

Trade Openness, Poverty and Inequality

Arvind Panagariya
Columbia University

Madras School of Economics
July 11, 2008

Distinguish between Poverty and Inequality

- Poverty relates to ensuring a minimum living standard—in developing countries, this is often the income necessary to maintain healthy level of calorie consumption, shelter and clothing
- Inequality is about the distribution of income across all income groups
- Poverty is a far more serious problem than inequality
- Greater equality of distribution does not necessarily imply less poverty

Openness and Poverty in Developing Countries: Links

- Direct Link:
 - The Stolper-Samuelson Effect
 - Removal of Bias Against Agriculture
- Indirect Link (through growth)
 - The “Pull-up” Effect of Growth
 - Shift to labor-intensive manufacturing (apparel, toys, footwear, light consumer goods)
 - Increased demand for non-traded services (construction services; domestic tourism related services; household services; sales services for various durable goods including automobiles, refrigerators, washing machines, cooking ranges and televisions sets; repair services for these goods; and driving services)
 - More Fiscal Resources for Anti-poverty programs
 - Better Access to Public Services (VERY poor often do not access health and education)

Qualifications

- When openness does not result in sustained rapid growth, it is unlikely to bring poverty down
- Low levels of growth may fail to bring poverty down but sustained rapid growth will rarely fail to do so
- Not EVERYONE who is poor will necessarily be helped at once—the statement on poverty reduction is limited to AGGREGATE poverty reduction
- This is why anti-poverty program (made possible by rapid growth in revenues in a rapidly growing economy) are an essential complement to growth

Nature of Growth Matters

- Growth of richer groups may impoverish the poor: the Green Revolution and the role for price supports for farmers
- Heavy industry versus light/labor-intensive-industry oriented growth (India versus the Far Eastern economies in the 1960s & 70s)
- Skilled-Services-driven versus light-manufacturing-driven growth (China versus India currently)

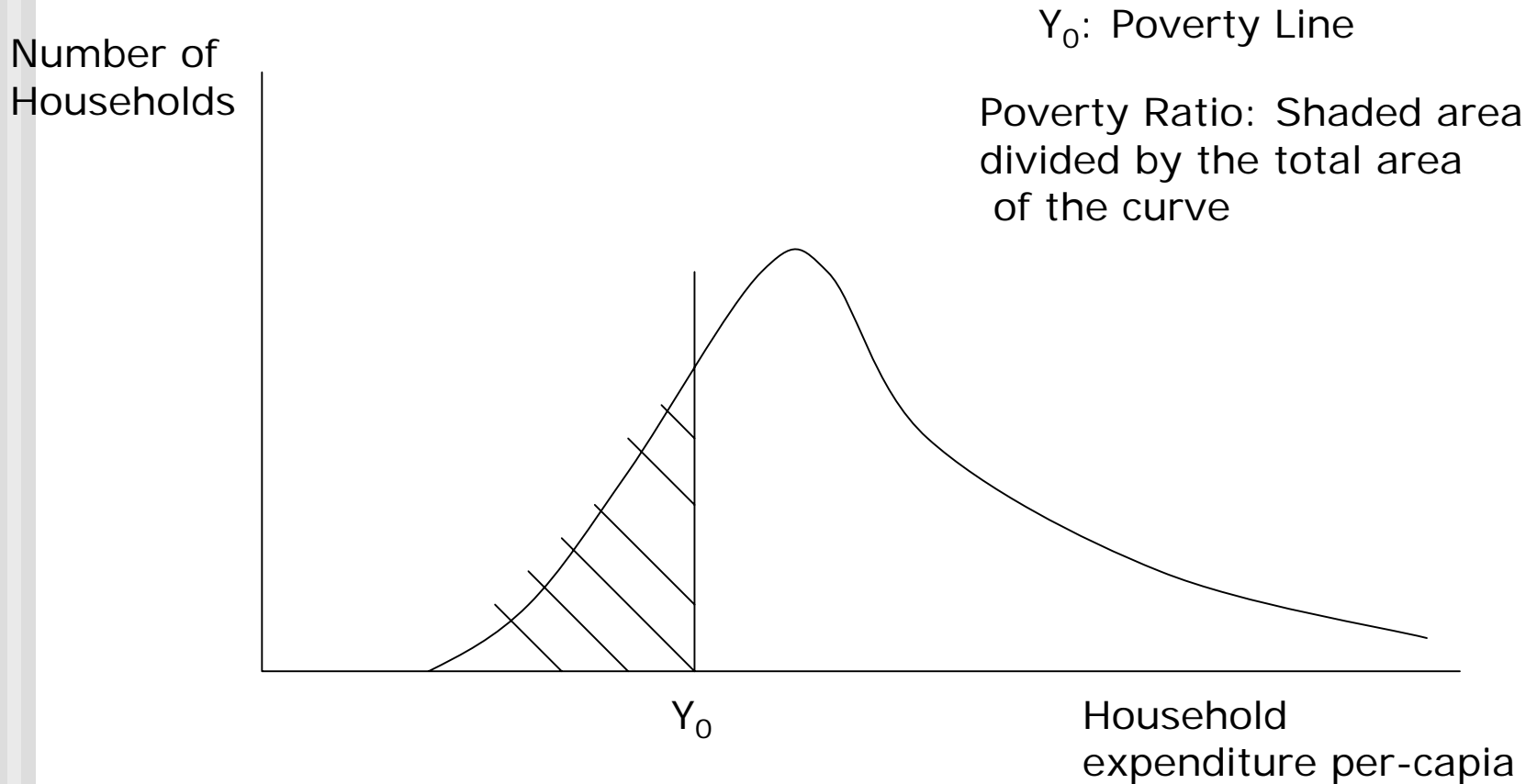
Policies to improve the access of the poor to benefit from growth are desirable as well

