

The World Bank

Poverty, Inequality Risk and Vulnerability Concepts

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Outline

- > 1. Key concepts: the poor
 - Basic poverty measurement: concepts, tools, data
 - Going beyond monetary poverty: health and nutrition
 - What is multidimensional poverty?
- > 2. Key concepts: risk and the vulnerable
 - Risks and shocks. Coping strategies
 - Poverty over time: chronic and transient poor
 - Vulnerability to poverty: concept and practice.
- > 3. Policy implications
 - Whom to target?
 - What is needed and can a social transfer program provide it?
 - How to assess impact of a social transfer?



Section 1

POVERTY



Basic poverty measurement

Survey

Poverty line and welfare

Indices

Profile



Survey data

- What kind of survey?
 - > Representative
 - Accurate
 - **≻**Timely
- Survey of what?
 - > Well being (and program participation)
- Could it be simpler?
 - > No



Poverty lines: options

- Concept of deprivation
- > Absolute
 - "Nutrition" based
 - **≻**Normative
 - ➤ International (PPP-based)
- > Relative

Poverty: absolute or relative



- World Development Report (2000): defines poverty as "unacceptable deprivation in wellbeing"
- This means there are absolute necessities without which the member of a society cannot function
- o But ...

By necessities, I understand not only the commodities which are indispensably necessary for the support of life but whatever the custom of the country renders it indecent for creditable people, even of the lowest order, to be without. (Smith (1776))



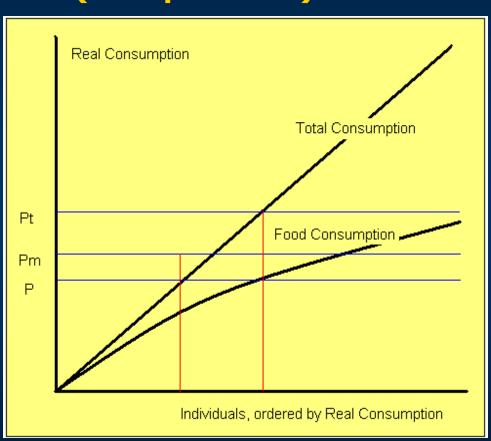
Poverty line: "basic needs" method

The method is based on the estimated cost of the bundle of goods "adequate" to ensure that basic needs are met. In practice, the cost of the food basket necessary to attain the minimum energy intake is calculated.

- Step 1. Pick a nutritional requirement.
- **Step 2**. Choose the basket of food items that will attain this requirement (or calculate the unit cal. cost for a reference group)
- **Step 3.** Estimate the cost of meeting this food basket, that is the food component (or the minimum cal. standard at unit cost).
- **Step 4**. Add a non-food component (based on Engel curve).



Setting the non-food component (empirical)

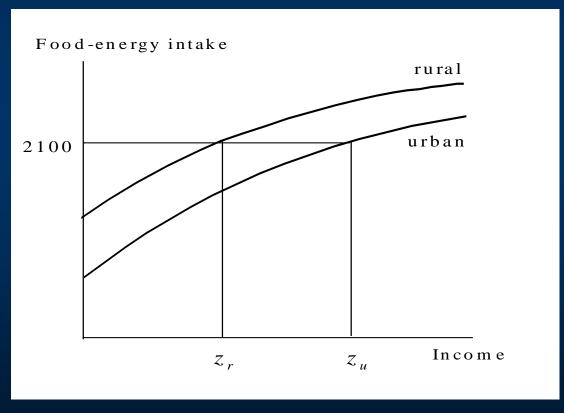


- Non-food share is based on real consumption structure of the poor
- Estimated model is based on Engel curve.
- o 2 lines!

P-min.food basket cost, Pm- lower full poverty line, Pt – upper full PL

Example of pitfalls: "Food-energy intake method"

Different sub-groups attain food energy requirements at different standards of living, in terms of real consumption expenditures. e.g., "rich" urban areas buy more expensive calories than "poor" rural areas.





