

***VULNERABILITY: Investigating the threat
of child poverty***

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Question

how can we use standard surveys to measure, monitor, analyze vulnerability?

With the key consideration:

- There is only thing worse than no data
- That is **bad** data

Intro: Why should we?

Life is full of uncertainty. Bad things may happen. People/Children can be at risk...

There is something wrong with using standard poverty and other deprivation concepts for policy planning...

Poverty

ex-ante and ex-post

- poverty and well-being measurement is 'ex-post', so really good for monitoring;
- But as expression of ill-being 'ex-ante' rather weak;
- For policy planning: very weak! (as ex-post concepts are backward looking, ignoring risk)

Vulnerability as a threat of poverty

Warning:

- Term 'vulnerability' is used as meaning 'risk-related vulnerability', whereby risk is constituting a 'threat' to well-being;
- Few things happen with certainty...
- It is forward-looking, threat to well-being tomorrow or in the long run

Warning: confusion alert!!!

... other common meaning of vulnerability
“state of being helpless or weak”, as in ‘vulnerable groups’.

- Vulnerable groups as specifically ‘helpless’, ‘weak’ or ‘excluded’ groups, liable to serious hardship and poverty
 - Unable to take advantage of opportunities
 - Limited defences if shocks occur.
- Disabled, orphans, HIV infected, elderly, female headed households, SC/ST (caste) groups, ...
- NOT today’s focus

Measuring the 'threat of child poverty'

2 issues

- Design a measure using information on potential outcomes
- Calculate this measure

Vulnerability measurement

1st issue?

Can we **design** measures that uses information on potential outcomes in some normative framework?

YES

Standard poverty measure:

$$FGT_a = \frac{1}{n} \sum_{j=1}^n \left(\frac{z - \text{Min}(z, y_j)}{z} \right)^a = \frac{1}{n} \sum_{j=1}^n (1 - x_j)^a$$

Vulnerability measure (Calvo-Dercon)'

$$V_{j(\alpha)}^* = 1 - \mathbf{E} \left((x_j)^\alpha \right), \text{ with } 0 < \alpha < 1$$

Vulnerability measurement?

2nd issue?

- Can we **use it** for policy-relevant analysis? [empirical application]
- Needs a 'forecast' model of possible welfare outcomes

Alternative route

- Identify 'risks' faced
- Identify coping/management strategies, and
- Identify impact, resilience or suffering
- Develop typology of those facing problems, and their responses
- Or study potential suffering or resilience

example

- A drought or other hardship may strike
 - Affecting child nutrition and/or school enrolment
 - Threat to well-being
- > Relevant to know what risks there are, who is at risk, how people cope, and effectiveness of responses.

How to address this?

Secondary data



Survey based questions



Analysis



Model 1: nothing new

- We observe in data: children nutrition, school enrolment, (and others, e.g. hours worked by child, long-run school achievement)
- Use secondary data on 'risk' (rainfall, price shocks, etc in areas covered)
- Link this to get: analysis of whether these risks are 'real' (have impact) and who is affected
- Use data on assets, transfers, etc to assess risk management, coping mechanisms/resilience

Model 2: direct questions

Three types:

- 2.1. starting from shocks
- 2.2. starting from outcomes
- 2.3. hypothetical (what if)

2.1 From shocks to impact

Have you in last xx years experienced a serious shock or event that caused you hardship?

Any drought?

Any death of family members? Any theft?

Etc.

Best with long lists... (pilots!)

Table 1: The incidence of serious shocks 1999-2004 - Ethiopia

Type of shocks reported	%
Drought	47
Death of head, spouse or another person	43
Illness of head, spouse or another person	28
Inability to sell outputs or decreases in output prices	15
Pests or diseases that affected crops	14
Crime	13
Policy/political shocks (land redistribution, resettlement, arbitrary taxation)	7

For each:

When?

How severe?

Did it reduce assets? Nutrition?
Consumption?

How did you cope?

(selling assets, child labour, taking child
out of school, ...)

*Problem: complicated narrative, but
basic question very revealing!*

2.2 From outcome to shock

- Is child in school? Why not?
- Answers may reveal whether risk and shocks matter for this, and for whom

2.3. Hypothetical

What if:

- What would you do if you were faced by a drought?
- Who would you rely on?
- Would you ask child to leave school and work?
- How likely do you think drought and each response is?

Discussion

- Problem with 1 and 2:
 - self-reported data (as in health: reporting bias)
 - Framing issues/leading questions
 - Complicated narrative, long lists of codes
- Problem 3
 - Hypothetical questions are VERY problematic, even if answers may seem to come closest to getting sense of 'vulnerability'
 - "Would you be able to raise Rs 10000 in six months? How? And what about Rs10,000 in one week? How?" may get at resilience.

So what now?

Secondary data



Survey based questions



Analysis



- **Survey-based questions only hope for quick information, as model 1 route takes long time...**

What to do?

- Get more information on shocks in surveys, how they respond and the overall impact, to inform who is at risk, facing a threat of poverty and ill-being;
- Information would be basis for better 'prediction' models, and then vulnerability measures may be more credible;
- But much validation work is needed: do we measure what we want to measure!