Global trends in multidimensional poverty and horizontal inequalities in poverty

Francesco Burchi German Institute of Development and Sustainability (IDOS)



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Background and objectives



- Limited evidence of trends in multidimensional poverty
- Existing evidence based on the global MPI shows that poverty has declined almost everywhere, and nowhere it has increased (Alkire et al., 2020)
- In a recent study we looked at the trends in multidimensional poverty in 54 countries during the MDG era using two different indices (G-M0 and G-CSPI) (Burchi et al., 2022).
- ➤ Here we expanded the analysis to a longer time-frame (1996-2018) and a larger sample of countries (85)
- Objectives: 1) to assess poverty trends; 2) to examine horizontal (rural/urban; gender) disparities in poverty

Two indices: G-CSPI and G-M0



Main features of the indices:

- They incorporate 3 key dimensions: education, health and work (Burchi et al., 2018, 2020, 2021)
- ➤ They are individual-based measures of poverty: focus on 15-65 years old individuals → 64% of the population in LICs and MICs
- Calculated for over 700 household surveys (about 104 countries), using the International Income Distribution Database (I2D2) established by the World Bank.

Measurement of multidimensional poverty



Dimension	Weight	Indicator	Deprived if	
Fulfilling work	1/3	Employment status	Person is unemployed & seeking a job, or is employed in a low-pay/low-quality sector	
Adequate education	1/3	Literacy & S	Person is unable to read, to write or both	
		Years of education	Person has less than 4 years of schooling	
		Educational level	Person has no education	
Access to water & sanitation (health)	1/3	Access to safe drinkable water and adequate sanitation	Person has no access to drinkable water and no access to adequate sanitation	

Measurement of multidimensional poverty -2



- > The G-CSPI uses CSPI measure (Rippin, 2014, 2017)
- ➤ The G-M0 uses the adjusted headcount ratio or "M0" measure (Alkire and Foster, 2011) with k=2
- ➤ While the G-M0 is fully decomposable by dimensions, the G-CSPI is distribution-sensitive and can be decomposed in the 3 l's of poverty: incidence, intensity and *inequality* (Burchi et al., 2021, 2022).
- By using both indices we can make a more robust assessment of poverty trends

Data and methods



- > Time-frame: 1996-2018
- > Focus on longer-term trends (>=5 years) rather than short-term fluctuations
- > Final sample: 85 countries

Region	No. of countries	% of the sample	
East Asia & Pacific	12	14.1	
Europe & Central Asia	15	17.7	
Latin America & Caribbean	18	21.2	
Middle East & North Africa	2	2.4	
South Asia	5	5.9	
Sub-Saharan Africa	33	38.8	
TOTAL	85		

- > In total, poverty estimates for 487 data points (5.7 per country, on average)
- > Here focus mostly on absolute and relative changes between baseline and endline year

Multidimensional poverty trends

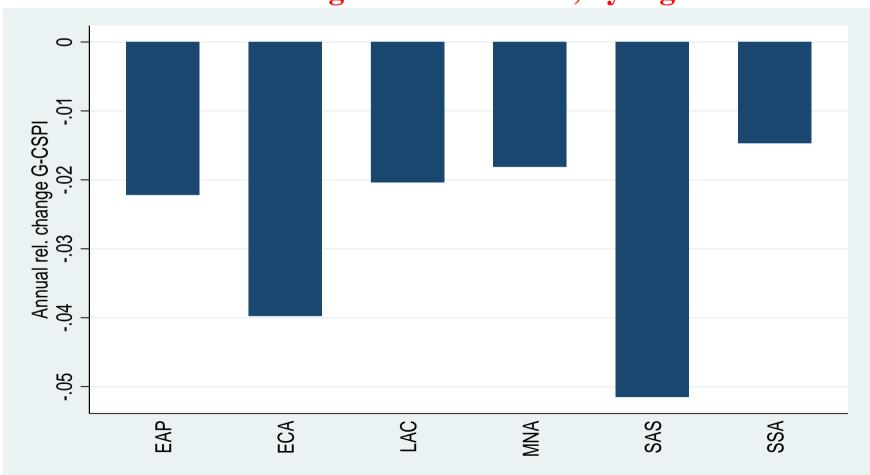


- About 85% of the countries succeeded in reducing multidimensional poverty
- The largest progress was in South Asia
- ➤ The lowest progress was in Sub-Saharan Africa, where about 25% of the countries witnessed an increase in the G-CSPI (even more with the G-Mo)

