Development Policy

Lecture Note 9

Is Growth Good for the Poor?

Reducing poverty is one of the main objectives of development policy (other objectives include creating opportunities for citizens to realize their full potential, national prestige and national defense, among others). Poverty can be defined in absolute or relative terms. In absolute terms, poverty is defined as income or consumption below a minimum standard that is determined on the basis of physical needs. For example, the World Bank's "dollar a day" poverty line is an attempt to define a universal standard of extreme poverty based on minimum nutritional requirements. Many national poverty lines, including the poverty line used by GSO in Vietnam, are based on an estimate of the minimum caloric intake that a person needs to maintain good health. This food basket, usually including locally relevant staple foods, is expressed in monetary terms. Then a "non-food" component is added to reflect the cost of housing, water and sanitation and other basic needs. Often this non-food component is calculated as a percentage of the minimum food requirement.

Unlike absolute poverty measures, relative poverty lines express poverty proportionate to some measure of central tendency. For example, poverty in the United Kingdom is defined as household income less than 60 percent of the median income. Relative poverty measurements of this sort have the advantage of automatically adjusting upwards as the society becomes wealthier. It also reduces the need for the complex calculations (and potential for errors) that are associated with translating food baskets into monetary measures. For example, poverty measures based on absolute poverty lines are very sensitive to price changes. A rise in the price of rice can result in a sharp increase in measured poverty in Vietnam, but does that mean that people are actually poorer? If they can substitute other foods for rice, then perhaps the actual poverty rate did not change so much.

A more serious problem with absolute poverty lines is that poverty isn't *only* a problem of extreme deprivation. Certainly most people would consider themselves poor if they do not have enough money to maintain a healthy diet. But that is not the only criterion that we use to gauge the extent of poverty. Poverty lines are much higher in rich than in poor countries because standards change with average consumption levels. The poverty line in Vietnam in 2010 was VND 750,000 per person per month in urban areas and 550,000 per person per month in rural areas. The poverty line in the United States for a family of four (two adults and two children under 18) was $22,162 in the same year. These figures do not reflect the cost of living, they are the product of different conceptions of the amount of money one needs to rise out of poverty.

Because poverty is relative we often define it as income or consumption that does not support a standard of living *considered adequate for a person or family to take part fully in the life of the community*. Although this definition is imprecise, it captures the widely shared idea that the poor are marginalized because they lack sufficient resources to live a life that is considered normal by local standards. Relative poverty lines do a better job of measuring poverty according to this definition. However, absolute poverty lines are also useful as a measure of extreme poverty, and as such they are widely applied in developing countries.

Both absolute and relative poverty lines are used to derive a "headcount" poverty index, which is the percentage of individuals or households whose income or consumption falls below the poverty line, or:

$$\frac{q}{n}$$

Where q is the number of people whose income falls below the poverty line, and n is the total population. This gives us an indication of the *incidence* of poverty (what percentage of the population is poor) but it doesn't tell us anything about how poor they are. For this we need the poverty gap ratio, which measures the *depth* of poverty. The poverty gap ratio is the sum of the income gap ratios for the population below the poverty line, divided by the total population:

$$PG = \frac{1}{n}\sum_{i-1}^{q}\left[\frac{z - y_i}{z}\right]$$

where z is the poverty line, y_i is the income of individual i, q is the number of poor people and n is the size of the population. A large poverty gap means that there are more people with incomes or consumption very far below the poverty line than people with incomes just below the poverty line. The two distributions shown in the figure represent similar poverty lines but different poverty gap ratios.

If we consider poverty headcounts and poverty gap ratios in the region the first thing that we notice is that richer countries generally have less poverty measured against an absolute poverty line. Economists therefore generally argue that the best way to reduce poverty is economic growth. David Dollar and Art Kraay published an influential article in 2002 that argued strongly that policies other than growth are not effective as a means of reducing poverty. It is worth considering this article for a few minutes because it has important implications for how we think about poverty reduction.

In their article, "Growth IS Good for the Poor," they claim that the relationship between growth and poverty reduction is linear and one-to-one.[1] A one percentage point increase in national income is associated with a one percentage point increase in the incomes of the poor. The authors pool 285 country-year observations where we have at least two observations per country of incomes of the poor separated by at least five years (covering 92 countries). They find that we cannot reject the null hypothesis that the slope of this line is equal to one: i.e. incomes in the bottom quintile grow as fast as average income.

They write: "What we can conclude however is that policies that raise average incomes are likely to be central to successful poverty reduction strategies, and that existing cross-country evidence – including our own – provides disappointingly little guidance as to what *mix* of growth-oriented policies might especially benefit the poorest in society."

In other words, looking across a wide range of countries, growth does not benefit rich people disproportionately. The best anti-poverty policies are those that promote growth. We need not worry about poverty as an issue that is separate from economic growth. If this is correct, it is an important finding.

