## <u>Panel 2 – Measuring Inequality of Opportunities Among Children: The Human Opportunity Index</u>

## Jamie Saavedra-Chanduvi, Acting Director, Poverty Reduction and Equity Group, World Bank

## Giving all children a chance

...and inequality?

• Inequality is going everywhere when we look at the world as whole

#### What inequality?

- Income, consumption?
  - These matter in that they are indicators of wealth, but also inequality in terms of access to specific opportunities/assets.
- Opportunities, assets?

Inequality of what? Incomes? Outcomes? This polarizes the policy debate.

Scale of one to ten on "income should be made more equal"...

#### Improvement in poverty indicators

- Beyond poverty reduction
  - Many dimensions; one is monetary... but also...
  - Under 5 mortality rate
    - Not such clear patterns of improvement everywhere
    - Under five mortality rate by wealth quintile.
      - Even in countries where things are improving... rate is higher in the lowest quintile, for example in Peru, India, Nigeria...
      - By area, also a big difference between rural and urban areas, even in countries where there have been improvements
- And again large, persistent and in some cases increasing gaps

Two Latin American Children:

- Probability of completing 6<sup>th</sup> grade on time
  - o Difference between families on wealth

## Two African Children:

- Probability of completing 6<sup>th</sup> grade on time
  - Huge difference between families base don wealth

## 4 out of 10 children less than 5 years do not have access to clean water

- True for many countries
- Problem 1: access/coverage
- But there is a second problem here:
  - o Those 4 children are indigenous (happens in many countries).
- Problem 2: distribution...
- Can we put two problems such as this into *one* indicator?... see next!

## The equality of opportunity principle

- Circumstances exogenous to the individual, like birth place, gender, ethnicity, income and education of parents should not determine the person's wellbeing
- Some variables should not have any explanatory power...

## **Human Opportunity Index**

- (Trying to build an inequality-sensitive coverage rate that puts the two things together)
- Inequality-sensitive coverage rate that incorporates:
  - A) the average coverage of a good or service, which society accepts should be universal
  - o B) If it is allocated according to an equality of opportunity principle
- Coverage/access rate of a discounted by a penalty for inequality of opportunities

#### Circumstances

- Characteristics outside the controls of individuals
- Society wants these to not influence a child's access to basic opportunities

#### Indicators

- Good or service that society agrees is critical for individual development
- Essential for poverty eradication
- Universality is a valid social objective
- We can all agree on certain indicators, such as access to water, but only some countries agree on such things as internet access...

#### Results

- African and Latin America (late 2000s)
  - Inequality-sensitive indicator shows that they are relatively similar but more variance in African countries
- Finishing primary school \*on time
- Completing education on time in Brazil by states
  - Richest states are much better off than poorest states
- Doing Business / Human Opportunity Index / Human Development Index
  - Countries appear at very different spots on the three lists
- Human Opportunity Index
  - Is an inequality-sensitive coverage rate that incorporates...

## Javier Escobal, Senior Researcher, GRADE, Peru

## Is the Playing Field Leveling in Peru?: The Evolution of Children's Opportunities

 Looking at a longitudinal sample... children in Peru; looking to see effects of inequality of opportunities

#### Context

- Peru has been growing for almost 18 years; fast-growing economy in which poverty has gone down significantly overall
- Poverty in the urban areas has decrease a lot; not as much in the rural areas, although it has decreased there
- Some gaps are narrowing, but many are widening
- Peru is characterized as a broken economy that is increasingly polarizing on many dimensions, and the most has to do with urban vs. rural poverty
  - Very different paths of growth and poverty reduction in the two

#### Inequality in access to basic services for children

- Gap is narrowing between richest and lowest percentile withstunting and low weight at birth, but still a gap...
- Gaps differ much depending on which dimensions we focus on

### Inequality of Opportunity

- Human Opportunity Index incorporates into a single composite indicator both overall access rates and the D-index measure of opportunity distribution
- The index combines average access to opportunities with how equitably those opportunities are distributed; the proposed index is given by O = p(1 – D)
- Areas with Big Improvements Finishing Primary School on Time
  - Peru is doing very well in some indicators like improvements in finishing in primary on time; primary school is now universal...

