Multidimensional poverty in Indonesia
Why we did it?

- To understand the poverty in Asia?
- ... and what we could do with it? (⇒ Policy advise)
- ... and how could we finance it? (⇒ Budget constraints)
- ... and how we could track progress? (⇒ Policy monitoring)
Debates on dimensions

- Material deprivation – everybody agreed
- Education – everybody agreed
- Health and nutrition? – debates
  - BMI + Access to water? – is it enough?
  - BMI? – but this is not complete measure of health
- Health? or Water and sanitation? – debates
  - %morbidity/mortality explained by water-borne diseases
- Utilities? – debates
  - Water? Sanitation? Electricity? Or all three?
What informed our debates?

- Public debates and expert opinions
  - Education, Health and access to Utilities are seen as the key for quality of life

- Empirical
  - BMI –is not complete measure of health (dropped)
  - Aggregating education at household level – use maximum years of schooling
  - Expenditures poverty threshold – 2000 kcal, consumption basket for deciles 2-4

- Additional statistics
  - $X\%$ of wells are microbiologically contaminated $\Rightarrow$ unsafe water source

- (ideally) Factor Analysis
  - Restricted database
  - Time constraints
Dimensions and Indicators

- **Material deprivation**
  - per capita expenditures less than 150’000Rs

- **Education**
  - maximum education in household less than 6 years

- **Health (Water and sanitation)**
  - no access to safe water source
  - no access to safe sanitation

- **Utilities**
  - no access to electricity

- **Nested weights**
  - Stata *really* liked it 😊
H and M0 for various k

Policy Advice: k=2
Unidimensional vs Multidimensional

Poor at least in two dimensions
## Correlation of dimensions

<table>
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<th></th>
<th>Income</th>
<th>Education</th>
<th>Health: Water</th>
<th>Health: Sanitation</th>
<th>Health: Severe</th>
<th>Health: Soft</th>
<th>Utilities</th>
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</table>
Policy Advice: Focus on Rural, as they suffer (i) combined and (ii) deeper deprivation
Where should we focus?

- Contribution to M0
- Contribution to M2

Utilities
Health (Water and sanitation)
Education
Material deprivation

$\Rightarrow$ Budget discussion: What is the cost of lifting from 'health' poverty?
...In the ideal world

- **Education**
  - compliment by enrollment

- **Health (Water and sanitation)**
  - is this water source really safe?
  - availability vs non-contamination
  - health status—real or self-reported
  - access to health services?

- **Utilities**
  - fuel for cooking?

- **New dimensions**
  - Employment and labour?
  - Peace and order?
  - Empowerment?
Maximum vs Expected YoEdu

- **Household**
  - Father 34 yo, 5 years, non-enrolled
  - Mother 33 yo, 3 years, non-enrolled
  - Son, 13 years, 5 years, enrolled grade 6
  - Son, 10 years, 2 years, enrolled grade 3
  - Daughter, 8 years, 1 year, enrolled grade 2

- Maximum YoEd criteria ➔ **poor**
- Maximum YoEd + Enrollment ➔ **non-poor**