- Roads and electricity
- Access to credit (rural-branch expansion in India in the 1970-80s versus micro credit)
- Turning potential collateral into actual collateral (land titles etc.)—Hernando de Soto (*The Mystery of Capital*)
- Political voice—democracy, legal standing to social action groups (NGOs), freedom of information

Measures of Poverty

- Headcount Ratio (HCR): percentage of the population below the poverty line
- The poverty-gap index (PGI): The gap between poverty line and the average expenditure of the poor as percentage of the poverty line.
- Each of these measures has limitations but being simple they are popularly used
- There are other, statistically more sophisticated measures

Defining Poverty Ratio



Measuring Poverty: How it is done and Some Limitations

- Sample Surveys: distribution of Consumption Expenditure (or income)
- Differences in sample designs across nations (7 versus 30 day recall periods)
- Differences in time periods covered (which months of the year the survey is in the field matters)
- Price changes over time within a country
- PPP related issues for international comparisons

Growth and Poverty: Study by Fields (1980)

Gary Fields (1980) puts together the evidence available until 1980. He finds credible studies on 13 countries.

- Nine exhibited “demonstrable improvements” in the economic position of the poor and also grew at moderate to fast rate.
- One (Sri Lanka 1953-73), achieved substantial reduction in poverty in spite of slow growth.
- Two (Argentina 1953-61 and the Philippines 1951-61), experienced deterioration in poverty despite fast growth

Additional Early Studies

- Ahluwalia, Carter and Chenery (1979) studied 12 cases
 - Real per-capita income of the poorest 20 percent rose with growth in every case
- Fields (1989) compiled consistent data on poverty for 18 countries. Out of these
 - poverty fell in 14 cases, rose in three and did not change in one
 - In two of the cases in which poverty rose, economic growth had been negative
 - only one case in which economic growth had not brought poverty down

Major Study by Deininger and Squire (1996)

- They assemble an extensive and high-quality data set on changes in poverty and income distribution
- These data yield 88 cases of income growth and 7 cases of income decline.
- In the former group, income of the poor rises in 77 cases and declines in 11 cases. In the latter group, income of the poor falls in 5 and rises in 2 cases.
- Thus, out of a total of 95 episodes, 13 fail to conform to the hypothesized positive correlation between growth and poverty reduction. A case-by-case review reveals that non-conformity in 9 of these episodes disappears if longer periods are considered.
- In three of the remaining four cases, growth was less than 2 percent.

