Summer School on Capability
and Multidimensional Poverty

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OPHI
Oxford Poverty & Human
Development Initiative
University of Oxford
www.ophi.org.uk
Normative Issues in Multidimensional Measures

Sabina Alkire (OPHI)
Outline:

• Part I: From Concept to Implementation
• Part II: Basic options for measurement
• Part III: Multidimensional Poverty Measures
  – Choice of *Unit of Analysis* (individual, household)
  – Choice of *Dimensions*
  – Choice of *Variables/Indicator(s)* for dimensions
  – Choice of *Normalisation* (if relevant)
  – Choice of *Poverty Cutoffs* for each indicator/dimension
  – If relevant *Aggregation within dimensions*
  – Choice of *Weights* within and across dimensions
  – *Identification* (who is poor)
  – *Aggregation* (How much poverty does a society have)
Part I. From Concept to Implementation

Focal question from now until Tuesday:

Can we implement a real, empirical measure of capability poverty?
Observation 1:

• The capability approach is incomplete. It raises but does not resolve all of the normative issues identified here. The one clear recommendation: the space of evaluation.

• Theoretically there are many degrees of freedom in how to implement the CA.

• After ‘filling in’ the specific constraints of an exercise you find that, in practice, there are far fewer realistic options.
Observation 2.

• Two broad kinds of situations limit the degrees of freedom, and should be considered first:

1. Particular objectives of the exercise
   • The purpose of the evaluation
   • The region, or sector, or years of interest
   • The methodologies

2. Unchangeable constraints (*might* include)
   • Data
   • Political powers
   • Time and Costs (e.g. of participation)
Sample purposes for MD measures

• to replace, supplement, or combine with the *official measures* – (of poverty, of health, of governance, etc)
• to *monitor* the level and composition of poverty, and the reduction of poverty, over time
• to *monitor* the impact of programmes
• to *target* the poorest more effectively
• to *identify vulnerable or excluded groups* in the population
• to *evaluate* the impact of particular interventions
Observation 3.

- Even with capability/functioning measures, you might construct measures:
  A) that measure present functionings
  B) that predict future capabilities/functionings

This is fundamental, e.g. to discussing substitutability/complementarity [relevant in B) not A)]
Observation 4.

- In most cases, it is not possible to implement a perfect capability measure, e.g. of poverty.
- It remains important to articulate the weaknesses of the measure as well as its strengths.
- What are the basic problems with any multidimensional measure?
Basic problems of Cap. Comparison:

• Comparable measures *ignore diverse values.*
  – Same dimensions/weights for all people – *But* values differ across people (wts can be indy).
  – Compare people across time, but values change
• Comparable measures focus on achieved functionings (usually). Ignore *freedoms.*
• Not all key capabilities/functionings can be measured. E.g.: love, meaning, faith, beauty
• *Time* is elusive: duration of achievements?
• Ex post any measure seems to use *prices.*
Exercise

• Think of one concrete situation in which you have developed a measure: What kind of constraints did you operate under?

1. Particular objectives of the exercise
   • The purpose of the evaluation
   • The region, or sector, or years of interest
   • The methodologies

2. Unchangeable constraints (*might include*)
   • Data
   • Political powers
   • Time and Costs (e.g. of participation)
Part II: Issues for Measurement

Initial discussions of capability measurement are found in the Appendix to *On Economic Inequality* by Foster and Sen 1997.

Later discussions not yet collected but see reading list for key articles.
Measurement options from OEI 97:

1. Distinguished Capability
2. Income plus....
3. Adjusted Income
4. Direct Multidimensional
1 Distinguished Capability Comparison

• This general approach compares some focal capability ie life expectancy, literacy, employment, nutrition. It might consider overlaps between achievements in that functioning, and in another.

• Development as Freedom page 82
2 Income plus...

- The supplementary approach: A second approach is relatively nonradical, and involves continued use of traditional procedures of interpersonal comparisons in income spaces, but supplements them by capability considerations (often in rather informal ways).

- Such factors as the availability and reach of health care, evidence of gender bias in family allocation, and the prevalence and magnitude of joblessness can add to the partial illumination provided by the traditional measures in the income space.

