<u>Lunch Keynote – Professor James Foster, The Institute for International</u> <u>Economic Policy, Elliott School of International Affairs, The George Washington</u> University

Making Meaningful Numbers

I design measures, I don't focus on implementation, but a lot of people who interact with me are focused on it and try to make sure it's designed correctly.

An axiom is simply precise representation of policy. It's a policy that describes what you think should be measured and, more importantly, what shouldn't be measured.

Things I have been looking at:

- Literacy where you take into account the local access to literacy given to you by someone in your household, even if you're not
 - Polarization and the spread of incomes...
- Inequality and self-reported health fair/poor/etc.

Size
Spread
Base
→ of distribution
MPI is an example of that...

First case study: income base measures

- Sen brought home the fact that poverty was not being considered at a deep enough or nuanced enough level and has two stages
 - 1. Identification
 - Who is poor?
 - o 2. Aggregation
 - How poor are people? → use something that reflects depth of poverty
 - o Introduced axiomatic structure which helped in putting that forward...
 - You could decrease poverty in the South and increase in the North and overall it could rise!
 - Put together a measure that did not have that problem.
 - FTT indices...
 - Include poverty-gap measure (depth as well as frequency)
 - Squared gap measure

Multidimensional Poverty

- Everyone says it is multidimensional
 - World Bank Development Report emphasized this point and showed how hard the measurement was; they didn't include measures, just discussions of each dimension
- What does this mean? Contract to unidimensional.
 - Can all dimensions be aggregated in a meaningful way, into one single, coherent dimension?
 - Each dimension can't be commensurate with other dimensions... take into account each dimension's cutoff and each dimension's deprivation
- One deprivation would give you the right to be called poor people with multiple dimensions would be considered in a worse situation...
- Intersectional approach: poor in every dimension we are considering
- Both of the above are impractical: either everyone is poor or everyone is not
- Data characteristics... qualitative data; categorical data... these are not very cardinal, or quantitative, as we're used to using... they may not even be ordinal.
 - There are very important problems with data when it comes to studying poverty.

- Must first commonsense notion of poverty; fit purpose for which it was developed
- What should we advise?
 - Came up with a new approach whose identification was based on dual cutoffs: within each dimension, a cutoff... within the US, who would agree high school was needed? Without it, you are deprived.
 - Within each dimension, a cutoff depends on if you have enough depth of deprivation to determine who is poor
 - Take weighted measure of deprivation and ask if you are broad enough/multiply deprived enough to be determined more
- Focus has turned to the adjusted headcount ratio
- Question people want to see answered: Who will choose the parameters?
 - o Answer depends on purpose of the exercise
 - In Mexico, a country-measure of poverty and expert did this. → referred to many people and constructed index mindful of the law and social dimensions
 - For NPI, UNDP decided... went back to the field and tried to see how it related to people... is this really capturing poverty? But it wasn't very systematic
 - Participatory measure in Bhutan → ground up, not top down measure of poverty
 - Open source and available freely; many using it to evaluate how well they're targeting
- How has this technology diffused?
 - o In Mexico, from 2006 onward working on coming up with an approach
 - Applications in a paper on Indonesia & USA
 - Teaching the methodology with many classes full of government officials and academics
 - Applications to other forms of measurement, such as governance and corruption
 - Broad interest, especially in Caribbean and Latin America → major conference in Chile; Colombia
 - o UNDP rolled this out for the Human Development Report
 - Released in advance of the report in London
 - Media looked at some of the India v. Sub-Saharan Africa results ->
 more people poor in a few states of India than all of Sub-Saharan
 Africa... people were even surprised that it could be done
 - Response beyond that has been interesting
 - Martin Revellion (?) chief spokesman expressing discomfort with multidimensional approach
 - Conferences quickly organized at the Bank after the results were announced by UNDP
 - Point to clarify usefulness of approach
 - First conference:
 - This is a tsunami that cannot be stopped.
 - Well, the rubber has hit the fan.

- Multidimensional has been implemented; it can be done; things are happening
- o Main question: why has this diffusion happened?
 - We paid attention to fundamentals; axioms; making sure the measure has some meaning?
- How does this relate to human rights?
 - How can the discussion of human rights become more people based?
 By going from the top up to the bottom down?
 - Should an indicator measure size spread or base?
 - o Must an indicator be cross-country or region based?
 - Can you add up rights, or is each separately and independently important?
 - Is it more important when one person is missing many rights or when one person is missing one?

Q&A

- Q: To what degree do these meet the axioms of quantity and magnitude?
- Foster: Tell me what those axioms are.
- Response: Tells you when you can use numbers and statistics.
- Foster:The whole idea of meaningfulness is based on what possible transformations of a variable can be done. The number matters. We're very mindful of that, hence the whole approach we took with the N zero measure.
- Q: I'm really puzzled because one of the things at the World Bank, etc. is a resistance to letting the people participate. I just wonder if it makes sense to look at sociology, cherry-picking who you privilege, etc... do you have any suggestions on how to deal with these issues?
- Foster: No, I certainly don't.
- Q: How do your variables change at different levels of change, are they invariate?
- Dr. Foster: Trying to prioritize poor...
- ..
- Dr. Foster: Allows noises to be assembled nicely.
- Cutoffs make noise worse

Depends on what you do with cutoffs... I don't have a really good answer to your question as an implementer, I'm just the designer.