Regression studies

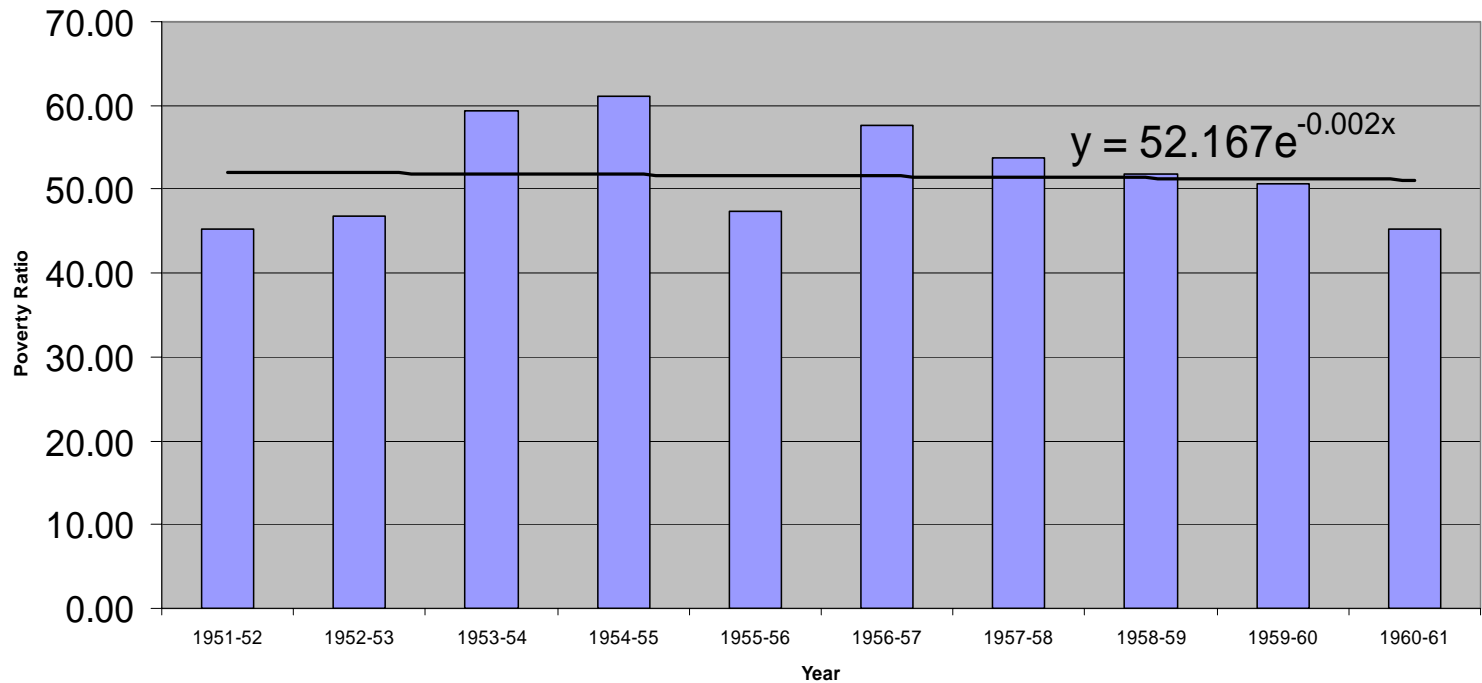
- Large number of regression studies showing declining poverty with rising per-capita incomes
- Ahluwalia (1976) explicitly examined what was then called the “absolute impoverishment” hypothesis. He found that a 1 percent increase in the nationwide per-capita income raises the average income of the bottom 20, 40 and 60 percent of the population though by less than 1 percent. Ahluwalia thus rejected the absolute impoverishment hypothesis.
- Chen and Ravallion (1997), Roemer and Gugerty (1997), Timmer (1997), and Gallup, Radelet and Warner (1998) have found the same relationship in terms of the poverty ratio or the average income of the poor. The former falls and the latter rises as per-capita incomes rise.
- Most influential are a set of papers by Dollar and Kraay (2002 and 2004) and Kraay (2006). In “Growth is Good for the Poor,” they show that on the average, a 1 percent increase in per-capita income leads to a 1 percent increase in the average income of the bottom quintile of the population.
- Each of these studies can be criticized for one shortcoming or another but taken together they surely indicate a close link between growth and poverty reduction.
- This is reinforced by several recent country experiences.

Openness and Poverty: More Recent Country-specific Evidence from Asia

- According to the dollar-a-day criterion, the large majority of Asia's poor live in South Asia. This region has also been traditionally the least open to trade.
- Based on the national poverty line, as China opened its economy, the proportion of the poor declined from 28% in 1978 to 9% in 1998.
- The lowest rates of poverty in developing Asia are in the most open economies of East and Southeast Asia. Poverty By the dollar-a-day criterion has been virtually eliminated in Hong Kong, Korea, Singapore, and Taiwan, the most open of Asia's economies.
- Latest experience of Vietnam: poverty cut in half