- Essentially, this involves using ‘distinguished capability comparison’ as a supplementary device.
Issues for income measures:

- Welfare is represented by indirect utility function defined over income and price vector.
- Does not include public goods.
- Does not include non-market activities.
- Presumes markets function; supplies exist.
- Does not impute value to health, ed, etc.
- Even if have income, non-poor people may not allocate it to basic needs (addicts).
- Income and consumption data often poor.
3 Adjusted Income

Information on determinants of capabilities other than income can be used to calculate ‘adjusted incomes.’ For example, family income levels may be adjusted downward by illiteracy and upward by high levels of education, and so on, to make them equivalent in terms of capability achievement. This procedure relates to the general literature on ‘equivalence scales.’ It also connects with the research on analyzing family expenditure patterns for indirectly assessing causal influences that may not be observed directly (such as the presence or absence of certain types of sex bias within the family).
Direct approach:

*The direct approach:* This general approach takes the form of directly examining what can be said about respective advantages by *examining and comparing vectors of functionings or capabilities*. In many ways, this is the most immediate and full-blooded way of going about incorporating capability considerations in evaluation.
Why might choose ‘direct’ approach?

<table>
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<tr>
<th>Non-deprived in non-monetary dimension</th>
<th>Deprived in non-monetary dimension</th>
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<tbody>
<tr>
<td>Not income poor</td>
<td>Group A</td>
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<td>Group B (I)</td>
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<td>Income Poor</td>
<td>Group C (II)</td>
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<td>Group D</td>
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If income/consumption poverty is used for policy & targeting purposes,  
**Group B** represents a targeting error I (omission of some poor)  
**Group C** represents a targeting error II (inclusion of some non-poor)
Oversights from income poverty:

Table 5. Lack of overlaps between monetary and CA poverty

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<thead>
<tr>
<th>Capability poverty measured as</th>
<th>Education</th>
<th>Nutrition/health</th>
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<td>% of CA poor not in monetary poverty:</td>
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<td>India</td>
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<td>53</td>
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<td>Peru</td>
<td>32</td>
<td>21</td>
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<tr>
<td>% of monetary poor not CA poor:</td>
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<tr>
<td>India</td>
<td>65</td>
<td>53</td>
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<td>Peru</td>
<td>93</td>
<td>66</td>
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Source: Franco et al. (2002).

Conclusion: Income significantly mis-identifies deprivations. Supplemental Direct Measures are Necessary.

Ruggieri-Laderchi, Saith and Stewart '03, '07
But even if income is an inadequate measure, perhaps growth in income per capita is an adequate objective? Surely if a country is growing, that is enough?

India: 15 years of strong economic growth.
1998-9 NHFS-2: 47% children under 3 are undernourished
2005-6 NHFS-3: 46% are undernourished (FOCUS 06) (wt-age)
Part III: Multidimensional Poverty Measures

1. Choice of **Unit of Analysis** (order of aggregation)
2. Choice of **Dimensions**
3. Choice of **Variables/Indicator(s)** for dimensions
4. Choice of **Normalisation** (if relevant)
5. Choice of **Poverty Cutoffs** for each indicator/dimension
6. If relevant **Aggregation within dimensions**
7. Choice of **Weights** within and across dimensions
8. **Identification** (who is poor)
9. **Aggregation** (How much poverty does a society have)
Achievement in each domain $D$

Dimensions - which?

[Fuzzy] Poverty Line or band for each relevant domain or indicator.

Also Required:
- Indicator
- Weighting
- Interactions
- Identification
- Aggregation
- Robustness
- Freedom
- Ordinal Data

Time

Future

Alkire 2008
Domain for MDP: A representative capability or cluster of capabilities or functionings that are of i) basic importance and ii) social influenceability.
1. Choice of Unit of Analysis

- Individual
- Household
- Municipality
- Nation

Choice depends upon data, and purpose.
1. Choice of Unit of Analysis

It is related to the *order of aggregation*

- Individual ~ first across $D$ then $N$
- Household ~ first within hh then across $D$
- Municipality ~ first within $M$ then across $D$
- Nation ~ first across $N$ then across $D$
Unit of Analysis: Nation (Region)

