

On data availability and recommendations for a multidimensional poverty index (MPI).

ECLAC, Statistics Division

Geneva, December 2019



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Plan of the presentation



Why we need a multidimensional poverty index (MPI)?



Why we estimate an MPI now??



What dimensions and indicators were selected in Latin America MPIs?



Why official MPI are not comparable between countries?



Do we really need a regional MPI for Latin America?



Why we don't use global MPI as regional MPI to Latin America?



How is the process of building a MPI adopted by ECLAC?



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¿Why we need an MPI?



To identify and measure poverty directly, knowing if people satisfy a set of basic needs, rights or functionings. (Sen, 1978/81; [Altimir, 1979](#))



To evaluate the results of social policies.



To follow the 1.2.2 indicator in SDG's which call the countries to reduce at least at half the poverty rate for women and men in all the age groups, in all the dimensions according with national definitions.



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“Poverty is also, from the point of view of measurement, a multidimensional concept, whose ideal application should be the establishment of normative standards of satisfaction or adequacy for each representative indicator, whether of a group of needs or of a type of resources, depending on the approach chosen to measure living standards.”
(Altimir, 1979, p. 24)



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Why we estimate an MPI now? Because...



Could be constructed

We have data

We have computational and methodological developments (calculation, aggregation)



Add information & value

We expand the possibility information frontier beyond monetary measures

We can associate monetary and non-monetary poverty measures

We can link poverty with other variables



Connect w/ policy demands

We can give clear indicators to measure the achievements in poverty policies

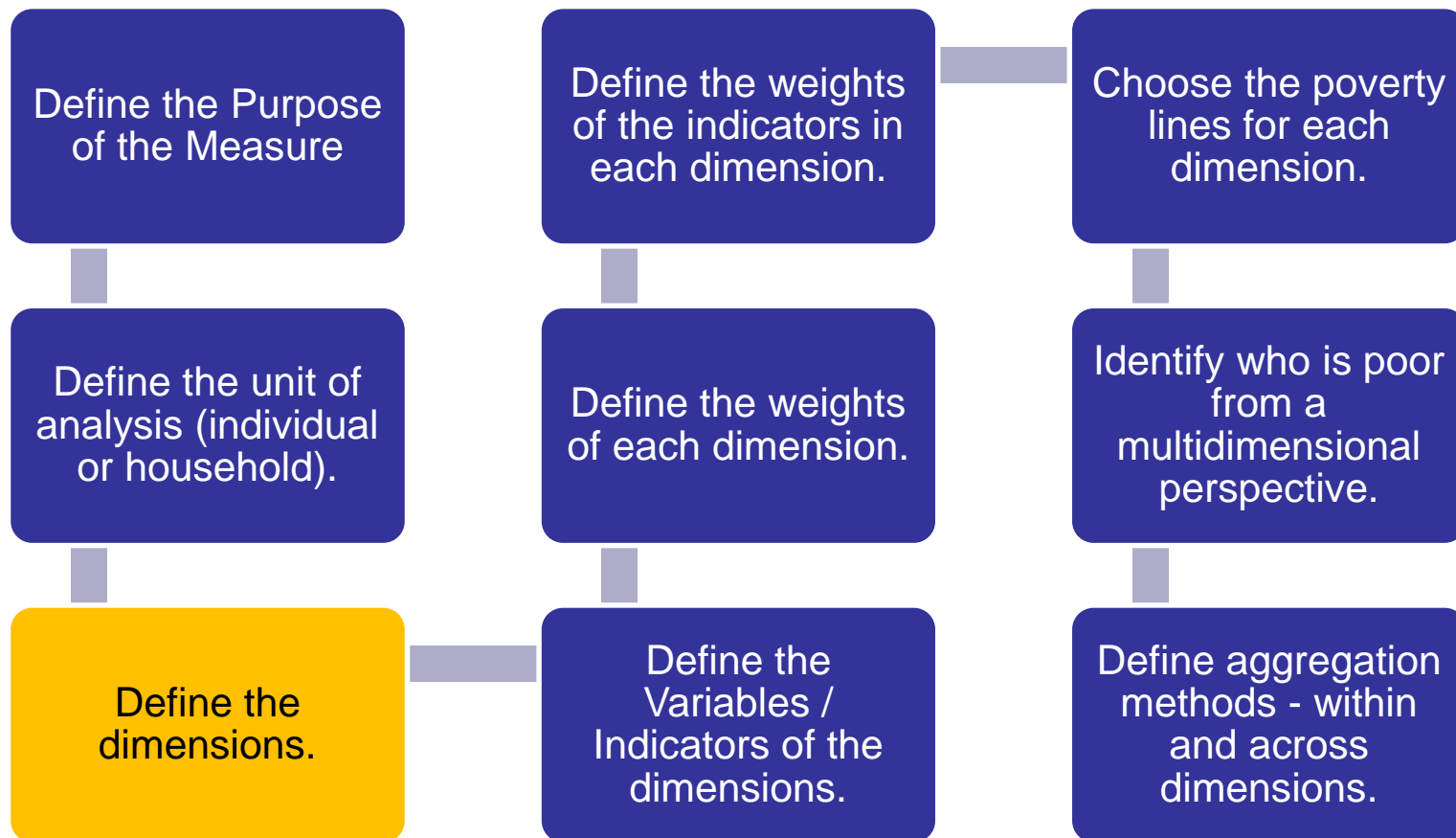
We could elaborate new metrics and objectives