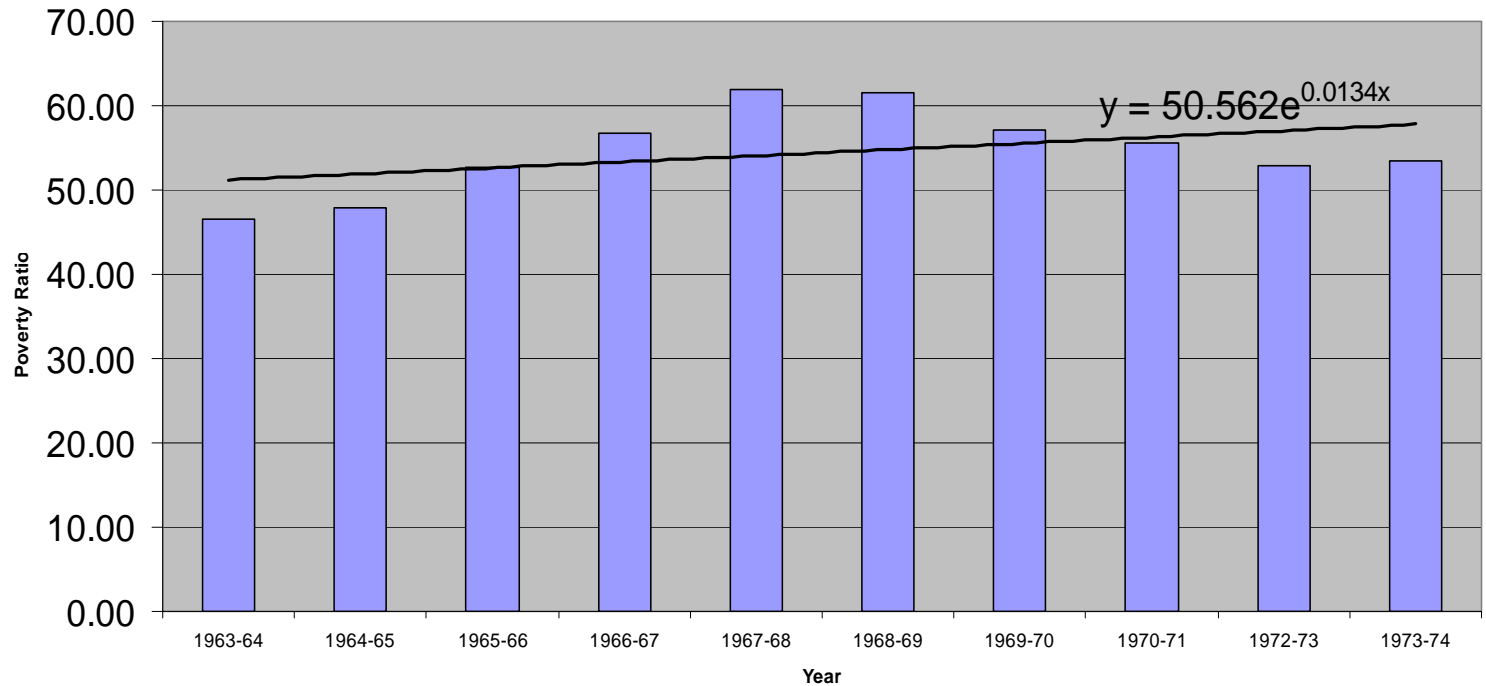
Openness, Growth and Poverty: A Close Look at India

Poverty Ratio: 1951-62 (p.c. growth <2%)