• Order of Aggregation: First across people, then across dimensions (e.g. HPI).
  – Aggregate data are widely available – so simple, less sophisticated.
  – Can combine different data sources
  – Can combine with distribution information
  – Cannot speak about breadth of poverty,
  – May not be able to decompose by state or smaller groups
Unit of Analysis: Person (or hh)

- Order of Aggregation first across dimensions, then across people (e.g. this class).
  - Coheres with a normative focus on individual deprivations.
  - Has information that can penalise breadth as well as depth of deprivation.
  - Decomposable as far as data allows.
  - Can combine with distribution information.
  - Requires all questions from same dataset.
  - [if desired, the measure can represent interaction – substitutability/complementarity – between dimensions]
Bourguignon & Chakravarty 2003 express an emerging preference for aggregation first across dimensions:

- “The fundamental point in all what follows is that a multidimensional approach to poverty defines poverty as a shortfall from a threshold on each dimension of an individual's well being. In other words, the issue of the multidimensionality of poverty arises because individuals, social observers or policy makers want to define a poverty limit on each individual attribute: income, health, education, etc...”
Choosing Dimensions:

Please write down:

• Dimensions of poverty used in any multidimensional measure you have made or worked on.

• Write down the Indicators of poverty used, and the dimensions.
2. Choosing Domains

• Grusky and Kanbur 2006 acknowledge the consensus that the multidimensionality of poverty and inequality should not be treated as soft social issues that can be “subordinated to more important and fundamental interested in maximizing total economic output.”

• But they regard the choice of dimensions as a ‘pressing conceptual question.’ “economists have not reached consensus on the dimensions that matter, nor even on how they might decide what matters.”
How Researchers Choose Dimensions

- *Existing Data or Convention*
- *Theory*
- *Public ‘consensus’*
- *Ongoing Deliberative Participatory Processes*
- *Empirical Evidence regarding people’s values*
How Researchers Choose Dimensions

- *Existing Data or Convention* – select dimensions (or capabilities) mostly because of convenience or a convention that is taken to be authoritative, or because these are the only data available that have the required characteristics.
How Researchers Choose Dimensions

- **Theory** – select dimensions based on implicit or explicit assumptions about what people do value or should value. These are commonly the informed guesses of the researcher; they may also draw on convention, social or psychological theory, philosophy, religion, and so on.
How Researchers Choose Dimensions

- **Public ‘consensus’**— select dimensions that relate to a list that has achieved a degree of legitimacy due to public consensus. Examples at the international level are universal human rights, the MDGs, and the Sphere project; these will vary at the national and local levels.
How Researchers Choose Dimensions

• *Ongoing Deliberative Participatory Processes* – select dimensions on the basis of ongoing purposive participatory exercises that periodically elicit the values and perspectives of stakeholders.
How Researchers Choose Dimensions

- *Empirical Evidence regarding people’s values* – select dimensions on the basis of empirical data on values, or data on consumer preferences and behaviors, or studies of which values are most conducive to mental health or social benefit. (Most used in studies to maximise ‘happiness’ or subjective well-being)
CA requires a combination of participation and objectivity

- **Existing Data or Convention**
- **Theory (in part – not alone)**
- **Public ‘consensus’**
- **Ongoing Deliberative Participatory Processes**
- **Empirical Evidence regarding people’s values**
Sen’s Criteria for Dimensions

- Purpose of the Evaluation (targeting, monitoring, measure quality of life, sectoral)
- Value and priority [for relevant group(s)]
  - basic importance (Sen 2004)
- Appropriateness for institutional response
  - social influenceability (Sen 2004)

(see Alkire 2008 Choosing Dimensions)
Procedural justification of dimensions (Robeyns)

1. *Explicit formulation*: the list [of domains and/or capabilities] should be made explicit, discussed and defended in any multidimensional poverty measure that is developed and advocated for policy reflections: **why it is claimed to be something people value and have reason to value.**

2. *Methodological justification*: The method that has generated the list should be clarified and defended (and open to critique or modification). For example, whether this domain was chosen on the basis of a participatory exercise, or through consultation of empirical studies of human values.

3. *Two stage process: Ideal-Feasible*: Only from the second stage onwards will constraints and limitations related to the measurement design and data collection, or to political or socio-economic feasibility in the case of policy-oriented applications, be taken into account.