Number and % of countries reducing poverty, by region & measure

	G-CSPI		G-M0 (k=2)	
	No. countries reducing poverty	% reducing poverty	No. countries reducing poverty	% reducing poverty
Total sample	72	84.7	70	82.4
East Asia & Pacific (EAP)	11	91.7	10	83.3
Europe & Central Asia (ECA)	13	86.7	13	86.7
Latin America & Caribbean (LAC)	17	94.4	17	94.4
Middle East & North Africa (MNA)	1	50	1	50
South Asia (SAS)	5	100	5	100
Sub-Saharan Africa (SSA)	25	75.8	24	72.7

Relative changes in the G-CSPI, by region



- ➤ The mean annualized change in the G-CSPI was -0.41 pp in *absolute* terms and -2.4% in *relative* terms
- ➤ South Asia is clearly the region with the fastest relative decline in poverty (-5.2% in the G-CSPI)
- ➤ SSA saw the lowest progress, with an average annual relative decline in the G-CSPI of 1.47%

Source: own elaborations

Income vs. multidimensional poverty trends

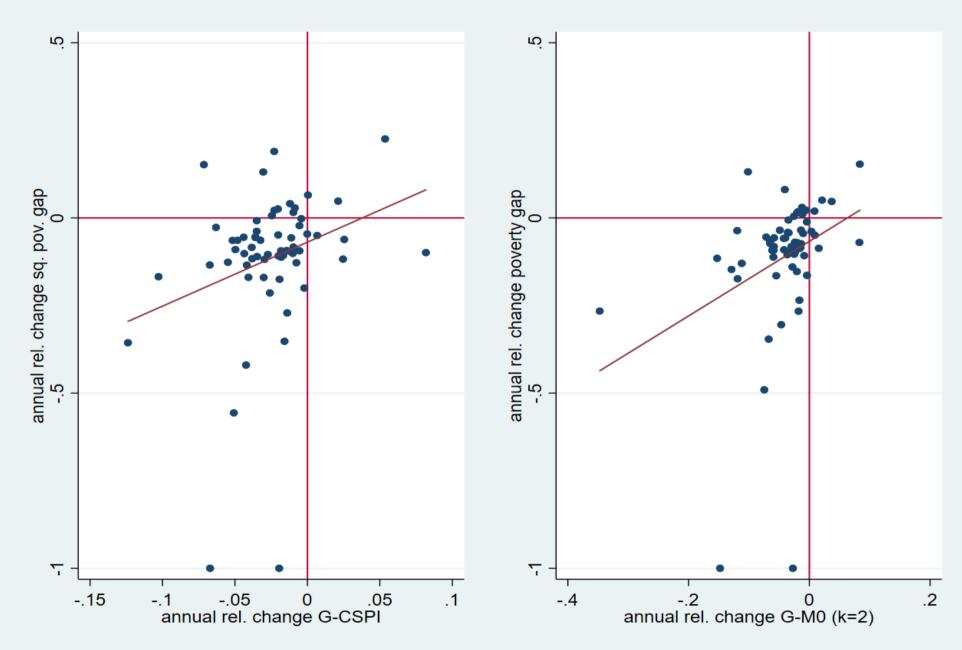


- ➤ Income poverty (US\$ 2.15) and multidimensional poverty move in the same direction in 50 countries (80%): in 47, both decline and in 3 both rise
- ➤ In the remaining 20% of the countries, they move in opposite directions
- ➤ Positive correlation, but not strong (rho ≈ 0.3)
- ➤ The annualized relative change was -11.3% for income poverty and -2.4% for the G-CSPI (left panel)



- ➤ Progress in poverty reduction was much faster for income poverty than for multidimensional poverty: 4.7 times faster with G-CSPI and 2.7 times with G-M0.
- Economic growth reduces income poverty substantially (5-8 times) more than multidimensional poverty (Balasubramanian et al., 2023)

Relative changes in multidimensional and income poverty (63 countries)