Dollar and Kraay then take the next logical step. If growth is in fact good for the poor, then the poor should benefit from policies that are good for growth. For them this means low inflation, financial system development, a high trade to GDP ratio and rule of law. Moreover, many policies that we generally assume are good for the poor are not associated with reduced poverty. For example, spending money on primary education is associated with growth but not poverty reduction; spending on health and education does not raise the incomes of the poor; agricultural productivity growth is not related to growth OR poverty reduction and democratic institutions are associated neither with growth or poverty reduction.

If these results are robust, they would mean that governments cannot reduce poverty by spending more on anti-poverty programs such as primary education, public health and agricultural research and extension. Instead, governments should focus on increasing trade, reducing inflation and liberalization their financial systems.

The main problem with this logic, as pointed out by Marc Wuyts, is that it does not specify the *mechanism* through which growth is good for the poor. For most people—including the poor—the relationship between growth and higher incomes depends on the division of output growth into productivity growth and employment growth, and

[1] David Dollar and Art Kraay (2002) "Growth IS Good for the Poor, *Journal of Economic Growth*, 7, p. 195-225, September.

the extent to which productivity growth increases labor earnings. You will recall that using the income approach to calculating GDP, that:

GDP = wages + rent + interest + gross profits + depreciation.

If wages are a function of hours worked times average remuneration, then the relationship between poverty and growth depends on the extent to which the increase in GDP is attributed to increases in wages versus the other components of GDP (profits, interest and rents). For example, the United States has experienced a widening gap between productivity growth and the growth of worker compensation. This essentially means that a larger share of GDP has been accruing to profits, as shown in the figure. GDP growth in the United States has become increasing pro-rich rather than pro-poor. As the "State of Working America" concludes, the economy was doing well except for the people in it.

Wuyts helps us to separate out the effects of productivity growth, employment and average wages on households well being. He decomposes the ratio of labor productivity to median compensation into the product of three terms:

$$\frac{real\ labor\ productivity}{real\ median\ compensation} = \frac{nominal\ productivity}{nominal\ mean\ compensation} x \frac{nominal\ mean\ wages}{median\ nominal\ wages} x \frac{CPI}{GDP\ deflator}$$

The first term is the gap between productivity and compensation. As we have seen, this is growing in the United States. It doesn't necessarily mean that household income is growing less than productivity, since households also own capital assets like their homes and equities. But since ownership of capital assets is heavily skewed to the top 10 percent of the population, the growing gap between productivity and compensation means that more additional income is going to profits than to wages.

The second term is the ratio of mean wages to median wages before correcting for inflation. This provides a measure of inequality of labor earnings. If the ratio is rising then it may be that the wages of top earners (bankers) are rising faster than the wages of everyone else. This is exactly what has been happening in the United States. The top one percent of wage earners increased their share of total wages from 7.3 percent in 1979 to 13.1 percent in 2011. The top 0.1% of earners increased their share over the same period from 1.6 percent to 4.7 percent—nearly tripling over thirty years.

The final term is the ratio of consumer price changes to all price changes. If consumer prices are rising faster than the GDP deflator, then the well being of households will be adversely affected. This was also the case after the 1970s in the United States.

The main point is that growth in productivity and GDP growth are not perfectly correlated with household income in general and the income of the poor in particular. The mechanisms that influence this relationship are the growth of wage income, inequality trends in wage income and price trends.

Dollar and Kraay argue that policies that support growth will reduce poverty. Low inflation is good for growth because it promotes saving and investment. However, as we have seen, a low GDP deflator will not necessarily be good for the poor. The impact on the poor depends on which prices are rising more than the overall index. Rising food prices are particularly hard on the poor, since they spend a larger share of income on necessities.

They also argue that trade liberalization is good for growth and therefore good for the poor. Trade liberalization is good for the poor when it leads to an increase in wage employment and rising wages. Petia Topalova shows that rural poverty *increased* in Indian districts with the most trade liberalization.[2] Goldberg and Pavcnik find that trade liberalization did not reduce urban poverty in Colombia.[3] One of the reasons that trade liberalization did not reduce poverty in Indian districts and Colombian cities was the lack of geographical mobility in these places. If people cannot move to where the new jobs are being created, trade liberalization may simply destroy old jobs without giving unemployed workers a chance to get new ones. This may also increase wage inequality, as workers in industrial zones and cities bid up their wages because of a lack of competition from migrant workers.

Growth is generally good for the poor. But the relationship is not one to one. It is mediated by the relationship between growth and employment generation, wages, inequality and price movements. Pro-poor growth means rapid employment growth, rising wages across all wage groups and stable consumer prices. These conditions are not met in all developing countries.

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[2] Petia Topalova, "Trade Liberalization, Poverty and Inequality: Evidence from Indian Districts" http://www.nber.org/chapters/c0110.

[3] Goldberg and Pavcnik, "The Effects of the Colombian Trade Liberalization on Urban Poverty," http://www.nber.org/chapters/c0106.pdf.