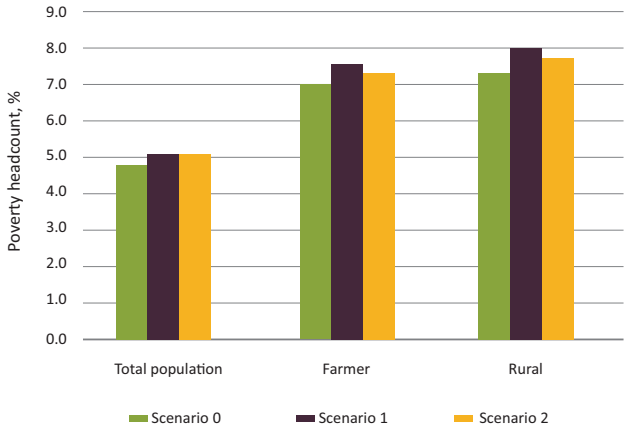
Average unskilled wages follow a similar pattern, declining when productivity falls. Under Scenario 1, West Africa sees significant drops in unskilled wages, at -11.6 percent compared to the baseline projection for 2030 for WAEMU countries and -3.6 percent for Ghana. South Asia also sees unskilled wages decrease (again, with the exception of India), as does Central America.

Remittances—another important source of income for many poor households—also see significant decreases in both Scenario 1 and Scenario 2 by 2030. In Central America, remittances are 16 percent lower under Scenario 1, reducing nationwide income by 8.8 percent on average. Under Scenario 2, where decreases in productivity affect both developing and high-income countries, remittances are projected to be 10–20 percent lower for Southern Africa, Central Africa, and South America as a result of the slowdown.

Global Poverty Headcount

Under all three scenarios, the projected 2030 poverty levels are lower than the 2012 levels, but the economic slowdown reduces the decline in poverty. Under Scenario 0, the global poverty headcount is projected to fall to 4.79 percent in 2030 (see Figure 2). This reduction depends on pushing poverty rates to very low levels in many countries that currently have large numbers of poor people. Under Scenario 1, the global poverty headcount falls only to 5.21 percent—34 million fewer people escape poverty than under Scenario 0. For rural populations, poverty rises from 7.15 percent under Scenario 0 to 7.74 percent. Given the sizable deterioration in economic growth under Scenario 1, it is encouraging to find that poverty rates do not increase more. The robustness of overall poverty reduction appears to reflect (1) the near elimination of poverty in most countries, (2) the economic improvement under Scenario 1 for many of the countries with large numbers of people vulnerable to poverty, and (3) the rise in agricultural prices associated with the downturn, which puts upward pressure on wages in poor countries.

Figure 2 Global poverty headcount under alternative scenarios by 2030 (%)



Source: Authors' calculations.
Note: Poverty is defined by the $1.90 PPP 2011 threshold. The 2014 global poverty headcount level is equal to 13 percent.

Under Scenario 2, the overall poverty rate rises further relative to the Scenario 0 projection for 2030, with 38 million additional people living in poverty; however, the poverty rate is slightly lower in this scenario for farmer-headed households and rural people. This latter result reflects better growth and greater employment opportunities in some African and South Asian countries, as well as slightly higher agricultural prices under Scenario 2. However, the movement into poverty is significantly larger under this scenario, particularly among the poorest countries (a net increase of 3 percentage points compared to Scenario 0). For farm households, the story is largely the same. Households in the poorest countries see a substantial net increase in poverty of 2 percent, with 4 percent of people falling into poverty and 2 percent moving out relative to the 2030 levels projected from the 2012 baseline. Middle-income countries see a net increase in the poverty rate of 1.5 percentage points; almost no farm families in these countries move out of poverty under Scenario 2. For households falling into poverty under Scenarios 1 and 2, the biggest driving factor appers to be a reduction in smallholders' sales, caused by lower production and productivity.

CONCLUSIONS

Many developing countries seem likely to see a substantial downturn in economic growth over the 2015–2030 implementation period of the SDGs, compared with the recent years of strong growth. Since the 2015 WEO, the macroeconomic outlook has deteriorated further, with projected global growth for 2017 falling from 3.8 to 3.5 percent.

However, a key result of this study is that projected declines in global poverty rates are not greatly affected by the anticipated slowdown in economic growth. Under the updated projections for 2030, the extreme poverty rate will be 5.2 percent compared to 4.8 percent. For most groups of countries and subgroups of populations, projected 2030 poverty rates will be within one percentage point of the levels projected under the optimistic outlook on global growth. However, there is some variation across countries, and even countries not directly affected by the recent global slowdown are likely to see long-term impacts. And despite this optimistic finding, we should be concerned that the movement in poverty rates is away from the SDG goal of complete elimination of poverty.

The poorest countries will see the greatest changes in projected declines in poverty rates, with over 5 percent of their population remaining below the poverty line. Overall 38 million fewer people will leave extreme poverty compared to earlier projections. Farm households are at particular risk in middle-income countries, with over 1.5 percent more of the farming population potentially not escaping extreme poverty in these countries. By 2030, average extreme poverty in rural areas is now projected to be about 7.5 percent, rather than 7.1 percent. While significant poverty reduction is still expected between now and 2030, a strong focus on policies for poverty reduction will be vital to achieving the first SDG goal of eliminating poverty.

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