Globalization and Poverty

Forthcoming, University of Chicago Press

www.nber.org/books/glob-pov
NBER Study: What is the relationship between globalization and poverty?

• Definition of globalization
  – trade (tariffs/trade shares)
  – capital flows (foreign investment, aid, capital flows)

• 15 papers
  – Theory (from Globalization to Poverty)
  – Cross-country evidence
  – Country case studies based on micro data
  – Concerns of globalization’s critics (Aisbett)

• Policy Implications
Increasing Integration of Developing Countries
(Export Shares of GDP)

Source: GEP 2003, World Bank data.
While trade integration has increased, the incidence of poverty has declined (but not necessarily the absolute number of poor)

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Mechanisms from Globalization to Poverty

Trade Reform

Growth

Transfer Programs

Wage changes

Employment changes

Informality

Changes in prices of
Producer and/or consumer goods

Poverty
In the last 2 decades, the percentage of the population living on less than 1 dollar a day fell from 40 to 22 percent. During this period, developing countries increased their trade shares and slashed their tariffs. To what extent is increasing globalization responsible for the fall in the incidence of poverty?
Five cross-country studies

- Openness and inequality (Milanovic and Squire, Easterly)
- OECD agricultural subsidies and LDC incomes (Ashraf, McMillan, and Zwane)
- Impact of Financial integration on consumption volatility (Prasad, Rogoff, Wei, and Kose)
- Relationship between, openness, growth, and poverty reduction (Harrison)
Aggregate inequality and Globalization (Milanovic and Squire)

- Inequality: wage inequality compiled from a database on occupations and inter-industry inequality compiled by University of Texas.
- In panel setting with country effects, authors find that opening up to trade or reducing tariffs is associated with rising inequality in poor countries (< 4000 ppp dollars per capital in 1995) and falling inequality in rich countries
- Results in direct contradiction of what we would expect in simple HO world
Ashraf, Mcmillan, and Zwane on Agricultural support

• “Macro” angle: measure impact of OECD support policies on country incomes, distinguishing between food importers and exporters
• “Micro” angle: measure impact on Mexican corn farmers of liberalizing trade with USA
• Results: agricultural support in rich countries helped most poor countries, because most poor countries are net food importers!
• Hurts only countries that export primarily food
Average income and net food exports by decade in a repeated cross section of developing countries.

Average income and net food exports by decade in a repeated cross section of developing countries

Net food exports value / GDP at current prices (%)

Decade average income per capita (log scale, $1985 PPP)

- Average fraction of income spent on food net exports 1970-80
- Average fraction of income spent on food net exports 1980-90
- Average fraction of income spent on food net exports 1990-2000
Direct Linkages between globalization and poverty outcomes (Harrison)

In the introduction to the volume, I test for the following linkages:

(1) Openness and income

(2) Income levels/growth and poverty

(3) Openness and poverty
Definitions:

1. Openness:
   - Trade shares (nominal X + M/GDP)
   - Tariffs (tariff revenues/imports)

2. Poverty:
   - Percentage of households living on less than 1 or 2 PPP dollars per day
   - Income of poorest decile or quintile
Results:

- Openness associated with increasing incomes
- Biggest driver of poverty reduction is growth ("Growth is good for the poor")
- Very weak direct association between openness and poverty outcomes
- Why? Two possibilities:
  - Distributional effects offset growth effects of trade?
  - Poor data? (also simultaneity bias, weak instruments, multicollinearity, etc)
  - Suggests need for country studies using micro data
Correlation between fraction of households living on $1 per day and average import tariff controlling for country fixed effects.
Country Case Studies Using Household Data

- India (Topalova)
- Colombia (Goldberg and Pavcnik)
- Ethiopia (McMillan and Levinsohn)
- Mexico (Ashraf, McMillan, Peterson-Zwane; Hanson)
- Zambia (Balat and Porto)
- South Africa (Levinsohn)
- China (Ligon, Wei)
- Poland (Goh and Smarzynska)
- Indonesia (Thomas)
Results

1. Simple conclusions misleading
2. Heterogeneity in responses
3. BUT generally true that poor in expanding sectors gain
4. Poor in previously protected sectors lose
5. Financial Integration: DFI and Aid help the poor, while currency crises hurt the poor
6. Bundling trade reform with complementary policies is key
1. Simple conclusions based on Heckscher-Ohlin models are wrong

“Orthodox” view: in countries with a comparative advantage in exporting unskilled-intensive goods, unskilled or poor will gain more from trade than skilled workers—pure HO world (Anne Krueger, Jagdish Bhagwati)

Why is this framework incorrect? (violation of HO assumptions)

- Workers cannot easily relocate to expanding sectors
- Countries protect sectors that use unskilled workers
- Exporters/foreign firms use skilled labor even in unskilled-labor rich countries
- Getting goods produced by poor (or using their labor) to global markets requires many complementary policies (infrastructure, human capital development etc)
Exporters and foreign firms use skilled labor even in unskilled-labor rich countries
Getting goods produced by poor (or using their labor) to global markets requires many complementary policies.....
2. Heterogeneity in responses makes generalization difficult