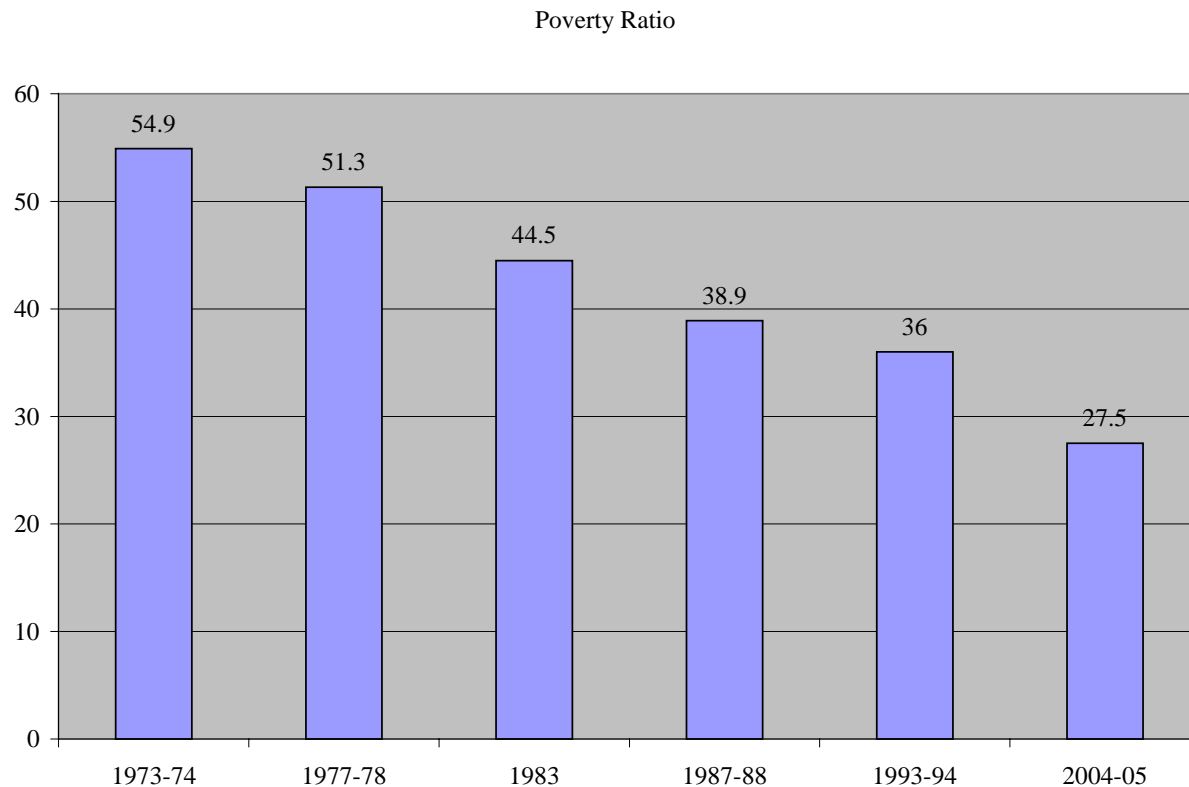
Openness, Growth and Poverty: A Close Look at India

Poverty Ratio: 1963-74 (p.c. GDP growth: <1.5%)



Openness, Growth and Poverty: A Close Look at India

1973-74, 1977-78, 1983, 1987-88, 1993-94 and 2004-05



Openness and Poverty: Country-specific Evidence from China

- Ratio of trade in goods and services to GDP rose from 19 percent in 1980 to 49 percent in 2000
- Growth rate of the country has been in the double digits during the 1980-2000
- According to the official poverty line, the proportion of the poor in China fell from 28% in 1978 to 9% in 1998

Openness and Poverty: Country-specific Evidence from 1960s Brazil

General impression seems to be that growth failed to deliver. But careful analysis by Gary Fields (1981) tells a different story.

- “The income distribution in 1970 was absolutely superior to the 1960 distribution.”
- “There was a small decline in the fraction of the economically active population classified as below the poverty line (according to my estimate, from 37% to 35.5%); but those who remained ‘poor’ experienced a marked percentage increase in real income (from one-third to as much as two-third higher).”

Poverty Reduction in Brazil in the 1960s (Continued)

Recently, Ricardo Barros and Rosane Mendonca (undated) have taken a detailed fresh look at the data and restored the basic conclusion of Fields that poverty declined in Brazil during 1960s. They note, "Despite the growing inequality, the poorest 30 percent was not the group which benefited the least. Actually, the gains concentrated at the top and bottom of the distribution being almost non-existent or even negative at the middle of the distribution (fourth, fifth, sixth and seventh tenths)."