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How we create an MPI? Applying the Alkire-Foster method



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What is a dimension?



Conceptual categories in which the indicators are organized.



Constituent elements of social policy areas.



Constructs developed or used by national and international agencies to achieve development goals.



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What dimensions were selected by Latin American countries for their official MPI?

- There are 9 countries in Latin America with official MPI poverty measures. Paraguay will be the 10th.
- They selected between 4 and 6 of dimensions.

Dimension	CHL	COL	CRI	DOM	ECU	ELS	HND	MEX	PAN
Education	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Health	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Housing, living standards and basic services	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Employment and social protection	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Environment	Yes		Yes	Yes		Yes			Yes
Digital divide, networks and social cohesion	Yes		Yes	Yes		Yes			
Child and youth conditions		Yes							



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Why are not directly comparables?

As an example, Education is present as a dimension in all official Latin America MPI's, but not all the countries uses the same indicators to define it.

EDUCATIONAL INDICATORS IN NATIONAL MPI

INDICATORS	CHL	COL	CRI	ECU	ELS	HND	MEX /a	PAN
FIRST CHILD CARE AND EDUCATION		X	X		X			
SCHOOL ABSCENSE	X	X	X	X	X	X	X	X
ABSENCE OF HIGHER EDUCATION FOR ECONOMIC REASONS				X				
SCHOOL LAG	X	X	X		X			
SCHOOL REPETITION								X
ADULT ACHIEVEMENT	X	X	X	X	X	X	X	X
ILLITERACY		X				X		X



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Moreover, they do not coincide in the way of implementing the indicator of Adult Educational Achievement, which is common to all MPI

INSUFFICIENT EDUCATIONAL ACHIEVEMENT INDICATORS IN ADULTS, NATIONAL MPI

COUNTRY	REFERENCE POPULATION	NEED OR INSUFFICIENCY INDICATOR	AGGREGATION CRITERIA
CHILE	18+ Y.O.	YEARS OF SCHOOLING UNDER THE OFFICIAL OBLIGATORY LIMIT, BY AGE	AT LEAST 1 PERSON IN HOUSEHOLD
MÉXICO	BORN BEFORE 1982	INCOMPLETE PRIMARY EDUCATION	DOES NOT APPLY
	BORN IN 1982 AND AFTER	INCOMPLETE SECONDARY EDUCATION	DOES NOT APPLY
COLOMBIA	15+ Y.O.	LIVING IN A HOUSEHOLD WITH AN AVERAGE YEARS OF EDUCATION BELOW 9	ALL PEOPLE 15 Y. O. AND MORE
	5+ Y.O.	ILLITERACY	AT LEAST 1...
COSTA RICA	18-24 Y.O.	INCOMPLETE HIGH SECONDARY EDUCATION	AT LEAST 1...
	25-35 Y.O.	INCOMPLETE HIGH SECONDARY EDUCATION	IF NO ONE IN THE HOUSEHOLD ACHIEVE
	36-57 Y.O.	INCOMPLETE LOWER SECONDARY EDUCATION	IF NO ONE IN THE HOUSEHOLD ACHIEVE
	58-64 Y.O.	INCOMPLETE PRIMARY EDUCATION	IF NO ONE IN THE HOUSEHOLD ACHIEVE
	65+ Y.O.	DOES NOT APPLY	DOES NOT APPLY