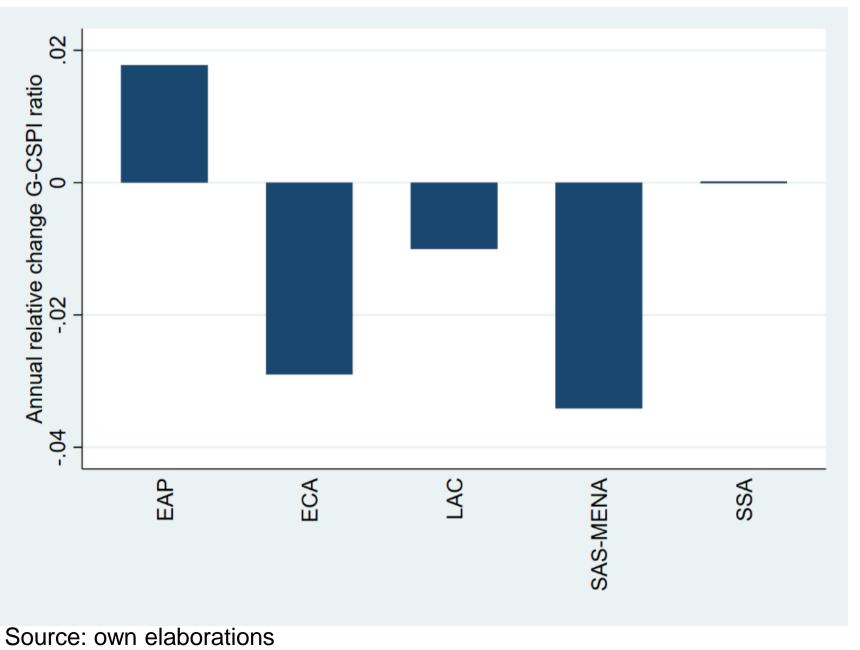


Source: own elaborations

Rural-urban disparities in poverty



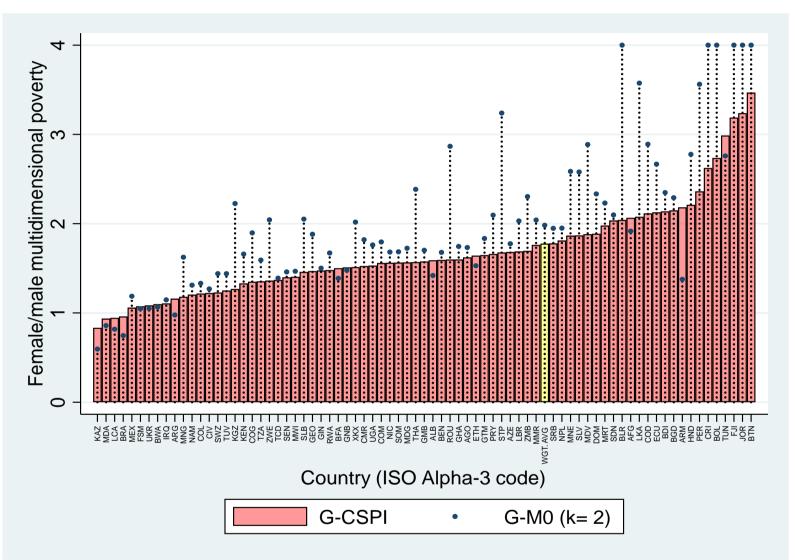
- At the baseline, in 72 out of 74 countries rural poverty exceeded urban poverty
- On average the rural poverty was 3.1 times higher than urban poverty
- More countries experienced a decline in rural poverty than in urban poverty
- As a consequence, the average ratio fell to 2.7
- The largest relative decline in the rural/urban G-CSPI ratio occurred in the South Asia & MENA region (-3.4%) and ECA (-2.9%)
- No change in SSA and even an increase by 1.8% in EAP



Gender disparities in poverty



- Enormous challenges in assessing gender disparities in poverty
- ➤ In a recent paper (Burchi and Malerba, 2023), we used a revised version of the G-CSPI and G-M0 to examine the female/male poverty ratios in 76 countries
- Results: in 72 countries female poverty exceeded male poverty
- On average, multidimensional poverty is about 60% higher among women
- ➤ The largest gender disparities were found in MENA and South Asia



Source: Burchi and Malerba, 2023

Conclusions



- ➤ Multidimensional poverty has declined in the vast majority of the countries, with an average relative reduction of nearly 2.4% annually
- ➤ Progress has been uneven across regions. In particular, SSA was the region with the slowest relative reduction in poverty (-1.47% per year).
- Income and multidimensional poverty may even move in opposite directions and multidimensional poverty has declined substantially less (about 3-4 times)
- Poverty reduction is driven by improvements in education and health, and by the performance of rural areas rural/urban poverty gap has fallen
- Progress in poverty eradication has not been as remarkable as believed and interventions succeeding in alleviating income poverty are not necessarily effective in reducing multidimensional poverty (see economic growth)
- Anti-poverty policies should primarily focus on SSA, women, rural households, and on ensuring decent jobs

German Institute of Development and Sustainability (IDOS)

Tulpenfeld 6

53113 Bonn

Deutschland

Telefon +49 228 94 927-0

Telefax +49 228 94 927-130

presse@idos-research.de

www.idos-research.de