Global Poverty

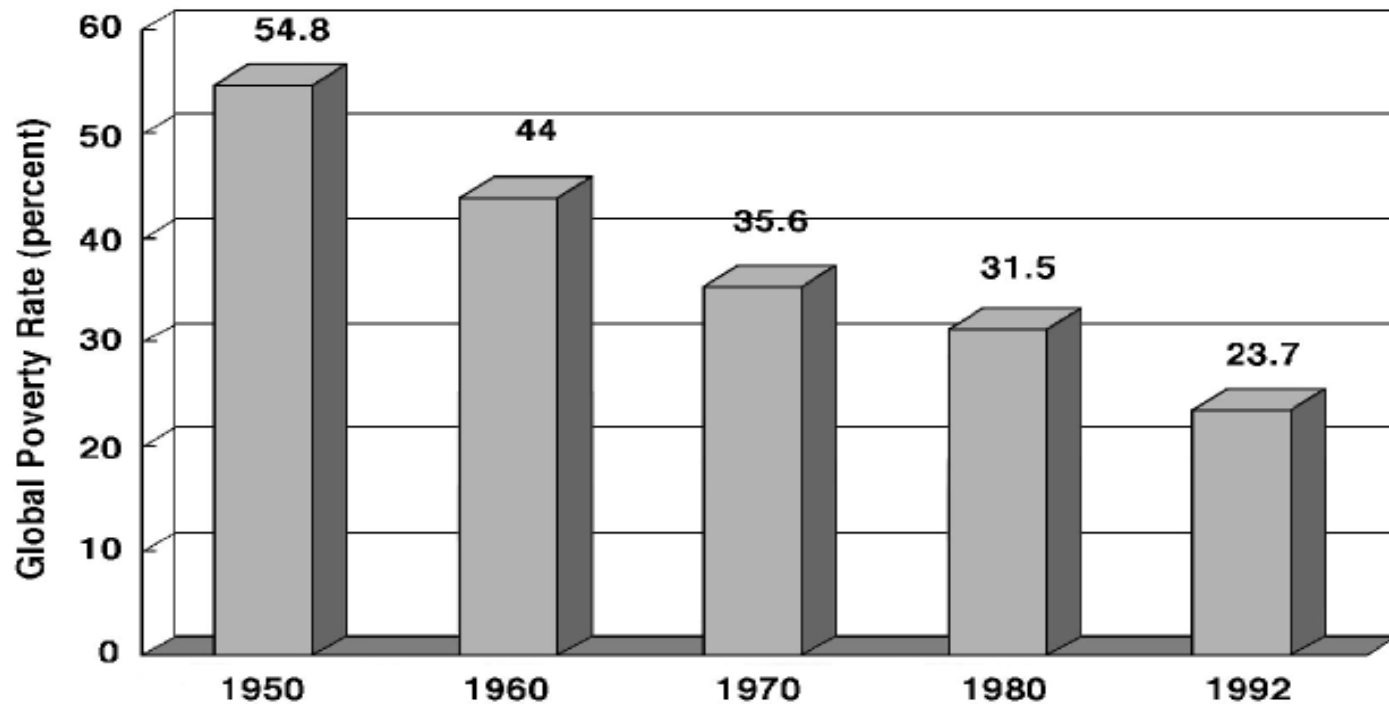


FIGURE 1. GLOBAL POVERTY RATES: PERCENTAGE OF PEOPLE LIVING ON LESS THAN \$1 PER DAY
Source: Bourguignon and Morrisson (2002).

Global Poverty Headcount (million): World Bank (GEP 2006, Table 1.3)

| | \$1 per day | | \$2 per day | |
|-----------------------------------|-------------|-------|-------------|-------|
| | 1990 | 2002 | 1990 | 2002 |
| East Asia and the Pacific | 472 | 214 | 1,116 | 748 |
| China | 375 | 180 | 825 | 533 |
| Rest of East Asia and the Pacific | 97 | 34 | 292 | 215 |
| Europe and Central Asia | 2 | 10 | 23 | 76 |
| Latin America and the Caribbean | 49 | 42 | 125 | 119 |
| Middle East and North Africa | 6 | 5 | 51 | 61 |
| South Asia | 462 | 437 | 958 | 1,091 |
| Sub-Saharan Africa | 227 | 303 | 382 | 516 |
| Total | 1,218 | 1,011 | 2,654 | 2,611 |
| Excluding China | 844 | 831 | 1,829 | 2,078 |

Global Poverty Headcount Ratio (% of total population)—World Bank (GEP 2006)

| | \$1 per day | | \$2 per day | |
|-----------------------------------|-------------|------|-------------|------|
| | 1990 | 2002 | 1990 | 2002 |
| East Asia and the Pacific | 29.6 | 14.9 | 69.9 | 40.7 |
| China | 33 | 16.6 | 72.6 | 41.6 |
| Rest of East Asia and the Pacific | 21.1 | 10.8 | 63.2 | 38.6 |
| Europe and Central Asia | 0.5 | 3.6 | 4.9 | 16.1 |
| Latin America and the Caribbean | 11.3 | 9.5 | 28.4 | 22.6 |
| Middle East and North Africa | 2.3 | 2.4 | 21.4 | 19.8 |
| South Asia | 41.3 | 31.3 | 85.5 | 77.8 |
| Sub-Saharan Africa | 44.6 | 46.4 | 75 | 74.9 |
| Total | 27.9 | 21.1 | 60.8 | 49.9 |
| Excluding China | 26.1 | 22.5 | 56.6 | 52.6 |

