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# WIDER Development Conference

## Think development - Think WIDER

Parallel Session 1.3  
Poverty, Inequality and Jobs

**Discussant: Paola Ballon**

September 13, 2018



# Discussion

Based on three papers:

**Paper 1:** Eradicating **poverty** by 2030:

Implications for **income inequality**, population policies, food prices (*and faster growth?*), by Giovanni Andrea Cornia.

**Paper 2:** How does the sectoral composition of **employment** affect **inequality?**, by Arief Yusuf, Padjadjaran and Andy Sumner.

**Paper 3.** The role of **inequality** in **poverty** measurement, by Sabina Alkire and James Foster.

# Outline



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- Highlights of the papers presented: aim and findings
- Multidimensionality of Poverty in the Development Discourse  
    Multidimensional Dashboard, Overlapping Poverty
- Comments

# I. Highlights

## Paper 1 Cornia

Examines whether the 2030 **planned** eradication of **monetary poverty** (SDG 1) is compatible with the **expected** trends of its *immediate* **determinants** - GDP growth, population growth, income inequality and food prices.

Findings: 20 -36% of the studied countries will not reach the SDG 1 monetary target.

## Paper 2 Yusuf & Sumner

Examines the sectoral **composition of employment** (structural transformation – ‘Kuznets’) and its effect on **income inequality** across provinces in Indonesia.

Findings: Kuznets somehow verified.  
Inequality ↑: employment share of industry ↑ and when employment share of some services ↑ (high turning points)

## Paper 3 Alkire & Foster

Examines whether inequality can be usefully incorporated into the Alkire and Foster (2011) poverty measures.  
They propose a new axiom: **Dimensional Transfer**.

Findings: They find a general impossibility theorem that shows the conflict between two key axioms: **Dimensional Breakdown** and **dimensional transfer**.

## II. Multidimensionality of Poverty in the Development Discourse

- The 2015 Sustainable Development Agenda acknowledges poverty as multidimensional.

*Target 1.2:* by 2030, reduce at least by half the proportion of men, women and children of all ages living in **poverty** in all its **dimensions** according to national definitions

*Report of the Commission on Global Poverty (World Bank)*

# Report of the Commission on Global Poverty (World Bank)

- **Recommendation 11:** The Bank should publish, alongside the global poverty count, a portfolio of Complementary Indicators, including a multidimensional dashboard of outcome indicators..]
- **Recommendation 18:** The World Bank should establish its own requirements with regard to the measurement of nonmonetary poverty, for inclusion in the Complementary Indicators (including the **overlapping poverty measure**) and in other World Bank uses...]

# Multidimensional Dashboard vs. Overlapping Poverty

Table 2.5 Illustration of Overlapping Poverty Index

	Health	Education	Shelter	Personal security	Deprivation score	Poor (with $k = 2$ )	Censored deprivation score
<i>Household</i>							
1	1	1	1	0	0.75	Yes	0.75
2	1	1	0	0	0.50	Yes	0.50
3	0	1	0	0	0.25	No	0
4	0	0	1	0	0.25	No	0
5	1	0	0	0	0.25	No	0

Note: 1 = below deprivation threshold; 0 = above threshold. Households are assumed to be equal in size. Dimensions each receive a weight of 0.25, so the score for household 1 is 3 times 0.25. On this basis, 2 out of 5 individuals are suffering multiple deprivation ( $k$  is 2 or greater), so that the headcount ratio,  $H$ , is 40 percent.

Multidimensional dashboard

Overlapping poverty

### III. Comments: Paper 1 - Cornia

$$\underbrace{\frac{\Delta H}{H_{-1}}}_{\text{\% change in monetary } H} = f \left[ \underbrace{\frac{\Delta z}{z_{-1}}}_{\text{Growth effect}}, \underbrace{\frac{\Delta Y}{Y_{-1}}}_{\text{Growth effect}}, \underbrace{n, \frac{\Delta Gini}{Gini_{-1}}, \Delta Gini}_{\text{Inequality effect - prices}} \left[ \frac{FPI}{CPI} > 1.25\% \right], IT \right]$$

% change in monetary  $H$       Growth effect      Inequality effect - prices

1. How feasible would be to extend the comparative-static, poverty-accounting model to a:

*Multidimensional Dashboard?*

% change in non-monetary headcounts (education, health)

*Multidimensional Overlap ?*

% change in multidimensional headcount poverty

% change in the intensity of multidimensional poverty

% change in deprivation ratios among the poor (“censored deprivation ratios)

2. Is it possible to identify the “immediate” determinants?



### III. Comments: Paper 2 – Yusuf & Sumner

$$I_{it} = \alpha + \sum_{j=1}^J (\beta_j s_{jit} + \gamma_j s_{jit}^2) + \sum_{k=1}^K \theta_k x_{kit} + \delta_i + \varepsilon_{it}$$

Income inequality measure      Share of employment by sector      Control variables

1. Study a non-monetary “Kuznets” argument:

*Multidimensional Dashboard?*

On measures of inequality in education, child (mal)nutrition; and assess in what extent the conclusions obtained in the monetary space hold.

*Multidimensional Overlap ?*

On measures of multidimensional inequality, such as the  $M_0^2$  (AF, 2018).

2. Extend the Kuznets argument to study group inequality (horizontal inequality) with monetary/non-monetary indicators?

### III. Comments: Paper 3 – Alkire & Foster

$$M_0^\gamma = \mu(c^\gamma(k)), \gamma \geq 0$$

1. Interpretability of  $M_0^2$  for comparisons over time/or with varying parameters of measurement (indicators, dimensions)

While  $M_0^0$ ,  $M_0^1$ , the headcount ratio (incidence), and the adjusted headcount ratio (breadth of deprivation) can be expressed as 0-1 values,  $M_0^2$  is presented as a positive number, with larger values denoting greater inequality. It may result useful to “find the maximum” of  $M_0^2$  and express the information conveyed in a normalised form, as reported by Gini/Theil measures.



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**Thanks.**