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INSUFFICIENT EDUCATIONAL ACHIEVEMENT INDICATORS IN ADULTS, NATIONAL MPI

COUNTRY	REFERENCE POPULATION	NEED OR INSUFFICIENCY INDICATOR	AGGREGATION CRITERIA
ECUADOR	18-64 Y.O.	< 10 YEARS OF SCHOOL	UNKNOWN
	65+ Y.O.	DOES NOT APPLY	DOES NOT APPLY
EL SALVADOR	18-64 Y.O.	INCOMPLETE SECONDARY EDUCATION	AT LEAST 1 PERSON IN HOUSEHOLD
	65+ Y.O.	INCOMPLETE PRIMARY EDUCATION	AT LEAST 1...
HONDURAS	15-49 Y.O.	6 OR LESS YEARS OF SCHOOLING	AT LEAST 1...
	15+ Y.O.	ILLITERACY	AT LEAST 1...
PANAMÁ	18-30 Y.O.	INCOMPLETE LOWER SECONDARY EDUCATION	AT LEAST 1...
	31-59 Y.O.	INCOMPLETE PRIMARY EDUCATION	AT LEAST 1...
	60+ Y.O.	ILLITERACY	AT LEAST 1...



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Why do we need a regional MPI?



National IPMs are designed to produce the most relevant and reliable estimates of poverty at the country level.



As a result, national IPMs are not comparable between countries in the indicators, dimensions, thresholds and aggregation criteria used



Because the national indexes differ and the poverty identification differ, isn't possible to aggregate this indexes for a regional poverty estimation without a previous harmonization.



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Why have we not adopted the global index for the region?



The Global IPM aims to measure acute poverty in as many developing countries as possible



As a result, some sufficiency standards may be undemanding for the countries of relatively greater development in the region (eg electricity, housing materiality, education indicators)



Other indicators in the Global IPM (health dimension: malnutrition and infant mortality) are not available in most household surveys of countries