4. *Exhaustion and non-reduction*: the capabilities on the [ideal] list should include all elements that are important: no dimensions that are relevant should be left out. For example, those capabilities related to the non-market economy should also be included in economic assessments.
Myth: The possible dimensions are endless!

• Fact: Researchers regularly come up with VERY similar lists of dimensions.

• Example: a review of the 19 main international multidimensional indices of poverty and well-being find that all dimensions fall into 10 categories. A further review of 45 accounts corroborates this observed regularity.
Often observed Dimensions

Life, Health, Reproduction
Security
Work and Leisure
Education, Knowledge, Skills
Relationships
Self-direction, Empowerment, Agency
Political Life, Governance
Inner Peace and Self Expression
Culture and Spirituality
Environment
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<tr>
<td><strong>Human Flourishing</strong></td>
<td><strong>Life</strong></td>
<td><strong>The basic liberties</strong></td>
<td><strong>Nutritional food/water</strong></td>
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<tr>
<td>Bodily life – health</td>
<td>Bodily health</td>
<td>freedom of movement, freedom of association</td>
<td>Safe birth control/childbearing</td>
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<td>reprod and safety</td>
<td>Bodily integrity</td>
<td>freedom of occupational choice</td>
<td>Health care</td>
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<td>Knowledge &amp; skills</td>
<td>Senses, thought imagination,</td>
<td>against a background of diverse</td>
<td>Protective housing</td>
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<td>Meaningful work and play</td>
<td>Emotions</td>
<td>opportunities</td>
<td>Physical environment</td>
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<td>Relations / Friend</td>
<td>Practical reason</td>
<td>powers and prerogatives of office</td>
<td>Security in childhood</td>
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<td>Agency, Participation</td>
<td>Affiliation</td>
<td>positions of responsibility in political and</td>
<td>Work</td>
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<td>(Practical reason)</td>
<td>Other species</td>
<td>economic institutions</td>
<td>Significant primary relationships</td>
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<td>Self-integration</td>
<td>Play</td>
<td>income and wealth</td>
<td>Physical security</td>
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<td>Harmony with ultimate source(s)</td>
<td>Control over one’s environment</td>
<td>the social bases of self respect</td>
<td>Economic security</td>
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<td>of reality</td>
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<td>Basic education</td>
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Table A1: Multidimensional Poverty & Well-Being Indices: An Overview

<table>
<thead>
<tr>
<th>Index / Source</th>
<th>Achievement</th>
<th>Environment</th>
<th>Health</th>
<th>Society &amp; Life Expectation</th>
<th>Culture &amp; Religion</th>
<th>Safety</th>
<th>Comfort</th>
<th>Education &amp; Knowledge</th>
<th>Expression</th>
<th>Culture &amp; Religion</th>
<th>Security</th>
<th>Governance</th>
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<td>Chambers (2008)</td>
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<td>McGillivray (2007)</td>
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<td>MQOL (Kreitler &amp; Kreitler, 2006)</td>
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<td>Quality of Life Index (Economist Intelligence Unit, 2005)</td>
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<td>Quality of Life Index (International Living, 2008)</td>
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<td>Quality of Life Index (Ferrans &amp; Powers, 1984)</td>
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<td>State of the World's Mothers (Save the Children, 2000)</td>
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<td>The Human Wellbeing Index (Prescott-Allen, 2001; IDRC and IUCN)</td>
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<td>Basic Capabilities Index (BCI) (Social Watch, 2007)</td>
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<td>Prosperity Index (Engines, 2006)</td>
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<td>Mobility Index (Foreign Policy, 2006)</td>
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<td>Commitment to Development Index (CDI) (2008)</td>
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<td>International Index of Social Progress (Estes, 1974)</td>
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<td>Human Poverty Index (UN)</td>
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End of 2. Look at what you wrote down:

• How were those dimensions chosen?
• Are they indicators of capabilities, of resources, of utility?
• Write out a sample ‘justification’ of the dimensions
Next sections: delegation

3. Choice of Variables/Indicator(s) JMR
4. Choice of Normalisation (you)
5. Choice of Poverty Cutoffs for each indicator/dimension (Monday if time)
6. If relevant Aggregation within dimensions (you)

Other things we hope to find time to discuss:
Substitutability / Complementarity
Freedom
Ordinal Data
7. Weights