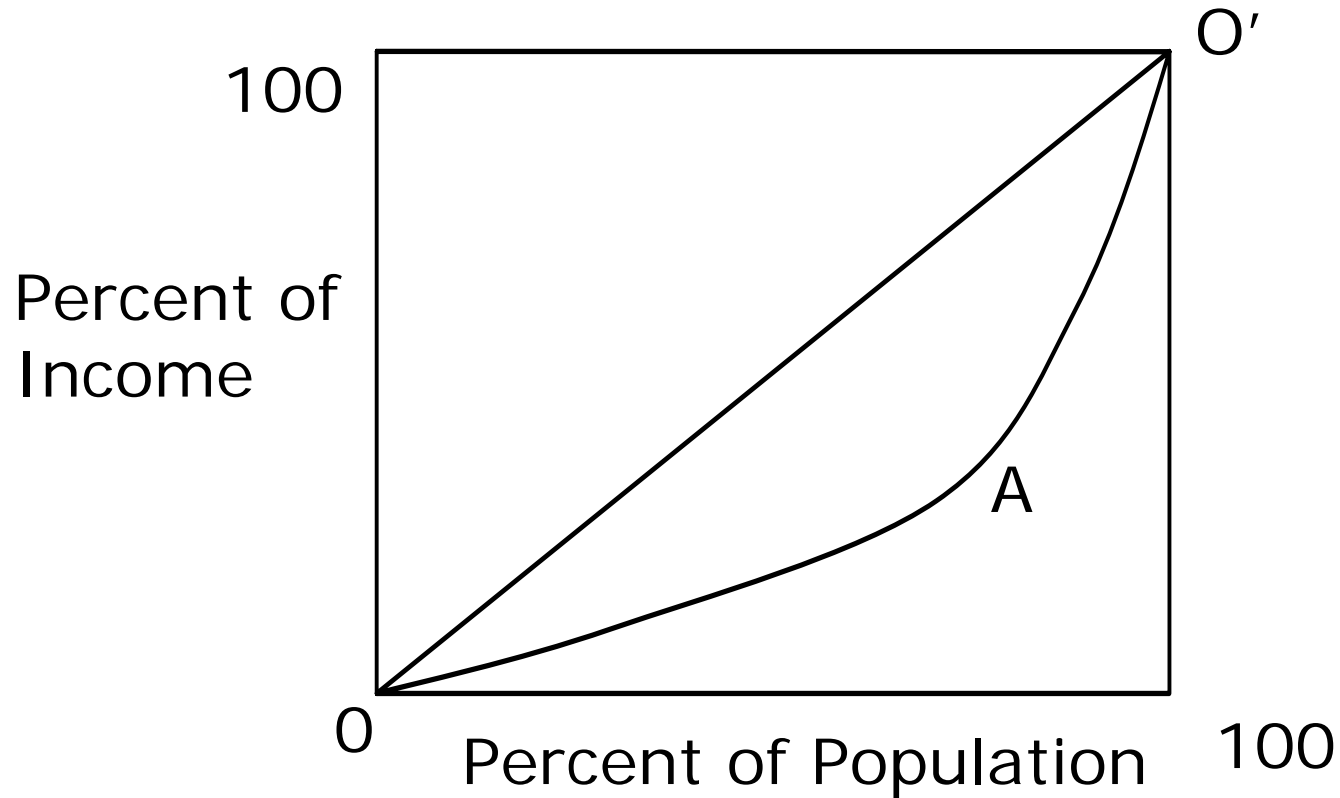
Why the World Bank numbers are too large

- Sample survey consumption expenditures do not fully capture growth (Xavier Sala-i-Martin—5% in 1998 by \$1 per day!)
- India: World Bank poverty ratio is higher than what most scholars and the Government of India have calculated using similar poverty lines
- The same holds for China