Clicker question

z Extreme poverty line:

- 1. It is ½ of the full poverty line
- 2. It is the cost of the minimum food basket
- 3. It is \$1/day
- 4. It is any line below the full poverty line
- 5. It is the line that cuts bottom 5 (or 10) % of population
- 6. Do not know/not clear to me



Poverty line and nutrition

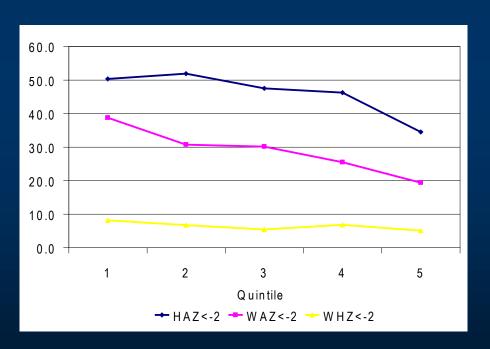
- □ Nutrition is key to the definition of absolute poverty, we say poverty line is anchored in nutrition
- Minimum food basket is defined by actual consumption patterns of the poor. But...
 - ☐ Is selected minimum bundle sufficient to cover different nutritional needs of different groups? E.g. everywhere urban food consumption is below rural at the same real income. But welfare is the same!
 - ☐ Is caloric adequacy sufficient to reflect the nutritional value of food? The minimum is clearly not absolute; millions live below it, even if at risk.
- Even though the monetary poverty line is based on a nutrition related calculation (expenditures necessary to attain sufficient calories) actual nutritional status is based on more than access to calories and therefore gives a separate indicator of wellbeing.

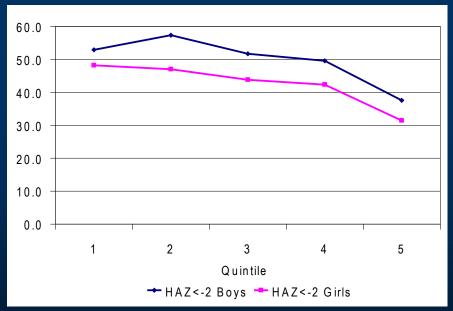


Poverty is not the same as poor nutrition Malnutrition by consumption quintile in Mozambique

Prevalence of stunting, underweight, and wasting by quintile in Mozambique

Prevalence of Stunting by Quintile and Sex in Mozambique

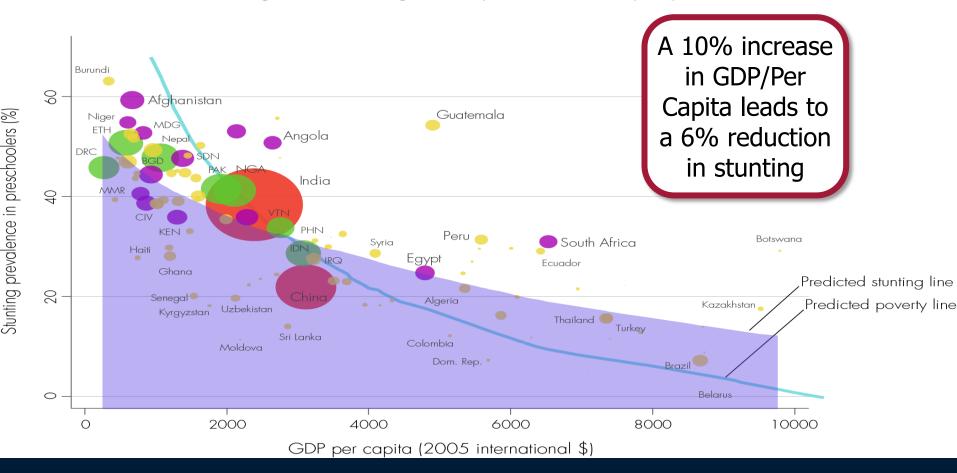




"Analyzing Health Equity Using Household Survey Data" Owen O'Donnell, Eddy van Doorslaer, Adam Wagstaff and Magnus Lindelow, The World Bank, Washington DC, 2008, www.worldbank.org/analyzinghealthequity

Nutrition-sensitive Social Protection Programs Can Impact Nutrition Through Increases in Income

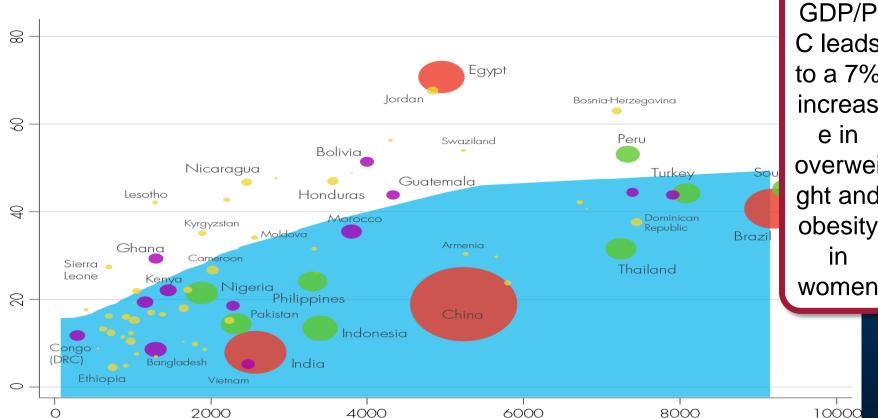
Prevalence of stunting in children aged 0-5 years and GDP per person