1. Where are weights applied?
2. Setting Weights: Rationales
3. How are normative weights set?
   - Equal weights
   - Expert Opinion
   - Participation and Public Deliberation
   - Survey based – subjective
   - Survey based – necessities
In evaluating this summerschool how do we weight expansions in:

1. Understanding of each lecture topic
2. Understanding the Capability Approach
3. Completion of paper & stata exercises
4. Collegial Relationships (social capital)
5. Ability to complete your own research
6. Understanding of Peruvian poverty
7. Future earning potential across 20 years
8. Your satisfaction with life as a whole
Where do weights enter MD poverty measures?

- Number and kind of indicators (if equally weighted)
- Transformation and Normalisation functions for variables (ranking, z-scores, shortfall, log)
- Degree of substitution among dimensions (if relevant)
- Direct weights set on dimensions

Poverty Measure = Aggregation of
- weight of each dimension, applied to
- transformed variable, corrected for
- substitutability
A very general functional form:

\[
I(X|\beta) = \frac{[w_1 I_1(x_1)^\beta + \ldots + w_q I_q(x_q)^\beta]}{w_1 + \ldots + w_q}\]

\[I(X|\beta) = \text{Individual well-being index}\]
\[I_j(x_j) = \text{transformed achievement}\]
\[\beta = \text{degree of substitutability (parameter)}\]
\[\beta = 1/(1-\sigma) \text{ where } \sigma = \text{elasticity of subs.}\]
\[w = \text{explicit weights for each dimension}\]
A simple comparison (?)

• Two people, Ann and Bob.
• Ann has life expectancy of 90 years
• Bob has life expectancy of 50 years
• Ann has $1000
• Bob has $2000

• Who is better off? [poverty parallel]
Perfect substitution $\beta = 1$
Rescale by median: $x_j / Me_j$
Median income = $2,500
Median health = 80 years

Start with Equal weights
Who is better off?

Change explicit weights:
$w_i = 0.75$ and $w_h = 0.25$
$I_j(x_j) = x_j$
$Me_j = 1$

Who is better off now?
$I_{Ann} = 0.56 < I_{Bob} = 0.76$
What happens if the median income changes (rescale/different transformation)?
Conclusion: *several* decisions affect weighting, not just explicit weights

- Weights are clearly very important
- However, weights are affected by other factors than explicit weights:
  - Number of variables
  - Content of variables
  - Transformation of variables
  - Assumptions regarding Substitutability
  - Kind of data
Where are weights applied in MD poverty measures?

• *Within* Dimensions
  – E.g. Asset index
  – Education variables in HDI
  – Standard of living variables in HPI

• *Between* Dimensions
  – Across 3 dimensions in HDI/HPI
  – Across Unmet Basic Needs

• *Blended* Approach
Where are weights set in MD poverty measures?

- **Blended approach**: when variables for one dimension are not aggregated separately, but are directly incorporated into a MD poverty measure, but with lower weights, which may or may not be equal. Example: use ‘nested’ weights.
  - 4 dimensions (empowerment E, assets A, nutrition N, schooling S).
  - E, N, S measured by one indicator each
  - Assets: 8 dichotomous indicators, each weighted =ly
  - Weighting: .25, .25, .25. (25/8, 25/8...)
Setting Weights – Rationale(s)

• **Statistical** – by far the most common
  – Different techniques, eg
    • Data-driven
    • Regression-based
    • Covered a bit later on.

• **Normative**
  – Different reasons, eg
    • Importance
    • Priority
Weights between dimensions, for a poverty measure based on capabilities, must be *normative* rather than statistical.

Weights *within* dimensions might be normative or statistical.

Today: focus on normative weights.
Setting weights: The need for *clarity* on the selection of the *procedure* for setting weights. How and why did you set weights?

“Since any choice of weights should be open to questioning and debating in public discussions, it is crucial that the judgments that are implicit in such weighting be made as clear and comprehensible as possible and thus be open to public scrutiny” (Anand and Sen 1997 p. 6)
A note on language – arbitrary

Normative weights are often called ‘arbitrary’ -?