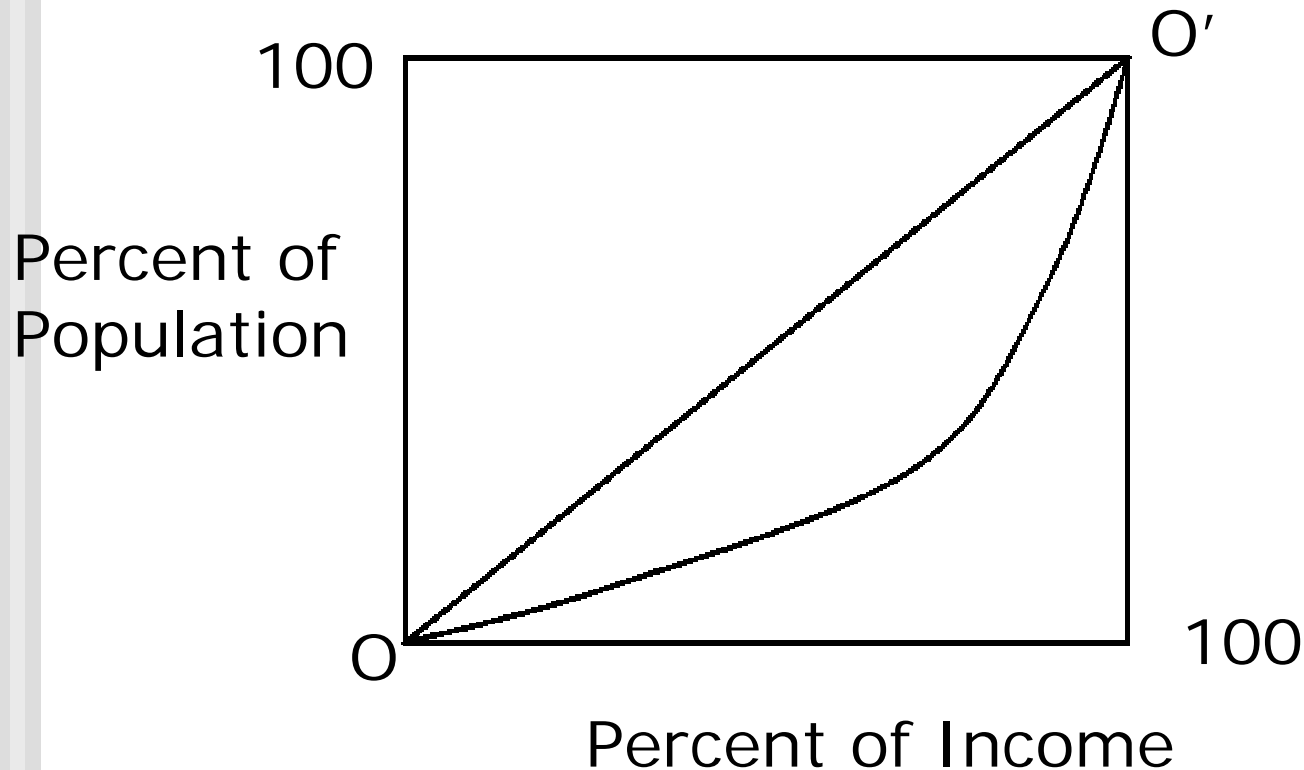
A brief look at inequality

- Inequality within a nation
- Regional inequality
- Urban-rural inequality
- International inequality
 - Across national per-capita incomes
 - Across households

Measuring Inequality: (Area between OO' and OAO')/(Triangular area under OO')



Measuring Inequality: (Area between the diagonal and the curve)/(Triangular area under the diagonal)



Deiningering and Squire (1996)

- No definite relationship between Growth and inequality
- 88 cases of positive growth: Inequality down in 45 and up in 43 cases
- 7 cases of negative growth: Inequality down in 2 and up in 5 cases
- There is no Kuznets curve where by inequality rises with growth at low levels of income and falls at high levels of income.
- Gini changes very little over time: In the deiningering and Squire sample, the average movement per year in Gini is 0.28 percentage points compared with average GDP growth of 2.61 percent
- This has observation implies that growth does have a pretty good chance of alleviating poverty

International Inequality

- Whether it has risen or fallen very much depends on how you measure it
 - Distribution of per-capita incomes across nations has worsened
 - Distribution of household incomes worldwide has substantially improved (China and India)
- International Inequality Matters a Lot Less: Does an Indian farmer lose sleep over the living standard of his counterpart in the US? When it comes to inequality, one's immediate context matters much more.

Why Inequality is a lesser problem

- Poverty reduction must gain priority
- Reduced inequality does not always lead to less poverty
- Preoccupation with inequality can lead to the adoption of populist but anti-growth policies (you are likely to strike at those who create wealth, as happened in India in the 1960s and 1970)
- Regional imbalance:
 - What if you are making all regions better off even as some regions grow much faster?
 - Focusing anti-poverty programs on the poor regions will automatically reduce regional inequality
 - Demonstration effect
 - Migration
- In a fast growing economy with a large population in the rural areas, rise in urban-rural poverty is likely to be an essential part of poverty reduction process. But politically, this inequality is perhaps the hardest to manage.

Conclusions

- Increased protection today is unlikely to help either growth or poverty
- Gradualism in liberalization can go a long way towards minimizing the cost of dislocation
- Nevertheless, when there is dislocation, the remedy is adjustment assistance rather than sacrifice of liberalization and potential growth

The End