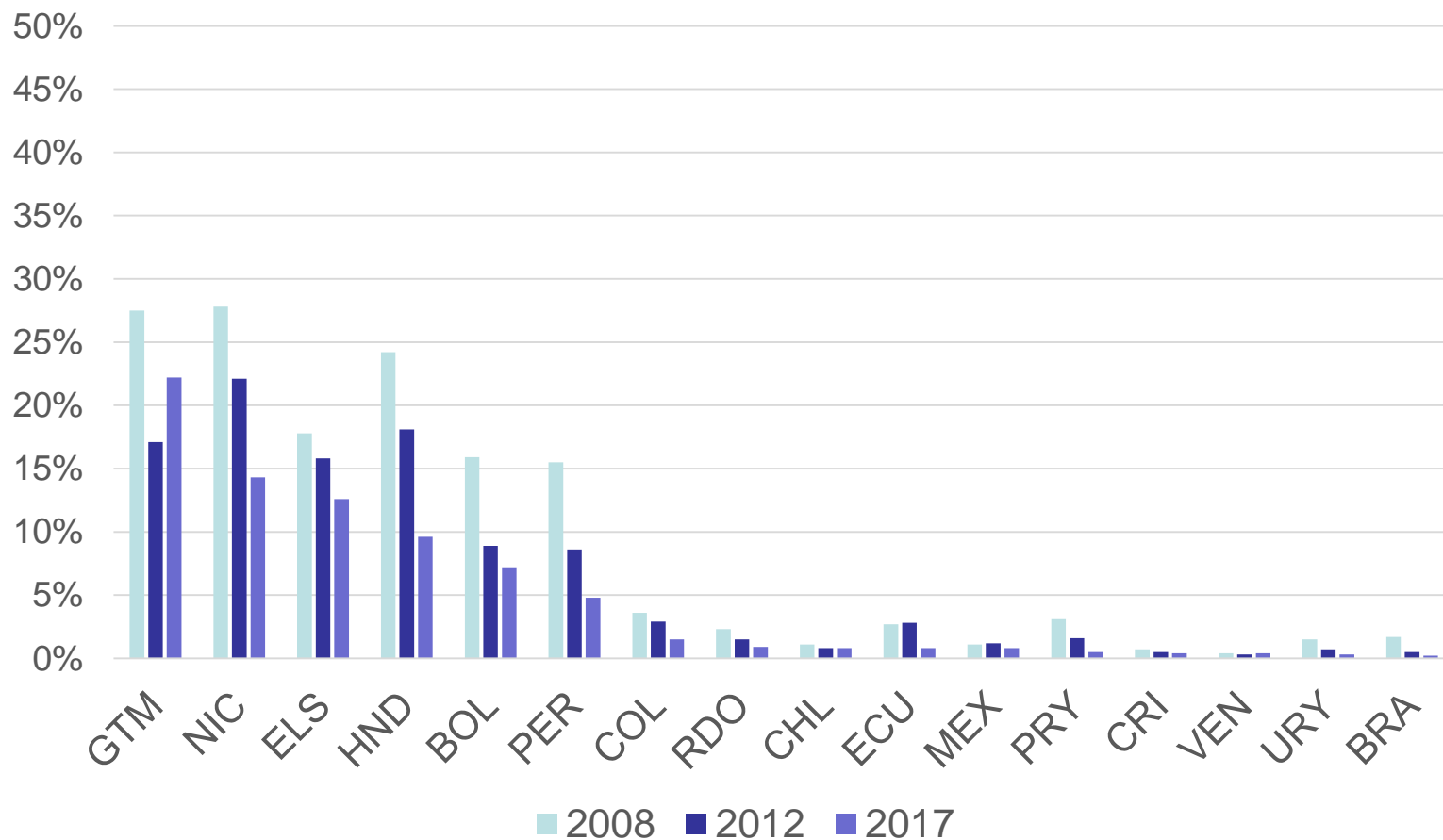


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Some examples of undemanding standards for middle and high income countries in LA

