# Structure, causes and distribution of poverty-Some observations on thinking around a workhorse measure

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Sonia Bhalotra University of Bristol

#### My "favourites"/ my biases or beliefs

The fundamental importance of health

• The importance of disaggregating by age and gender (children, women)

- Recognition of (and modeling of) causation/ endogeneity.
- Understanding of mechanisms. eg. to design redistribution or predict trajectories

#### Interactions across dimensions

'dynamic complementarities'

health *x* education (AIDS- LE-lowers investment) (health & education) *x* income

Multiplier effects on returns to investment in any one dimension. Conversely, (endogenous) mechanisms for poverty traps.

Think about weights proportional to "feed"?

### persistence

Duration of deprivation –

likely increasing erosion of capabilities and/or loss of aspiration

Possibly different for each dimension- identify drag and causes of.

 Think about nature of dimensions in this regard- low education amongst adults will change much more slowly than amongst children.

- Study longitudinal data

### critical ages

Even short-lived deprivation, if experienced at critical ages of development, can have persistent consequences.

e.g. the foetal origins hypothesis (Barker 1992), recent evidence on the later life penalties of foetal programming in response to deprivation.

More general- impact of shocks of famine (age 1-2) or immigration (age 8?) on adult height;

Or impact of recession at school transition ages.

### Intergenerational transmission

Some evidence that conditions (deprivations) in the mother's birth year influence outcomes (deprivations) of her children.

• Mothers as a buffer/conduit- investment in girls and women, not only during pregnancy but from the start.

Intergenerational correlations in earnings, education, health, fertility, worklessness, culture.

- Causal?
- Persistence of social origins

### Spillovers

As discussed, spillovers occur across generations

But they also occur at any given time, across individuals

- within families- education of most educated person-Basu, or infection in crowded homes-historical data
- across families- information sharing, peer effects, relativities

Spillovers occur across dimensions too- we discussed this as interactions

# Volatility- a particular aspect of

Widely understood that we need to capture risk of poverty and not just realised poverty.

A simpler consideration is that some components of the multidimensional index are more naturally s.t. volatility than others

- Access to tap water or education amongst adults likely to be fixed from one year to the next
- Income and health likely to be volatile- point of measurement matters

# Summary- 'dynamics'

- Interactions across dimensions
- Persistence in any one dimension
- Critical ages of exposure to deprivation
- Intergenerational transmission of deprivation
- Other spillovers within & across families
- Volatility

#### Other measurement issues

- We discussed timing
- Measurement error is a general concern when a cut off is applied-small variations can change the classification. (create confidence intervals)

Other sorts of issues relate to subjective v objective measurement

- Subjective assessments (e.g. self reported health or happiness or feelings of empowerment) have the virtue of "scaling the impact" of deprivation.
- But they may reflect adaptation..

#### The entire distribution

We have a poverty-focused measure but it can be useful to look at the same time at the entire distribution of deprivations because-

- Depth of poverty below the cut-off- established issue
- Above- The neglected middle?
- A policy intervention or other "shock" that alters the poverty rate may shift other parts of the distribution in organically related ways.
- Fiscal considerations- redistribution
- Utilities that depend upon relative incomes

# weights

- from happiness functions? or,
- to reflect functionality?
- (marginal) costs?
- Clean water and clean air serve larger populations
- Weights attached to alternative dimensions may implicitly imply weights attached to centiles if there is a distributional pattern in deprivation by dimension.

### quality

Education- of very variable quality. Ref functional literacy, test scores.

Why does this matter?

- Functionality/productivity of education
- SES gradients in quality will tend to reinforce SES gradients in quantity- accounting for quality will increase inequality.

Less of an issue when the measure is an outcome like under5 mortality

# Absolute v relative deprivation

This issue is specific to the dimension-

- absolute more natural for health & education.
- relative may be more natural for income.

Not only because utility may depend on relative income but because prices (real incomes) or crime or war may depend on relative income

# "Time consistency"

- Stock v flow
- Education of adults v children- cohort specific HDI?
- Relates to my earlier point about the long arm of early childhood. Current deprivations may originate in one's own early childhood or in one's mother's childhood
- Similar but different story re colonial legacies etc

#### trends

Adjust for demographic change
Eg. AIDS deaths, ageing

Look at changes in X (dimensions) and β
(elasticity). Latter may capture institutions for
eg.

### Summary- measurement issues

- Measurement error
- The distribution below & above the cut off.
- Choice of weights
- Quality
- Cohort specific HDI
- (adjusted) trends
- Absolute v relative deprivation
- Subjective assessments, +/-

# (Selected) Omitted Dimensions

### Dimensions – inputs v outcomes

More general consideration of whether the HDI includes inputs or outcomes.

Health- under-5 mortality *vs* immunization rates, availability of water or decently priced anti-retrovirals.

Outcomes incorporate inherited endowments and behavioural choices. Inputs reflect policy-investments.

#### Political environment

- Autonomy, participation, hope, voice, agency
- citizen of a well functioning democracy

Peace as in the absence of war and crime

 Public provision- water, sanitation, teachers, loans, returns to saving

#### Natural environment

• Water- tightening scarcity, clean water

• Clean air - pollution- traffic (lead), stoves..

Forests

Property rights issues

#### Social environment

Social capital

Challenged by migration?

Or positive dynamic changes in neighbourhood?

- Religion
- Heirarchy eg caste

# Levels of analysis

Important to understand how states, markets and individual behaviours interact to produce outcomes.

e.g. demographic \* macro/environmental characteristics

#### Time

Time as a resource.

I have a picture of time-deprived women

Constraints on time to commit to productive labour to augment earnings (unclear that women's work is "liberating", their education is), or to walk the distances needed to get clean water or to attend a health clinic.

Time deprivation interacts with nutritional deprivation (e.g. iron) to create low energy, fatigue and poor mental and physical health.

#### Mental health

Cast as deprivation of peace, loss of "control", e.g.

- maternal stress as an aspect of functionality that impacts the next generation
- the stress of war (the Congo), of imminent natural disaster (Bangladesh) or of fatal infection (AIDS)

Direct impact on wellbeing, Influence on investment in other aspects of wellbeing

### One step back

• Poverty in any dimension experienced in the Congo (war), Bangladesh (cyclone, flood risk), and India (neither) clearly has very different roots.

• Important to contextualise measurement if measurement is to feed into policy.

### One step forward

- "Agents of change"-
- Women (demographic transition- growth)
- Political economy- civil war, public provision

- a focus on early childhood – this is how the health and education components are identified

Clearly very selective but relatively neglected