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Comparing global trends in multidimensional and income poverty and assessing horizontal inequalities

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DC**



- Background
- Research gaps
- Research questions
- Indicator, methods and data
- Results
- Conclusions and policy implications



Background

Poverty reduction has long been at the center of targets and goals of the international development community.

Two major changes have occurred with the SDGs (2030 Agenda).

1. poverty is no longer viewed strictly in monetary terms, but rather as a multidimensional phenomenon: SDG 1 “*end poverty in all its forms everywhere*”.
2. Focus on different social groups and not just on the aggregate level

Given these policy goals it is crucial to (be able to) assess trends of BOTH income and multidimensional poverty (for different groups).



Current research gaps (1)

While empirical evidence has shown the significant decrease of income poverty from 1990 to 2015 (from 36% to 10%).....

....little evidence is, however, available on trends with regards to other dimensions of poverty. Why?

- Methodological and data availability issues (Dotter & Klasen, 2014; Tran et al., 2015).
- A comparison between the trends in multidimensional and income poverty as presented in the current literature is not straightforward (different years and surveys)

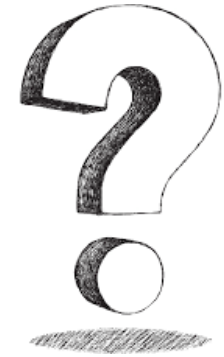


Current research gaps (2)

- Rural vs urban poverty
 - In the 1970s, Lipton (1977) argued that many governments in developing countries tend to allocate disproportionately more resources to urban areas for political economy reasons.
- Current rural/urban income poverty estimates are only based on national poverty lines
- Those based on international poverty lines are not available due to the significant differences in prices
- These problems are substantially alleviated when measuring poverty in the multidimensional space.



Against this background, this paper explores two research questions:



- (1) Has multidimensional poverty in low- and middle-income countries declined since the MDGs? More or less compared to income poverty?
- (2) Is there still an urban bias? Did it change over time?



A new indicator

The analysis relies on a new indicator of multidimensional poverty, the **Global Correlation Sensitive Poverty Index (G-CSPI)** ([Burchi, Rippin & Montenegro, 2018](#))

Main features of the G-CSPI:

1. Strong theoretical basis (Sen's capability approach);
2. Encompasses three dimensions that largely overlap with those obtained by expanding the constitutional approach: education, decent work and access to drinking water & sanitation (proxy for health);
3. The aggregation function, the CSPI (Rippin, 2016, 2018), accounts not just for poverty incidence and poverty intensity (as the MPI) but also for inequality among the poor;
4. The unit of analysis is the individual (and not the HH) in the 15-65 age group.

The G-CSPI: dimensions, indicators, thresholds and data



| | Main analysis | | |
|---------------------------------------|---------------|--|--|
| Dimension | Weight | Indicator(s) | Poor if... |
| Fulfilling work | 1/3 | Employment status | Person is unemployed & seeking a job, or is employed in a low-pay/low-quality sector |
| Adequate knowledge | 1/3 | Literacy | 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 neither access to drinkable water nor to adequate sanitation |

- **Household Data:** the source is *The International Income Distribution Database (I2D2)*, a worldwide database drawn from nationally representative HH surveys and consisting of a standardized set of demographic, education, labor market, household socioeconomic and income/consumption variables.



Data:

- G-CSPI estimated using the I2D2 data.
- 102 countries and more than 550 surveys

The estimated G-CSPI has several methodological advantages:

- Same surveys and years of income poverty measures
- it is an individual measure

In this paper we focus on the 1998-2015 period (MDGs)

- 3 sub-periods: 1998-2003, 2004-2008, 2009-2015
- countries (60) with data for first sub-period and at least one of the other two sub-periods.

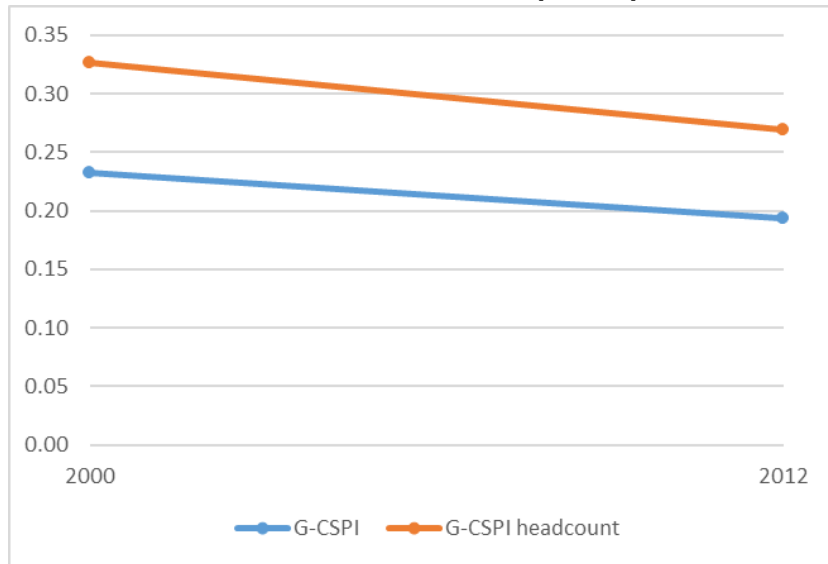


Results



RQ1: trends in multidimensional poverty

G-CSPI trends, 2000-2012 (n=48)