LATIN AMERICA (16 COUNTRIES): POPULATION WITHOUT ACCESS TO PUBLIC ELECTRICITY, 2008, 2012 Y 2017



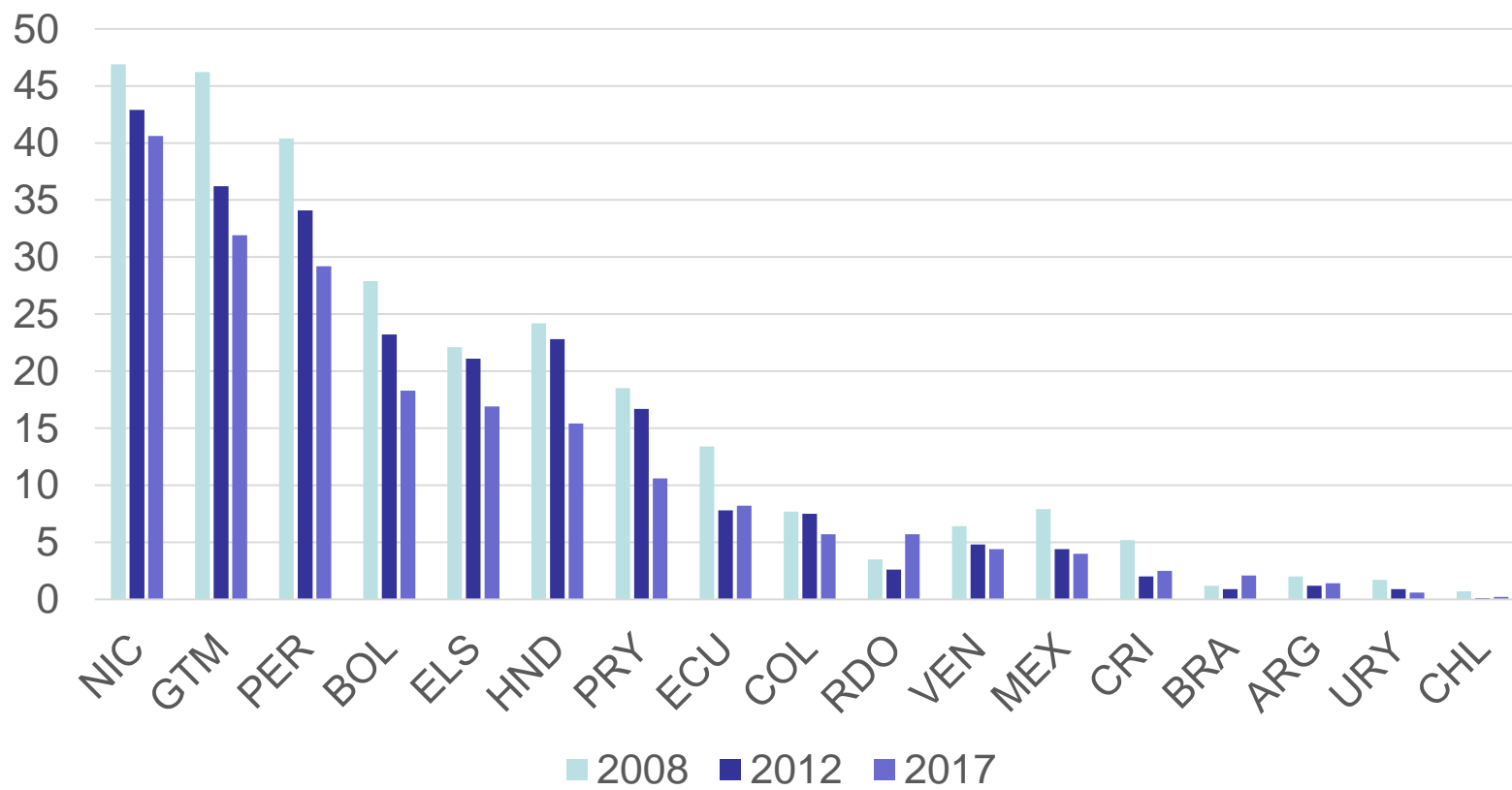
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Some examples of undemanding standards for middle and high income countries in LA

LATIN AMERICA (17 COUNTRIES); DEPRIVED POPULATION IN HOUSING MATERIALITY, 2008, 2012 Y 2017

(Percentages)