- Mexico: large corn farmers gain, small corn farmers lose (from US corn imports)
- India: tariff reductions associated with slower rate of poverty reduction BUT
  - Only true in regions with restrictive labor laws
  - No impact on poverty reduction in regions with mobile labor
3. BUT generally true that poor in expanding sectors gain

- Unskilled in countries with a comparative advantage in exporting unskilled intensive goods to rich countries (Poland)
- Poor wage earners in sectors receiving DFI (Mexico, India, Poland)
- Poor wage earners in sectors with export growth
4. Poor in previously protected sectors lose

- The poor in urban sectors with tariff reductions (Colombia)
- Small farmers competing with higher imports (small corn farmers in Mexico)
- Rural agricultural labor restricted from relocating due to rigid labor laws (India)
Specific Sector Model Wins

- Fact that poor in expanding sectors gain (export sectors)
- And
- Poor in contracting sectors lose (importing sectors)
- Suggests that Specific Sector Model a more accurate framework for predicting gainers and losers from trade among the poor, at least in the short run
Study on India (Topalova)

• Trade reforms post-1991 coincide with significant poverty reduction
• Difficult to identify contribution of trade reforms to overall growth in 1990s in light of other changes.
• So different tariff reductions across regions and sectors can be used to identify two effects:
  – Firms: falling tariffs and rising FDI → productivity growth
  – Households: Although aggregate poverty fell, poverty fell less in regions with higher tariff reductions
• Adverse impact: immobile agricultural households
• Although firm results indicate productivity gains from reform, household data implies poor gain less (or not at all, depending on contribution of trade to overall growth)
Methodology for India (Topalova)

• Regress district level outcome on a district-level measure of trade exposure, defined as the average of industry-level tariffs weighted by the workers employed in that industry in 1991:
  \[ Y_{dt} = a + b \cdot \text{Tariff}_{dt} + c \cdot \text{FDIreforms} + d_t + e_d + \epsilon_{dt} \]
• Outcomes \(Y_{dt}\) include proportion of population below poverty line, poverty gap, and inequality (std of log consumption)
• Finds negative and significant coefficient \(b\), implying tariff declines increase poverty in rural areas (\(b\) is between -.2 and -.8)
• Coefficient on FDI < 0, implying FDI helps poor.
Topalova’s study provides empirical support for claims in *Business India* which voices concerns regarding biased gains from reforms:

“It is commonly accepted that the economic regeneration process which started in the ’90s have led to some undesirable distortions. The most obvious of which is the fact that liberalization while giving an impetus to GDP has failed to benefit the common man in general. Rural India in particular has been seen untouched by the process.”
Study on Mexico (Hanson)

- Divides Mexico into two “high globalization” and “low globalization” regions based on imports, proximity to USA, and FDI
- Examines changes in both the level of wage income and the entire distribution of income, focusing on the left-hand side tails (the poor)
- Finds that both wage levels and the poor fared better in the more globalized regions
Study on Colombia (Goldberg and Pavcnik)

• They measure the impact of changes in instrumented tariffs, imports, and exports on the following outcomes for urban workers:
  – Movements into the “informal” market
  – Poverty incidence
  – Skilled-unskilled wage gap
  – Unemployment
Results for Colombia (Goldberg and Pavcnik)

• Tariff Protection associated with less informality, less poverty, less unemployment
• Import competition associated with more informality, more poverty
• Export activity associated with less informality, less poverty
5. Financial Integration: DFI and Aid help the poor, while currency crises hurt the poor

- Foreign investment reduces poverty (India, Mexico)
- Food aid benefits the poor, who are net consumers (rather than net producers) of agricultural goods (Ethiopia)
- Currency crises, premature capital account liberalization costly to the poor (Prasad et al, Indonesian case study)
- Global financial integration associated with higher consumption volatility for less developed economies
6. Bundling trade reform with complementary policies more likely to produce gains for the poor

- Importance of Complementary Policies
  - Lack of labor mobility impedes adjustment
  - Lack of complementary inputs (infrastructure, technology, credit) inhibits movement from subsistence agriculture to cash crops for export
  - Lack of domestic institutions, rule of law, capital market development restricts gains from access to international capital markets

- Income support—carefully targeted—can be an important safety net
- Market access to developed country markets critical (agriculture, textiles)
Conclusions

• Trade integration associated with higher growth, growth associated with poverty reduction, but no evidence of robust link between trade and poverty

• Trade and financial integration associated with rising inequality, higher consumption volatility in poor countries

• Simple interpretations of orthodox trade models (ie the HO model) don’t work for understanding linkages between trade and poverty

• Specific sector model a more accurate predictor of winners and losers

• Poor in expanding (FDI/exporting) sectors gain

• Poor in contracting (import-competing) sectors lose—largely a consequence of labor immobility

• Complementary policies are critical: trade policy is part of a “package” of successful policies.