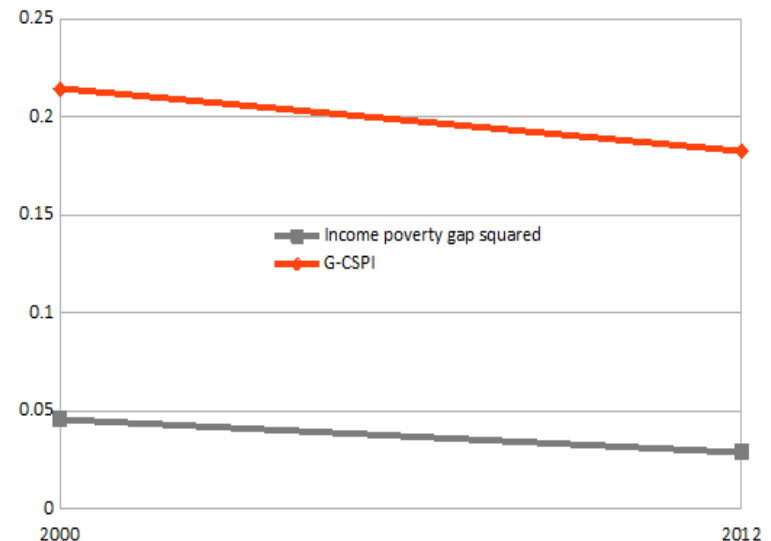


Multidimensional poverty has decreased by 17%

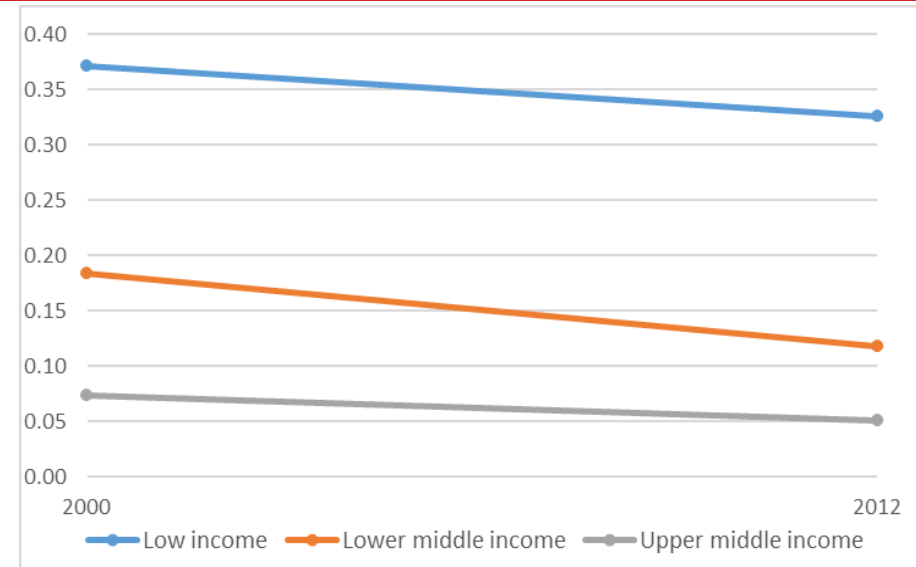
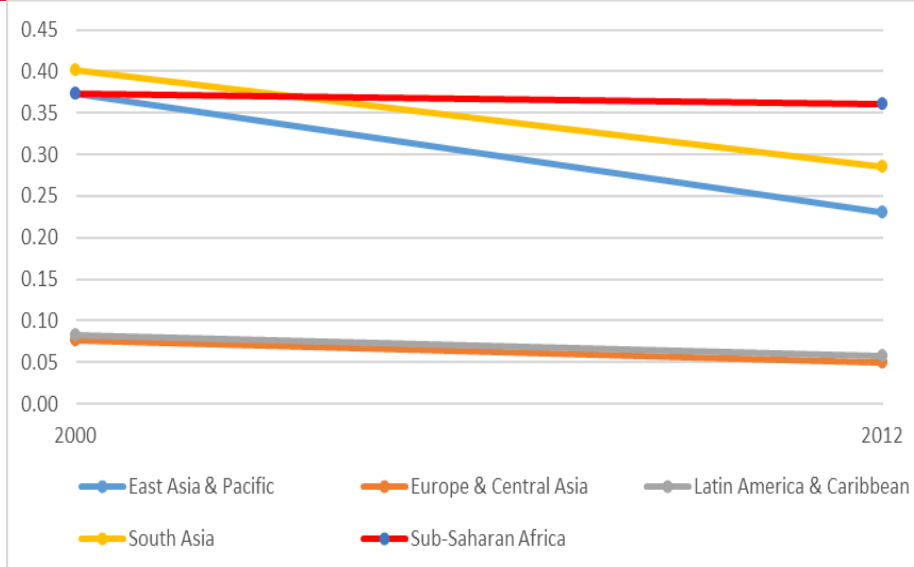
Both income and G-CSPI poverty fell between 2000 and 2012.