**Arbitrary:** “To be decided by one's liking; dependent upon will or pleasure; at the discretion or option of any one.”

“Derived from mere opinion or preference; not based on the nature of things; *hence*, capricious, uncertain, varying;”

“Unrestrained in the exercise of will; of uncontrolled power or authority, absolute; *hence*, despotic, tyrannical.”

Equal weights

- Most commonly used approach: HDI theory
- Sometimes is called ‘non-weighting’
- But this is not accurate
- Equal weights represent value judgements
- Example:
  - BMI, years of school (0.5)
  - BMI, yrs school, caloric intake, anaemia, (0.25)
- Weight on BMI?
- Weight on health vs ed?
Weights and Choice of Dimension

• Choice of dimensions & weights may both be value judgements
• choices are interlinked
• could choose dimensions to be equal in importance
  – e.g. Atkinson (2002): “the interpretation of the set of indicators is greatly eased where the individual components have degrees of importance that, while not necessarily exactly equal, are not grossly different”
• this is particularly relevant when the same exercise might address the choice of dimensions and of weights – eg expert opinion, participatory exercises
Sen: Normative Weights are Value Judgements

*Kinds of value judgements* required to set weights vary depending on the evaluative exercise.

**Importance:** Absolute importance of a dimension for poverty (national poverty measure across time)

**Priority:** Urgency of making progress in a dimension at a given time (3-year plan)

**Context-specific:** Importance and priority of dimensions in a particular context, which is shaped by the reach and mandate and reporting requirements of the institutions involved (ministry of health, participatory milk cooperative, budget allocations, relevant variables to choose from a given dataset).
Example: Priority

“For example, the ability to be well nourished cannot in general be put invariably above or below the ability to be well sheltered, so that the tiniest improvement of one will always count as more important than a large change in the other. We may have to give priority to the ability to be well nourished when people are dying of hunger in their homes, whereas the freedom to be sheltered may rightly receive more weight when people are in general well fed, but lack shelter.” (Sen 2004, p.78 – Feminist Econ.)
Example: Importance

In some situations, such as the development of a long term multidimensional poverty measure to replace an income poverty line, the weights should reflect the importance of each dimension relative to the other dimensions.

- Long term poverty measure
- Comparative
Need to Justify rationale: 1) normative; 2) priority or importance

Priority
• Time-specific
• M&E
• Institutional powers
• Planning exercises

Importance
• Long term
• More
• Comparative
How should either weights be set (conceptually)?

- What individual does
- What groups do
- What researchers do
- What publication feedback does
It is thus crucial to ask, in any evaluative exercise… how the weights are to be selected. This judgmental exercise can be resolved only through reasoned evaluation. For a given person who is making his or her own judgments, the selection of weights will require reflection rather than interpersonal agreement or a consensus. However, in arriving at an agreed range for social evaluations (e.g. in social studies of poverty), there has to be some kind of a reasoned consensus on weights or at least on a range of weights. This is a social exercise and requires public discussion and a democratic understanding and acceptance (Sen, 1996, p. 397).
• So individual reflects on life; social requires reasoned consensus among people with different values.

• - so are informed by ‘prevailing values’

“In the case of functionings and capabilities, since there are no markets directly involved, the weighting exercise has to be done in terms of explicit valuations, drawing on the prevailing values in a given society.”
• Open to critical scrutiny

It is not so much a question of holding a referendum on the values to be used, but the need to make sure that the weights – or ranges of weights – used remain open to criticism and chastisement, and nevertheless enjoy reasonable public acceptance. **Openness to critical scrutiny**, combined with—explicit or tacit—public consent, is a central requirement of non-arbitrariness of valuation in a democratic society. (Sen 1997: 206)
Aggregation & Range

Disagreement is likely to be durable ~ but dominance and intersection approaches can be used with a range of weights.

“There is no need here for different people, making their respective judgments, to agree on the same list, or on the same weight for the different items; we are individually free to use reason as we see fit. A framework for the analysis of well-being is just that – not a complete solution of all evaluation problems, nor a procedure for interpersonal agreement on relevant judgments.”
But who will bell the cat?

How set weights *in practice*??

Expert Opinion?  
Survey Methods?  
Participatory Methods?  
Combination?
Expert Opinion

Expert opinion has been used to:
• Set priorities in health care
• Devise lists of capabilities, needs and rights.
• Adjust weights of the HDI (Chowdhury and Squire, 2006).

