

Poverty-Specific PPPs and Global and Regional Poverty Measurement *Motivation, Scope and Tasks Ahead*

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PPPs and Global Poverty

The World Bank Approach

- ◆ Regular estimates of global and regional poverty
- ◆ Uses \$1-a day and \$2- a day as international poverty lines
- ◆ The \$-poverty line is converted into local currency using PPPs from the ICP
- ◆ Estimate poverty incidence using national accounts and HES/LSMS data
- ◆ Approach since the 1990 *World Development Report*



Which conversion factors to use?

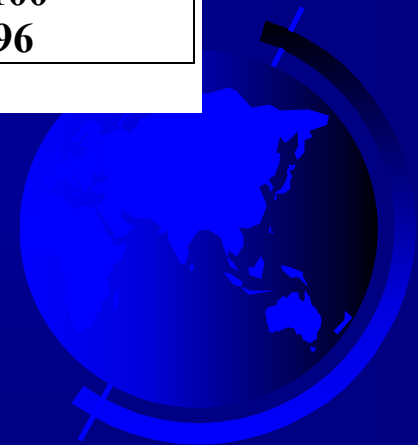
- ◆ Exchange rates
- ◆ PPPs from the ICP for the GDP as a whole
– used in real per capita income comparisons
- ◆ PPPs for consumption
- ◆ PPPs for food and beverages



Global and Regional Poverty Estimates

	1990	2000
Developing Country Groups		
East Asia & Pacific	470	261
Excluding China	110	57
Europe & Central Asia	6	20
Latin America & Caribbean	48	56
Middle East & North Africa	5	8
South Asia	466	432
Sub-Saharan Africa	241	323
TOTAL	1,237	1,100
Excluding China	877	896

Source: World Bank website



Advantages

- ◆ A simple approach that ensures inter-country comparability
 - Country practices are diverse
 - Need for comparability from an international perspective in the light of MDGs
- ◆ \$1-a-day poverty line approximates existing country poverty lines (especially in developing countries) quite well
- ◆ Concept is easy to explain and create awareness among the international community
- ◆ World Bank estimates of poverty incidence are widely used



Why ICP PPPs are not appropriate?

- ◆ Items priced are usually representative of the consumption of higher income groups – mainly due to adherence to comparability
- ◆ Location of price surveys
 - Urban/cities/rural
 - Past ICP price surveys mainly located in metropolitan areas
- ◆ Outlets for price surveys
 - Make sure the service component of outlets is comparable
- ◆ Inappropriate expenditure-share weights
 - National average weights versus weights representative of consumption pattern of poor



Extrapolations to non-participating countries and non-benchmark years

- ◆ Low participation in ICP benchmarks in the past and infrequent benchmarks
- ◆ Extrapolations to non-benchmark countries are based on regression methods
 - ◆ PWT Methodology (versions 5.6 and 6.1)
 - ◆ World Bank Methodology
- ◆ Extrapolations to non-benchmark years
 - ◆ Stability of regressions over time
 - ◆ Inconsistency between benchmarks
- ◆ Standard errors for extrapolated PPPs
- ◆ Big changes in poverty estimates (and regional composition) when new ICP round PPPs are used.



Poverty-specific PPPs

- ◆ PPPs for converting poverty lines expressed in different national currencies
 - Similar to price level adjustments for regional poverty lines
- ◆ Resulting PPPs may be used for purposes of converting the World Bank \$1 and \$2-a-day into various national currency units.



PPPs for Poor: Strategy

- ✦ Identify goods and services that can be considered as representative of consumption of the poor in different countries.
- ✦ Conduct price surveys to collect prices of these goods and services.
- ✦ Find expenditure patterns of the poor.
- ✦ Use a suitable index number methodology to combine data to derive PPPs for the poor.



Research efforts to date

- ◆ Main focus has been to examine feasible alternatives to a more complete poverty-specific PPP compilation.
- ◆ Is it possible to estimate price level differences across income groups using household expenditure survey data?
- ◆ Do poor pay higher prices?
- ◆ Feasibility of computing PPPs for poor from household expenditure surveys.



Data used

Unit Record Data (household data)

Rural and urban

Provinces

Unit values from survey data

Focus on food items

Methods

◆ **Average price and quantity for each income group/region**

◆ **Individual price and quantity data**



Index Numbers for 3 Income Groups Using Household Expenditure Data and unit values

	Bottom 30%	Middle 60%	Top 10%
Ethiopia	1.00	1.015	1.029
Uganda	1.00	1.279	1.672

Rao (2003)



Brazilian Study

Price Indexes by Income Groups	
Low	1.000
Middle	1.025
High	1.091

Source: Aten and Menezies (2002)



Indian Study

Household Group	Rural India			Urban India		
	South	East	West	South	East	West
All Households	0.990	1.095	0.996	0.931	1.041	0.961
Households above poverty line	0.974	1.084	0.998	0.925	1.043	0.952
Households below poverty line	1.082	1.101	1.092	1.058	0.994	1.009

Source: Coondoo *et al.* (2003)



India-Indonesia Comparisons

Conversion Rates

(1 Rupee = Number of Rupiah)

Exchange Rate:	182.42
Penn World Tables:	165.20
World Bank PPP:	140.00
Deaton Poverty PPP:	
Rural prices	238.20
Rural +Urban	235.00 (approx)

Source: Deaton *et al.* (2004)



PPPs based on poverty-specific price data

Scope and coverage

- ◆ Basically replicate the current ICP work but restrict to the consumption module
- ◆ Identify poverty-specific item lists
 - Need to use regional and sub-regional lists
 - Lists may be based on the ICP product lists
 - Use sizes similar to typical purchases of the poor
 - May need input of poverty researchers from regions
- ◆ Price surveys
 - Rural and urban surveys
 - Focus on outlets typically used by the poor (general markets)
 - Integrate these surveys with the ICP price surveys
- ◆ Expenditure weights
 - Use HES/LSMS and estimates of national poverty incidence estimates to identify the patterns of the poor



Tasks ahead

- ◆ Prepare product lists
 - Focus mainly on Phase I and Phase II lists
 - Scope is more limited than the standard ICP
 - Product lists may have strong regional and sub-regional flavour
 - ◆ Less flexible patterns of consumption
 - ◆ Importance of food component
 - Role of consumption from own production and in kind
 - Treatment of owner occupied housing – lack of rental markets
 - Pricing second-hand (used) goods
- ◆ Price surveys
 - Identify outlets
 - Coverage of rural areas is essential
- ◆ Expenditure weights
 - Use the most recent household expenditure survey
 - Calculate expenditure weights using data for all the households under poverty (use national poverty lines)



Let the work begin!!

Phase I List – Today

Phase II List – Tomorrow

Process

- **We go through the final lists**
- **Identify items/specifications to be dropped**
- **Discuss and add new items**