However, the decline in (extreme) income poverty (gap squared) in percentage terms was 2.5 times as large as the decline in multidimensional poverty (37% vs. 15%).

Trends in income and G-CSPI poverty, 2000-2012 (n=42)



RQ1: trends by region and economic classification



There is significant heterogeneity across regions and income groups.

- Multidimensional poverty declined the most in Asia, converging towards the relatively low levels of Latin America and Europe...while SSA's slow progress further distanced it from other regions.
- Lower middle-income countries experienced the largest decrease (from 0.18 to 0.12, a reduction of 36%), immediately followed by Upper middle-income countries (-32%).
- Low income countries decreased their poverty by just 12%.

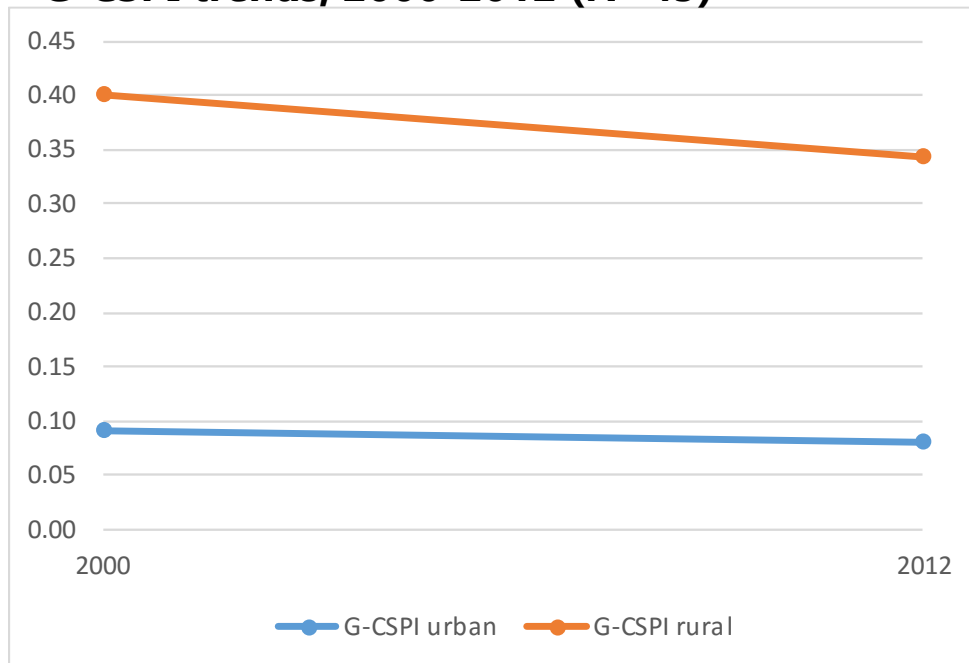
Results (RQ2)



Poverty is predominantly a rural phenomenon: around 2000 the rural G-CSPI was more than four times the urban G-CSPI.

- This difference remained nearly constant over time.
- Estimated rural-urban gap is larger than the one for income poverty (Castañeda et al., 2018): rural poverty 3.3 times w.r.t. urban one.
- Rural poverty exceeds urban poverty everywhere

G-CSPI trends, 2000-2012 (N=45)



Trends in urban bias, 2000-2012 (n=45)