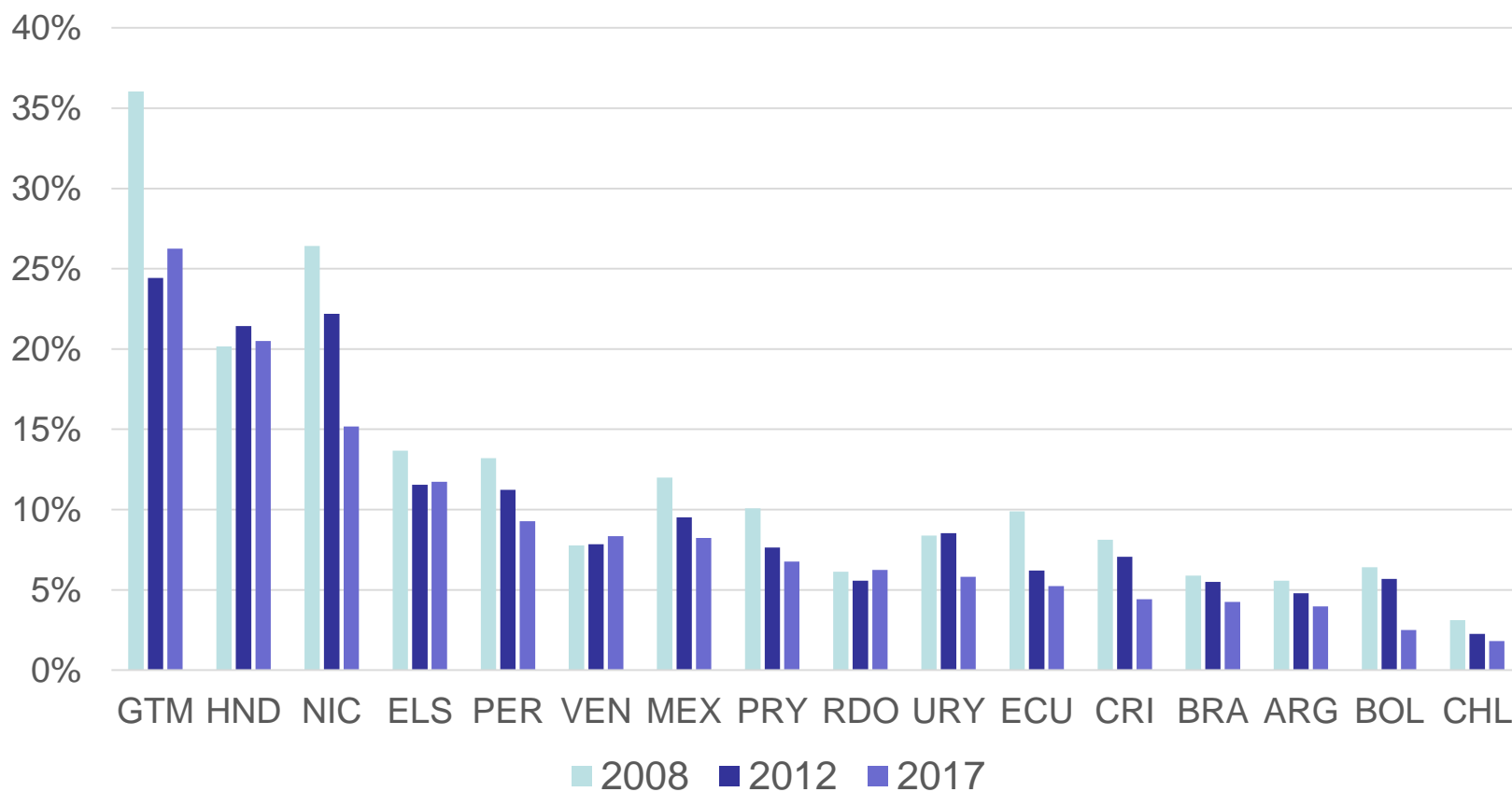


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Some examples of undemanding standards for middle and high income countries in LA

LATIN AMERICA (16 COUNTRIES): SCHOOL UNATTENDANCE IN 6 TO 17 YEARS OLD POPULATION, 2008, 2012 Y 2017



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How to build a regional MPI? First, we need data. Next, we need to harmonize the data. Last, but not least, you need to apply the Alkire-Foster method to your data.

- ECLAC have a harmonized database repository of HS (BADEHOG) with 267 databases from 18 countries for 2000's years.

	ARG	BOL	BRA	COL	CRI	CHL	DOM	ECU	GTM	HND	MEX	NIC	PAN	PER	PRY	SLV	URY	VEN
2000																		
2001																		
2002																		
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Regional MPI faces all the challenges of harmonization