Income Growth Can Have Unintended Consequences of Increasing Risks of Overweight and Obesity A 10%

Prevalence of women overweight or obese (BMI > 25) and GDP per pe for low-income and middle-income countries



GDP per capita (2005 PPP\$)

increas e in GDP/P C leads to a 7% increas e in overwei ght and obesity in

Female overweight prevalence, BMI>25 [%]



Are there alternatives to basic needs approach? No

International

- Examples of absolute lines: \$1/day (WB)
- Why exactly \$1 (in fact \$1.25 a day)?
- For whom?
- Is it relevant?

Relative

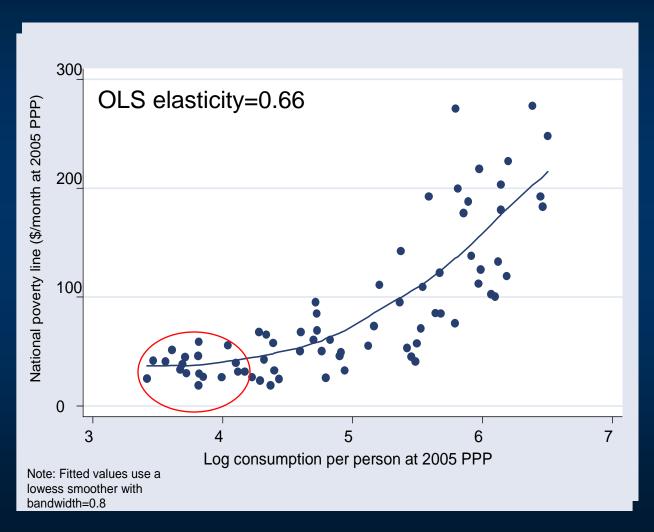
- Examples of relative lines: 60% of median income per equivalent adult (EU)
- Is it sufficient?
- How is it changing over time?

No matter what is the choice of a poverty lines they are useful as benchmarks for spatial and temporal comparisons. Many countries revise the line each HH survey making it difficult to track trends.



Where \$1.25 a day is coming from:

National poverty lines plotted against mean consumption using consumption PPPs for 2005





Other dimensions of poverty

Monetary poverty:

- Income poverty
- Consumption poverty

Non-monetary poverty:

- Insecurity
- Poor health
- Low education or illiteracy
- Lack of basic services
- Social exclusion
- Lack of freedom & voice/ lack of empowerment
- Poor nutritional status*

Dynamics of household welfare:

- Duration in poverty
- Chronic vs. transient poverty

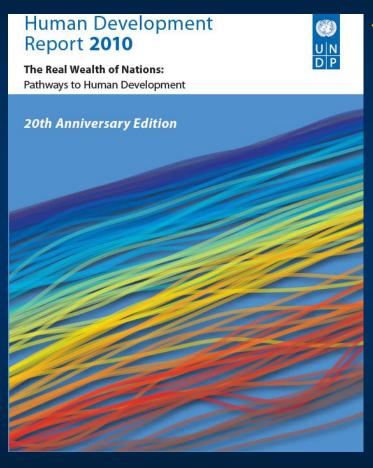
Vulnerability to poverty

Risk-induced vulnerability

^{*} Spans across dimensions

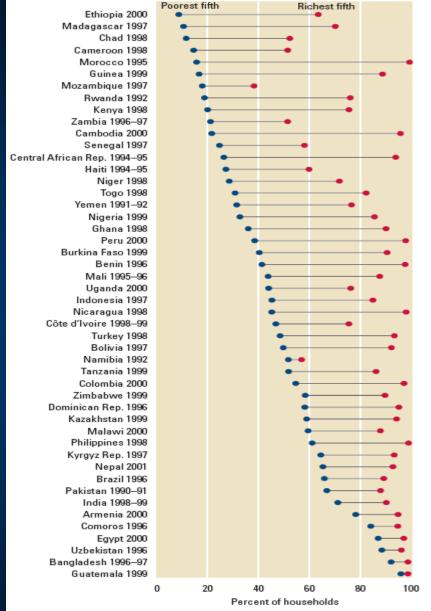


Multidimensional poverty



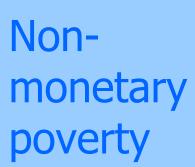
- The UNDP's MPI is composed of ten indicators (http://www.ophi.org.uk/wpcontent/uploads/OPHI-MPI-Brief.pdf):
 - ✓ 1. Education Years of Schooling: deprived if no household member has completed five years of schooling Child Enrolment: deprived if any school-aged child is not attending school in years 1 to 8;
 - 2. Health Child Mortality: deprived if any child has died in the family • Nutrition: deprived if any member is malnourished;
 - ✓ 3. Standard of Living: Electricity Drinking water Sanitation: Flooring Cooking Fuel/ Assets: deprived if the household does not own more than one of: radio, TV, telephone, bike, or motorbike, and do not own a car or tractor .
 - ✓ If one of the deprivation on this list is present, the household is "poor" in this dimension; a household is identified as multidimensionally poor if and only if it is deprived in some combination of indicators whose sum exceeds 30% of all deprivations.
- ✓ But why these Ds? Why these cut-offs? Why these weights?

Figure 1.3 Water, water everywhere, nor any drop to drink
Percent of households who use an improved water source, poorest and richest
fifths



Note: The poorest fifth in one country may correspond to the standard of living in the middle fifth in another country. Within-country inequalities reflect inequality in access to water and in the wealth index used to construct quintiles. An "improved" water source, as defined by UNICEF, provides adequate quality and quantity of water (that is, a household connection or a protected well, not an unprotected well or bottled water).

Source: Analysis of Demographic and Health Survey data.



concerns SSN policy as well





Section 2

RISK AND VULNERABILITY



Poverty fluctuate s over time-> househo lds go in and out

Poverty changes over time

Indonesia: the case of transient poverty

transient
poor:
househol
ds that
experienc
e poverty
every
now and
then.

	February-96	February-99
Total Number of Poor Percent of Poor Population	30,781,000 15.7%	55,800,000 27.1%

Percentage Share of Income or Consumption in 1996

	Lowest	Second	Third	Fourth	Highest
	20%	20%	20%	20%	20%
1996	8.4	12.0	15.5)	21.0	43.1



chronic poor: households that have a high probability of remaining poor



People move in and out of poverty constantly and in large numbers

Rural Ethiopia: Movements In and Out of Poverty, 1989 & 1995

Status in 1995			
Status in 1989	Poor	Nonpoor	Total
Poor	⇔ 31	1 30	61
Nonpoor	↓ 15	⇔ 24	39
Total	46	54	100
Source: Dercon (1999).			

Although the poverty rate declined from 61 percent to 46 percent, the data still suggest significant flows in and out of poverty, a sign of vulnerability.



Is rural Ethiopia unique in terms of movements across poverty line? No

Egypt, 2005-08

Poland, 1994-5

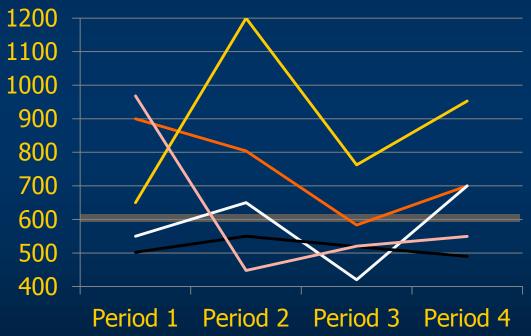
Egypt 2005-08		
Poverty status 36 months ago	This month's poverty status	
	Poor	Non-poor
Poor	9.6%	11.9%
Non-poor	9.3%	69.2%

Poland (94-95)		
Poverty status 12 months ago	This month's poverty status	
	Poor	Non-poor
Poor	11.0%	9.0%
Non-poor	9.0%	71.0%

Egypt is from El Laithy et al. (2010), Poland is from Luttmer (2000)

What is happening to people: Transitions from panel surveys (2)





Households move up and down in the distribution, some experience large swings

In this case with poverty line at 600 every one was close or crossed the line, but just one household stayed poor and one – non-poor

-HH1

—HH2

—HH3

HH4

-HH5

Other hh are "vulnerable" to risk of falling into poverty

But how reliable are these observations?

