

The Importance of Tackling Inequality for Global Poverty

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Global poverty and inequality goals

In recent decades, global extreme poverty has been substantially reduced. While over a third of the world's population lived below the extreme poverty line (less than \$1.90 per day) in 1990, that share had fallen to just 10% by 2015 (World Bank, 2018). This dramatic improvement has shown the world that it is possible to end extreme poverty, and the international development community has thus set itself a goal to do that by 2030. Meanwhile, national inequality has also become a topic of greater focus in the development policy debate in recent years (World Bank, 2016). These two distinct, but connected, issues have been recognised by the international community with inclusion in the Sustainable Development Goals (SDGs), as both a goal to end poverty (SDG 1) and a goal to reduce inequality within countries (SDG 10).

Simulating global poverty up to 2030

In order to demonstrate the importance of inequality reduction in achieving the goal of ending extreme poverty, we develop simulations of global extreme poverty through the year 2030 under scenarios that vary in terms of the evolution of inequality and growth in each country. These simulations utilise a set of micro data for 150 countries, as well as grouped data for a further 16 countries, covering about 97.5% of the global population. The simulations model distributional changes by adjusting a country's Gini index. The Gini index, arguably the most common measure of inequality, constitutes a tool for modelling distributional changes that is both intuitive and conceptually simple, thus maintaining direct policy relevance.

In order to produce intuitive and relatively realistic changes in the Gini index, we use growth incidence curves (GIC), the annualised growth rate of per

capita income for each percentile of the income distribution. This method allows us to model changes in income inequality of varying intensity and shape over a period of time. We use a weakly pro-poor linear GIC to produce our baseline results, but a strongly pro-poor convex GIC used in a robustness check achieves similar results.

Furthermore, it has been observed in the data that GDP growth has become increasingly disconnected from survey observations of income and consumption. In order to account for this, we apply a machine-learning algorithm to estimate the share of GDP growth that can be passed through to the survey income or consumption.

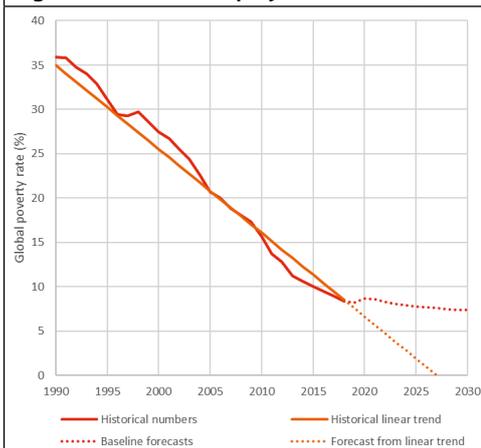
We can also assess the additional poor generated by the COVID-19 pandemic based on the forecast contraction in GDP and how this number could vary depending on the possible accompanying changes in inequality.

Findings

Using World Bank growth forecasts through 2021 and country-specific historical growth averages afterwards, and assuming distribution-neutral growth, our simulations suggest that about 7.4% of the world's population will remain in extreme poverty in 2030. If we instead assume that the Gini index of each country decreases by 1% annually, the global poverty rate estimate for 2030 falls to 6.3%, which translates to an additional 89 million people escaping extreme poverty. This impact of reducing Gini indices by 1% annually is larger than the impact of increasing each country's growth rate by 1 percentage point. However, even under the most optimistic conditions we consider, where each country's Gini index decreases by 2% per year and annual growth rates are two percentage points higher, our simulation suggests that the extreme poverty rate in Sub-Saharan Africa would still remain around 20% in 2030. Thus, it appears unlikely that we will meet the goal set by SDG 1.

Inequality reduction is crucial for reaching the global poverty goals set by the international development community.

Figure 1: Alternative projections to 2030



Source: Authors, based on Lakner et al. (2020)

These simulations generate three main insights. First, not surprisingly, the scenarios in which the bottom 40% grows faster than the mean dramatically reduce inequality within countries. Second, extreme poverty is unlikely to end in Sub-Saharan Africa even when growth of the bottom 40% is boosted. Third, if per capita incomes are held constant — if there is no growth in GDP — distributional changes have an even starker effect on the trajectory of global poverty. The “cost” of boosting growth for the bottom 40% in terms of reduced growth for the top 60% (due to our assumption of maintaining the mean growth rate at zero) is relatively low.

If the historical poverty trend between 1981 and 2018 continued linearly, global poverty would reach 0% well before 2030, as shown in the figure. But our baseline scenario projections based on World Bank growth forecast and historical growth rates suggest that getting close to the 2030 goal of ending extreme poverty will be unlikely. Some of this divergence is due to COVID-19, yet even if the historical trend only were to continue from 2021, global poverty would still reach 0% by 2030. The other part of the answer is that a non-negligible share of the global population remains quite far from the \$1.90 threshold and has faced low, and at times, declining growth rate over the past decades (World Bank, 2018). Indeed, the population making up the poorest 10% of countries has

seen relatively small declines in headcount rates, particularly in countries in long-term conflict and fragility. This means that poverty is becoming more concentrated in a small number of countries. If current trends continue, half of the world’s poor could be found in countries making up only 5% of the world’s population by 2030.

With respect to COVID-19, our baseline scenario suggests that the pandemic has driven 58 million people into extreme poverty in 2020. If all countries’ Gini indices increased by 2% in 2020 due to the pandemic, then 91 million will have been driven into extreme poverty. This is a larger effect than if all countries’ growth forecasts are 2 percentage points lower than anticipated, in which case the pandemic is expected to drive 78 million people into extreme poverty. Hence, our finding that percentage changes in the Gini matter more than percentage point changes in growth carries over to the estimated COVID-19 impacts.

Conclusions

These simulations quantify the importance of tackling inequality for the reduction of global poverty, using plausible distributional changes. A 1% annual decline in each country’s Gini index is shown to have a bigger impact on global poverty than if each country experiences one percentage point higher annual growth rates than expected. Making growth more pro-poor, as simulated in this paper, does not impose a large cost on the rest of the distribution. Because of the large income share of the top of the distribution, the reduction in the growth rate of the wealthiest individuals necessary to ensure that the bottom grows substantially faster than the mean is relatively small. In other words, the distributional changes simulated in this paper are technically feasible and highlight that pro-poor growth is crucial for reaching the poverty goals set by the global development community. And even more so after the COVID-19 pandemic, which is likely to hit the poorest the hardest and therefore contribute to increasing inequality. Policy makers should take into account the need for action on inequality if the internationally agreed goals on poverty are to stand a chance of being met.

On average, declines in country inequality have a larger impact on poverty reduction than increases in growth.

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