Relative importance of different circumstances in determining HOI for Infrastructure (2009)

- Location as a proxy of remoteness and location... income level... most important indicators; differences in gender not indicators
- Location effects are quite important especially related to targeting

Evidence from Longitudinal Data: Young Lives

- Looking at how representative examples change across time...
- Young Lives: An international study of childhood poverty; 12,000 children in 4 countries over 15 years... Longitudinal project; gathering comparable information in Ethiopia, India (Andhra, Pradesh), Peru and Vietnam
- Taking advantage of a broader set of circumstances
- Found same trends for access to electricity, nutrition...
- Huge disparities... gaps are widening in growth and production of poverty (?)

What happens when we look at individual trajectories?

- Children that have never been stunted
- Children that were not stunted at age of 5 but later in life
- · Children that were stunted and are not now
- Children that remain stunted

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- Different trajectories for urban and rural areas for Peru show big difference ->
   1/4 stunted at age 5 are now not stunted living in rural areas, a big improvement
- Very likely to see gender differences, maternal differences...
  - o Education of the mother is important
  - A number of key circumstances that explain a large part of who is doing the transition between who is being stunted and who is not.
- One last topic: capturing differences in quality: the devil is in the details

# Dena Ringold, Senior Economist, Human Development Network, Office of the Chief Economist, World Bank

A human rights perspective makes trade-offs explicit.

#### Questions

- Q: using indices for certain things... like schools...?
- Q: Opportunities vs. outcomes, consistent with principles of human rights, what do you think about that? The way the measure is constructed, C-bar needs to be highest outcome possible; he would call equality nondiscrimination, so comment on that?
- Q: technical question: couldn't hear him; political question: you've both
  worked as counselors for ministers in Peru, what is one thing you'd say to
  improve public policy quality in Peru over the next few years, given the
  upcoming elections?

#### **Answers**

 Escobal: In terms of the last question, no clue what will happen, 5 candidates very similar to each other... on the political debate, something that's been very clear is that inequality/discrimination and several dimensions of inequality have been put forward... one of the candidates (name?) who is first in polls has used labels of equality of opportunities as a way of branding what

- he would do... moving to an area where Peru has sustained economic growth... reliable but at the same time we have pressing debates on how to improve targeting... when we go down to how to work out this on a policy level, a good thing to maintain is each of these opportunities are separate, no intention to try to put them together in one unique index for multidimensional equality of opportunity... what people in the ministries are interested in are measures... look at HOI as assistants; whether we aggregate them or not is a different issue... whether they are used for specific policies measures...
- Jaime: Graphs used show changes... HOI will discount... certain levels; change could go either way: changes in coverage but they may be increasing or not in inequality... discussion of opportunities versus outcomes, that is a tough one in that this type of methodology could be used for different types of variables... some are used for input variables or output variables... a system of better nutrition could, say, include access to water; that is an input; an indicator which can guide policies regarding that specific input... but same exercise for nutritional and educational outcomes will be an output measure measuring the level that a child scores on a test, for example... the score that every child should get would be an outcome, and you can always this type of methodology; it all depends on what society decides everyone should have... are those rights? Are they not? He would say that usually they are but the cases that each country uses might be different and you need to ask what is the best way of positioning them within each countries. If you say indicators are universe it is very unlikely that you will get any pushback from anvone.
  - In Chile, part of the approach of Bachelet was equality of opportunity... different groups; weighted according to the size of each of those groups

#### Question

• Q: From a human rights perspective, disagreeing a bit... a full-fledged human rights index would be included with the factors you're looking at, you would have to include ethnicity/gender and all the grounds mentioned in the 9 core convention on human rights (rights of the child, etc.) → factor to take it further; also when looking at universal issues, from a human rights perspective if you have agreement you would then look at conventions the countries have ratified... i.e. rights of the child, which all but 2 countries have ratified... this leaves you a bit less choice.

#### **Answers**

- Jaime: Should not discriminate... i.e. variable of ethnicity; better data collection on this than in some countries... data considerations and what are those different dimensions (measuring ethnicity by language in Peru? Somewhat crude measurement)
- Escobal: For many countries, some indicators would not be achieved at the same level
- Dena: it's not just about the numbers... policy entry-points!