From different countries

With different institutional/societal setups



Over time

Managing changes in institutions and surveys



Accessing to household or personal data

With confidentiality issues



From various datasets and different kind of surveys

Output or ex-post harmonization
Or, if you are lucky, pre-harmonization

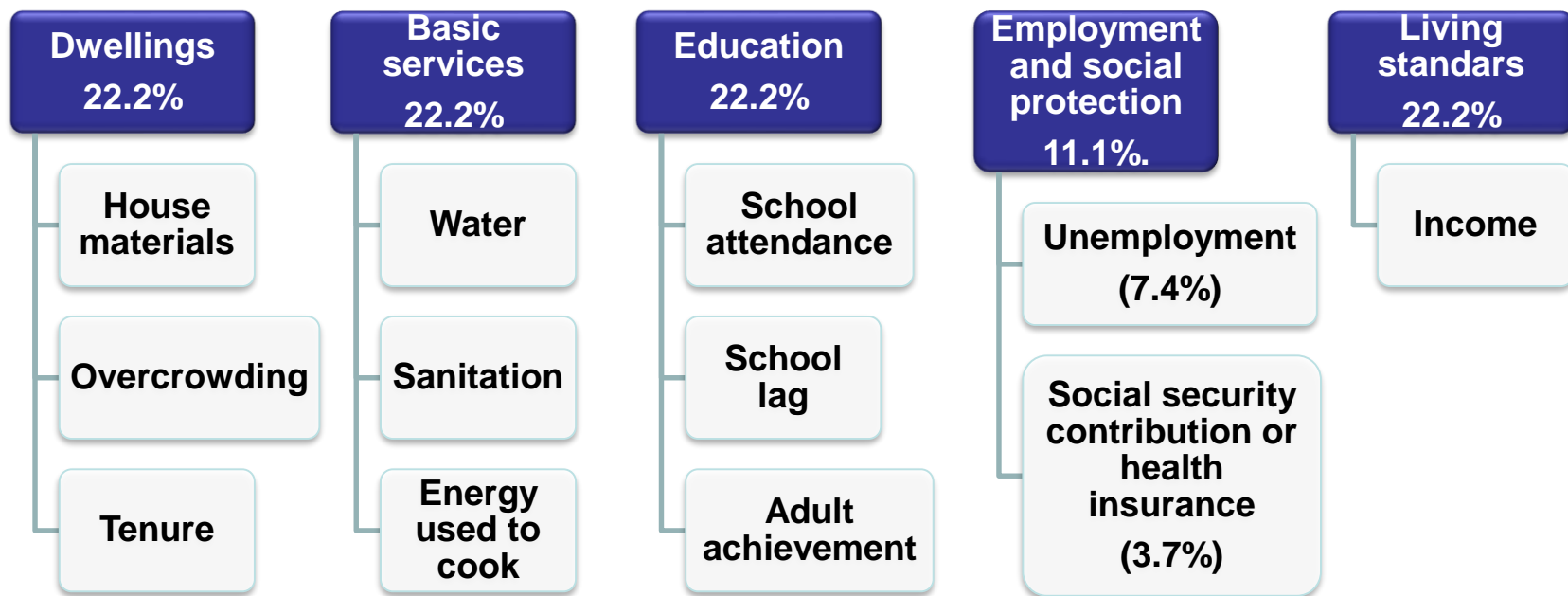


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But, if you obtain the data, and can harmonize it, eventually you can create a regional MPI

Five years ago ECLAC made its first attempt to have a regional MPI for Latin America countries



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Social Panorama of Latin America, 2014.

Santos y Villatoro, Review of Income and Wealth, 2018.

Now, ECLAC's Statistics Division are driving the construction of a new regional MPI



Applying Alkire-Foster method over a 3 years testing database of 18 countries, adding new harmonized variables.



Including other ECLAC's areas (Social Development Division, Economic Development Division, Population Division and Gender Division) (near 15 meetings in more than a year)



The process includes a consultation of the procedures and the results with the countries, once the regional index were defined (giving scripts and databases to allow the countries inspection)



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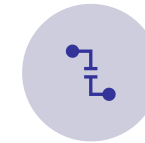
A final recommendation



First, **build trust** between the actors.



Second, **build consensus** between incumbents on the relevance and feasibility of a regional index. Collect evidence about **lack of comparability** of national indexes.



Third, a process of **harmonization** of databases is required, whether ex-ante or ex-post.



Fourth, **go through** all the stages of the **Alkire-Foster** process. **Iterate** in each of them the necessary times until reaching a consensus on the methodology and its results.



Fifth, **participate the results** to the incumbents being particularly careful to point out the purpose of comparability of the index and the differences with the national indices.



Finally, keep in mind that **it is a process that takes time and needs the goodwill** of people who are not under your command.



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**Muchas gracias por
vuestra atención.
(Thank you for your
attention)**



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