Too Poor to Grow

Higher poverty leads to slower growth by deterring investment

A rapidly growing theoretical literature has suggested a variety of mechanisms through which poverty may deter growth and generate self-perpetuating poverty traps. But a basic implication of the theoretical models—that countries suffering from higher levels of poverty should grow more slowly—has remained untested. Instead, the empirical literature has focused on the poverty-reducing effects of growth or the consequences of inequality for growth. A recent paper by Lopez and Servén attempts to bridge this gap by offering a first empirical assessment of the impact of poverty on growth.

The paper's strategy involves estimating a growth equation with poverty added to an otherwise standard set of growth determinants. The framework is very close to that used in recent empirical work studying the effects of inequality on growth. It retains inequality as a control variable, but shifts the emphasis from inequality to poverty. The data used consist of an unbalanced panel of nonoverlapping five-year periods spanning the years 1960–2000 for 85 countries.

The results reveal a consistently negative impact of poverty on growth, a result that is both economically and statistically significant: a 10 percentage point increase in the poverty headcount rate is estimated to reduce annual per capita growth by approximately 1 percentage point. The sign, significance, and magnitude of the poverty effect all remain essentially unchanged even after controlling for the level of inequality. The finding suggests that policies aimed at promoting growth could increase their payoffs if they exerted an independent, direct impact on poverty.

The finding that poverty has a negative impact on growth survives a variety of robustness checks, including using alternative poverty lines, alternative poverty measures, alternative sets of control variables in the regression, alternative sets of instruments in the estimation, and alternative estimation methods as well as allowing for nonlinear effects of inequality on growth.

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Through what mechanism does poverty adversely affect growth? In the theoretical model presented in the study, poverty affects growth through its negative impact on investment, which in turn results from the absence of well-developed capital markets. The study also explores this hypothesized relationship empirically. As an illustration, in figures 1a and 1b countries are ranked by per capita income in the 1990s and ordered in 10 groups of 10. For each country group the poverty headcount, and gross fixed capital formation relative to GDP, are then plotted against its income rank. Together, the figures suggest a close association between poverty and investment. Headcount poverty falls dramatically between the first and fourth groups, then declines much more modestly. Similarly, investment increases from 14 percent of GDP to 22 percent between the first and fourth groups, then remains virtually constant between the fourth and tenth ones.

Formally testing this relationship in a regression framework, the authors find that poverty deters investment, especially where financial development is limited. While this result is sensitive to how the poverty line is defined, it appears consistent with stylized theoretical models in which financial market imperfections prevent the poor from taking advantage of investment opportunities.

Humberto Lopez and Luis Servén. 2009. "Too Poor to Grow." Policy Research Working Paper 5012, World Bank, Washington, DC.

Figure 1. Relationship between Headcount Poverty and Investment