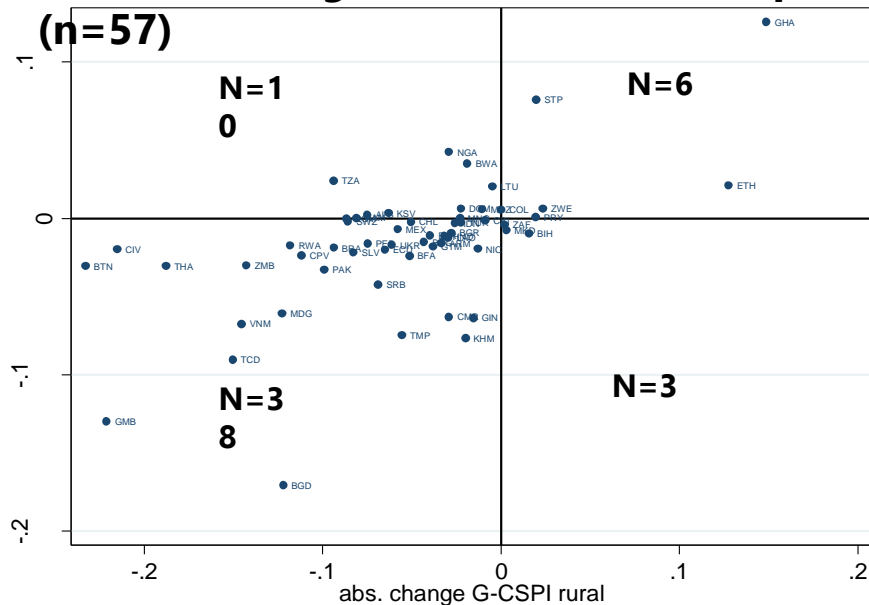
| | 2000 | 2012 |
|---|-------|--------|
| Rural/urban G-CSPI ratio | 4.390 | 4.293 |
| Absolute change in rural/urban G-CSPI ratio | | -0.097 |
| Percentage change in rural/urban G-CSPI ratio | | -2.22% |



RQ2: Changes in rural and urban poverty

Absolute changes in rural and urban poverty

(n=57)

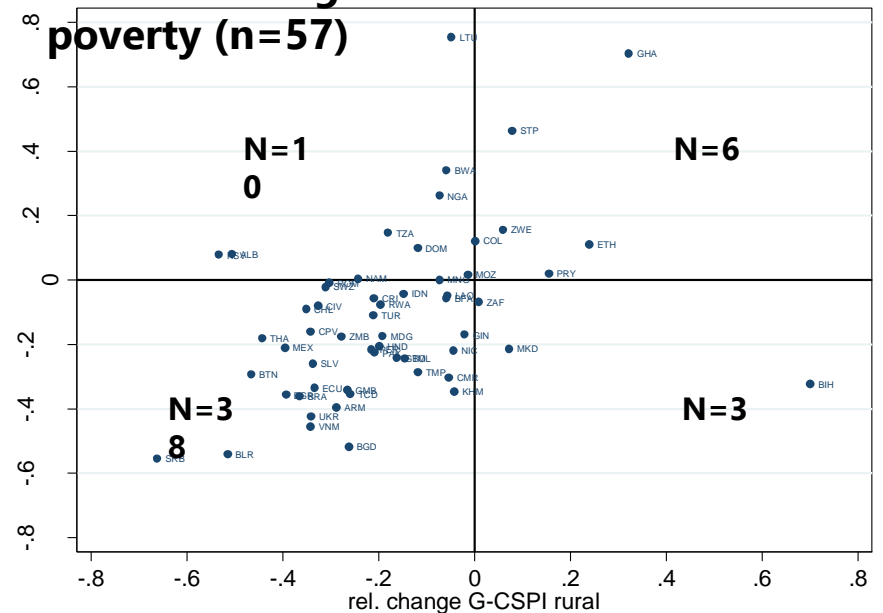


Rural poverty declined in 48 out of 57 countries: urban poverty in 41 countries.

Heterogeneity by country

- in 15 out of 21 countries in SSA rural poverty declined more than urban poverty, thus contributing to reduce the rural-urban gap.

Relative changes in rural and urban poverty (n=57)





Conclusions and policy implications

- With this new index, we were able to address important research gaps
- Multidimensional poverty has decreased by around 17% between 2000 and 2012...
- but...income poverty has declined significantly more than multidimensional poverty (more than twice as much).
- High heterogeneity across regions and income groups.
 - This confirms findings from monetary poverty studies and points to the existence of poverty traps.
 - the progress in poverty eradication has not been as great as believed; need for stronger efforts in tackling the different forms of poverty
- the two forms of poverty are complements rather than substitutes; especially in some countries they differ substantially.



Conclusions and policy implications

- The findings confirm that poverty is predominantly a rural phenomenon.
 - The urban bias on average did not change between 2000 and 2012
 - Despite the recent emphasis on urbanization and rural-urban migration, a considerable part of poverty-alleviating efforts should still focus on improving the lives of rural households.
- Future (current research):
 - We find that economic growth correlates with poverty reduction, but this elasticity is much lower for our G-CSPI than for income poverty. This finding is in line with that of Santos et al. (2019) for the MPI
 - Gender differences



Thank you!

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