Monthly Labor Review mlr BLS

BLS

August 2016

Poor is poor and middle is middle, and never the twain shall go any higher

Brian I. Baker

According to the World Bank, the percentage of people living in absolute poverty in the developing world declined from 47 percent in 1990 to 21 percent in 2010 and was projected to drop to 13 percent by 2015. ("World development indicators," October 2015, table 2.8.2.) Fueling this downturn in poverty was global economic growth, not least in regions that had seen little of it before 1990: Africa, south and east Asia, but also eastern Europe, and Latin America. A list of countries in these regions that saw at least a reasonable amount of economic growth from 1990 to 2010 contains some whose per-capita income grew faster than that of the United States over the period—the Asian "tigers" of Hong Kong, Singapore, South Korea, and Taiwan—as well as some whose income grew in absolute terms, but not faster than U.S. per-capita income: the Latin American countries of Brazil, Ecuador, Guatemala, and Mexico; the African country of Mozambique; and the Asian countries of Bangladesh and Nepal. In "Relative income traps" (Federal Reserve Bank of St. Louis *Review*, First Quarter 2016), authors Maria A. Arias and Yi Wen tell us that the latter seven countries, plus a large number of others, are in what they call a "relative income trap": a situation "in which levels relative to the United States remain constantly low with no clear sign of convergence." Brazil, Ecuador, Guatemala, and Mexico are in a middle-income trap, with per-capita income between 10 percent and 40 percent of U.S. income; and Mozambique, Bangladesh, and Nepal are in a poverty, or low-income, trap, with per-capita income at or below 5 percent of U.S. per-capita income. What is worse, all of these countries, say Arias and Wen, are highly likely to remain trapped at that level, if past experience is any indication.

To investigate the factors contributing to relative income traps, the authors present a model relating countries' average economic growth during several periods of growth to their gross volume of trade, the contemporaneous exchange rate, investment, government expenditures, inflation, and market orientation. They find that strong economic growth relative to the United States is correlated with a country's volume of trade, investment, and market orientation, but not with the exchange rate or government expenditures. Then, using the correlates of strong economic growth relative to the United States, Arias and Wen set up a probability matrix to calculate the likelihood of a country's having a relative income in income range j today, given that the country had a relative income in income range i during the previous period. In other words, the matrix gives the probability of a country's transitioning from income range i to income range j. (If $i < j$, the matrix gives the probability of a country's escaping a low- or middle-income trap to a higher income level.) To determine whether a particular country's escape is "permanent," the authors apply the matrix to three distinct intervals: spanning 10 years, 20 years, and 30–61 years (the latter depending on the number of years data were available, for each country). Their findings are, in general, no cause for optimism.

First, the probability of a low-income country's remaining that way is a very high 94 percent after 10 years, a still very high 90 percent after 20 years, and a continuingly high 80 percent after 30–61 years—ergo the name "poverty trap." Similarly, the probability of a middle-income country's remaining that way is a very high 89 percent after 10 years, a quite high 79 percent after 20 years, and a still relatively high 64 percent after 30–61 years—ergo the name "middle-income trap." (Worse, the middle-income percentages include a regression to a poverty trap for 9 percent of the countries after 10 years, 14 percent after 20 years, and 17 percent after 30–61 years.)

So, what is the prognosis for the future? Not very encouraging, to say the least. According to the authors, "even the poorest economies continue to grow at some positive rate each year; but unless lower-income economies persistently grow at a rate faster than the developed economies" (an almost impossible task, according to Arias and Wen), "they will not be able to catch up." The lone ray of hope they offer comes out of the findings from the model they present: the correlation between strong economic growth relative to the United States, on the one hand, and a country's volume of trade, investment, and market orientation, on the other, suggests that "those countries that can find ways to grow their manufacturing sector through continuous market creation, investment, and exports [will be] more capable of achieving technological and income convergence to the technology frontier" and thus more likely to escape the poverty or middle income trap in which they currently find themselves.