Advantages:
• relatively quick and cheap
• experts grasp complex ideas easily and respond appropriately
• experts to have extensive relevant knowledge
Process:

1. **Select Experts** (number, competence, uncertainty)

2. **Select Choice Procedures**
   - E.g. Voting or external aggregation procedure
   - Consensus building through discussion, reasonable argument and deliberation

3. **Challenges**
   - Expertise on *values* of people
   - How assess expertise vs own views
3. Challenges, cont’d

Tension: experts vs democracy

How revise expert weights?

How often revise expert weights?

Clarifying ‘expertise’ is political (the experts well placed to comment on local value judgments or needs – NGO staff, facilitators, judges – may not be those considered ‘experts’ in academia or development.

Empirical comparisons (Ch & Sq – no difference)
Participatory Approaches

Participatory approaches encourage local people to analyse their own situation, identify priorities, set budgets, develop strategies to further their goals and monitor progress – often with external administrative, technical or financial support.

Eg: Participatory budgeting in Porto Alegre, Brazil – gives rise to rankings
• Participatory budgeting involves three parallel streams of meetings:
  – neighborhood assemblies,
  – “thematic” assemblies,
  – meetings of delegates citywide coordinating sessions.
  – meetings continue throughout the year.

• The first stream discusses fund allocations among districts or neighborhoods of the city for the usual departmental responsibilities, such as water supply and sewage, street paving, parks, and schools.

• The district-based meetings begin with 16 “great assemblies” in public places, including union centers, gyms, churches, clubs, and even a circus tent.
• The government presents its investment plan
• This opens a debate for nine months.
• Each district gives two sets of rankings,
  – one set for requirements within the district (such as pavement, school construction, or water lines), and
  – the other set for efforts which affect the whole city (such as cleaning up the beaches).
• A public debate decides the criteria for allocating investment budget among districts – eg. population, an index of poverty, a measure of shortages (such as a lack of pavement or the lack of a school), etc.
End result: an annual ranking involving 40,000 people.

- What kind of value judgement is this?
- Who is included?
- Is there active sharing of information?
- Is there an exchange of reasons?
- Is it transparent?

- Question: how do you use the rankings.
“Que dicen los pobres”

• Voices of the poor, in Mexico
• 3,000 “poor” people (adults) engaged in participatory processes.
• Groups were asked to **name and rank** the most important aspects of deprivation and they said:
  1. Income
  2. Access of drinking water
  3. Education
  4. Health
  5. Nutrition
  6. Shelter
Questions re: VOP/PRSP participation

- How translate the *rankings* information into *weights*?

- Quality of participation
- When revise?
Challenges of Participatory approaches:

1. Organisation and facilitation
2. Inequality and unfairness in discussions
3. Deliberation vs. bargaining and power imbalances
4. Participation, information and (under)representation
5. Adaptation vs. listening to the poor
6. External Power and Domination
The Contribution of Deliberation

In addition to gathering information, participatory approaches provide a mechanism for public discussion and deliberation, in which participants:

• exchange views and information
• influence proceedings by ‘offering reasons others can accept’
• learn from the experiences of other people and revise their opinions accordingly;
• pool their capacity to analyse the relative merits of different arguments and options; and
• move towards a consensus grounded in the common good.
Using Subjective Wellbeing weights
A newly popular technique – but problematic:

Schokkaert & Fleurbaey 2008

• “happiness data can help us obtain information on individual preferences about the various dimensions of life...”

• “we ...argue against the welfarist use of such data on the ground that this is unlikely to respect individual preferences on what makes a good life.”
Example:

- Consider a rich and a poor person.
- 1) an average inhabitant of Iceland with a university degree, a life expectancy of 81.5 years and an income of $36,510 (PPP-corrected);
- 2) an average inhabitant of Sierra Leone with no schooling, a life expectancy of 41.8 years and an income of $806 (PPP-corrected).
- Both persons have similar answers about their happiness and satisfaction.
- It is still very possible that both have a strong preference for the former's life and could defend such preferences with good reasons.
Socially Perceived Necessities

• Is this item ‘essential for everyone to have in order to enjoy an acceptable standard of living in South Africa today’.