HH1: always poor; HH3- usually poor; HH5 – transient poor; HH1- occasionally poor, HH2-



Vulnerability

- 1) the result of not being able to fulfill the basic **need for security**
- 2) more precisely: the possibility of suffering a decline in well-being, brought about by shocks against which protection (insurance, avoidance, prevention) is either too costly or not possible
- 3) dynamic in nature
- 4) can affect individuals or strike whole communities

Measures:

Commonly captured through indicators of variability in wellbeing

- directly observed past indicators of vulnerability: past variability of well-being indicators such as consumption or income (panel example)
- 2) indirect indicators: usually socio-economic proxies for risk exposure, such as living in disaster-prone areas, being exposed to diseases, living in remote areas, not owning assets

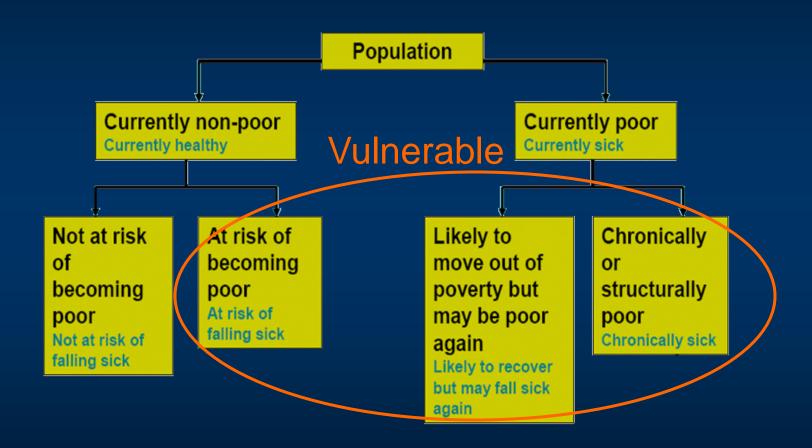


Vulnerability analysis and action

- Analysis is identifying main sources of risk and their relative importance and those most affected by them
- Understand the sources of vulnerability:
 - High exposure to risks?
 - Low resilience against shocks (low level of assets)?
 - Inability to cope (or detrimental coping strategies)
- Should help targeting the short-term poor, the long-term poor, or the most vulnerable?
 - ⇒ If short-term poverty is such that it threatens physical subsistence, then current poverty (not vulnerability) should arguably be the main target of public policy
 - ⇒ But security (protection against uncertainty) is a basic need so it is unavoidable to target vulnerable as well.
 - Temporal pattern of vulnerability and variability in well-being is also important for the design of targeting schemes:
 - 1) temporal shocks are auto-correlated across time (same people are exposed over time)? if yes, concentrate help on those who are currently poor
 - 2) are shocks correlated across individuals and households (neighbors are affected simultaneously)? if so, target help on communities



Vulnerability to poverty:



The problem with this definition is that easily 60-80 % are becoming eligible for assistance=> Policy choices

Practical approach to define the vulnerable

- Vulnerable groups:
 - ➤ Have, typically, higher rates of poverty compared to the rest of the population
 - Specifically 'helpless' or 'weak' groups, liable to serous hardship and poverty
 - Unable to take advantage of opportunities, limited defenses if shocks occur
 - Disabled, orphans, HIV infected, elderly, female headed households
- These groups are exposed to specific risks. But many households are also exposed to risks over their lifecycle



Section 3

POLICY



What poverty analysis does for SP?

- a) identifies the poor (clients of SP)
- b) assesses how well social policy works: e.g.:
 - i) how many of the poor are excluded from SP programs?/ how well programs are targeted?
 - ii) is it the poorest of the poor who benefit most from public policy?
 - iii) would a different sort of policy/program reduce poverty?
- c) helps to design more efficient SP schemes

 Benefic level, targeting, basic needs....
- d) What they do not intend to do:

Set the minimum standard / floor (statistical concept of poverty measurement vs. policy objectives)



From analysis to policy

By analyzing:	We get insights into:
characteristics of poverty / vulnerability/deprivations	whom public policies need to help (target)
	how to identify (target) these groups (eligibility, targeting method)
the extent of poverty /vulnerability	the scope of the program (coverage, budget)
causes of poverty/vulnerability (why do they belong to this target group?)	what treatment may ameliorate their status (type of program, level of benefit)



Conclusions

- ✓ Social Assistance programs focus on the poor and vulnerable (help avoid destitution)
- ✓ By doing so they protect the whole population against the risk of poverty (insurance function)
- ✓ They should use clear criteria for targeting that cannot be the same for all programs
- Social protection interventions are policies, and fundamentally are driven by political choices



Clicker time!

- Imagine you live in a country where 50 percent of the population is considered poor. If you were the decision maker to put the target for the number of beneficiaries in the SSNs, which one you would feel most comfortable with?
- **z** 5%
- **z** 25%
- z 50%
- **z** 75%
- z 100%
- Z Do not know



THANK YOU