  • Yes
  • No

• Percentage saying ‘yes’
## Percentage of people defining an item as ‘essential’

<table>
<thead>
<tr>
<th>Item</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mains electricity in the house</td>
<td>92</td>
</tr>
<tr>
<td>Someone to look after you if you are very ill</td>
<td>91</td>
</tr>
<tr>
<td>A house that is strong enough to stand up to the weather</td>
<td>90</td>
</tr>
<tr>
<td>Clothing sufficient to keep you warm and dry</td>
<td>89</td>
</tr>
<tr>
<td>A place of worship in the local area</td>
<td>87</td>
</tr>
<tr>
<td>A fridge</td>
<td>86</td>
</tr>
<tr>
<td>Street lighting</td>
<td>85</td>
</tr>
<tr>
<td>Ability to pay or contribute to funerals</td>
<td>82</td>
</tr>
<tr>
<td>Separate bedrooms for adults and children</td>
<td>82</td>
</tr>
<tr>
<td>Having an adult from the hh at home at all times</td>
<td>81</td>
</tr>
<tr>
<td>when children under 10 from the hh are at home</td>
<td>80</td>
</tr>
<tr>
<td>Having police on the streets in the local area</td>
<td>80</td>
</tr>
<tr>
<td>Tarred roads close to the house</td>
<td>80</td>
</tr>
</tbody>
</table>
For the same items, cross-check to double check value vs feasibility

• ‘Please say whether you have each of the following. If you do not have the item please say whether you don’t have it and don’t want it, or don’t have it and can’t afford it.’
  – ‘have’
  – ‘don’t have and don’t want’ [not valued]
  – ‘don’t have and can’t afford’ [capability poor]
Socially perceived necessities

• Individual level responses
  + Democratic
    – Not informed by discussion
• Apply at the individual level? (not done)
• Aggregate – how? Mean?
• Values change; weights change across time?
  – Difficulties in comparisons across time
  – Political considerations
Summary

• Use normative weights between dimensions
• This is an active area of innovation
• Broad approaches each have +/- :
  – Equal Weights
  – Socially Perceived Necessities / SWB
  – Expert opinion
  – Participatory Approaches
Summary cont’d

• Weights affect outcomes significantly
• Must consider not only explicit weights but also transformation, choice of dimensions, and substitutability

• Methodologically:
  – Justify selection of weights clearly
  – Report different weights
  – Perform Robustness tests
“A choice procedure that relies on a democratic search for agreement or a consensus can be extremely messy, and many technocrats are sufficiently disgusted by its messiness to pine for some wonderful formula that would simply give us ready-made weights that are ‘just right.’ However, no such magic formula does, of course, exist, since the issue of weighting is one of valuation and judgment, and not one of some impersonal technology.” (Sen 1999:79)
Part III: Multidimensional Poverty Measures

1. Choice of **Unit of Analysis** (order of aggregation)
2. Choice of **Dimensions**
3. Choice of **Variables/Indicator(s)** for dimensions
4. Choice of **Normalisation** (if relevant)
5. Choice of **Poverty Cutoffs** for each indicator/dimension
6. If relevant **Aggregation within dimensions**
7. Choice of **Weights** within and across dimensions
8. **Identification** (who is poor)
9. **Aggregation** (How much poverty does a society have)
1. Choice of Unit of Analysis

- Options: Individual, HH, Region, Nation
- Affects order of aggregation
- Choice criteria:
  - Focal population (person / nation)
  - Main comparison groups
  - Decomposability
  - Data availability (all from same survey?)
2. Choice of Dimensions

• To start, consult the 10 main categories.

• Three possible justifications of dimensions:
  – Participation
  – Theory
  – Consensus Please write up your justification!

• Choice criteria:
  – Accessibility of existing resources (participation)
  – Existence of political consensus
  – Data availability for dimensions/indicators
  – Required Comparisons
7. Normative Weights

- Recall weights are influenced by many factors other than explicit weights, e.g. Normalisation, # of dimensions, cutoffs.

- Main ways to set normative weights: experts, arbitrary, survey data based, or participatory.

- Choice criteria:
  - What of the above methods are available
  - Extent of contestation
  - Robustness of explicit weights chosen.