Uruguay

EquityTool: Released November 20, 2018

Source data: Uruguay MICS 2012-13

# of survey questions in original wealth index: 34
# of variables in original index: 63

# of survey questions in EquityTool: 11
# of variables in EquityTool: 13

Questions:

	Question	Option 1	Option 2	Option 3
Q1	Does your household have… a non-mobile telephone (landline)?	Yes	No	
Q2	… a water heater?	Yes	No	
Q3	… a microwave?	Yes	No	
Q4	… a DVD player?	Yes	No	
Q5	… an air conditioner?	Yes	No	
Q6	… a computer or laptop (not including computers provided by Plan Ceibal)?	Yes	No	
Q7	… internet connection?	Yes	No	
Q8	Does any member of your household own a car or truck?	Yes	No	
Q9	What type of toilet do members of your household generally use?	Flush to piped sewer system toilet	Flush to septic system toilet	Other

Q10	What is the main material of the roof of your home?	Metal/tin roof	Cement roof	Other
Q11	What is the main material of the floor of your home?	Cement floor	Other	

Technical notes:

The standard simplification process was applied to achieve high agreement with the original wealth index. Kappa was greater than 0.75 for the national index. Details on the standard process can be found in this article. The data used to identify important variables comes from factor weights derived from the reconstruction of the MICS Wealth Index using analytical syntax provided by UNICEF.

The MICS wealth index for Uruguay is constructed using a similar approach as the DHS Wealth Index. However, usually the DHS analysis involves the creation of separate indices for urban and rural populations which are then combined to create a national wealth index. In the case of Uruguay MICS 2012-13, a national index was created directly without separating urban and rural populations. This is because more than 90% of the population in Uruguay is considered urban. This EquityTool also only provides national wealth quintiles and not urban quintiles.

More information about how the DHS Wealth Index is constructed can be found here. Factor weights used in the construction of the Uruguay MICS 2012-13 EquityTool are available upon request.

Level of agreement:

	National Population (n=3,568)
% agreement	84.3%
Kappa statistic	0.755

Respondents in the original dataset were divided into three groups for analysis – those in the 1st and 2nd quintiles (poorest 40%), those in the 3rd quintile, and those in the 4th and 5th quintiles (richest 40%). After calculating their wealth using the simplified index, they were again divided into the same three groups for analysis against the original data in the full MICS. Agreement between the original data and our simplified index is presented above.
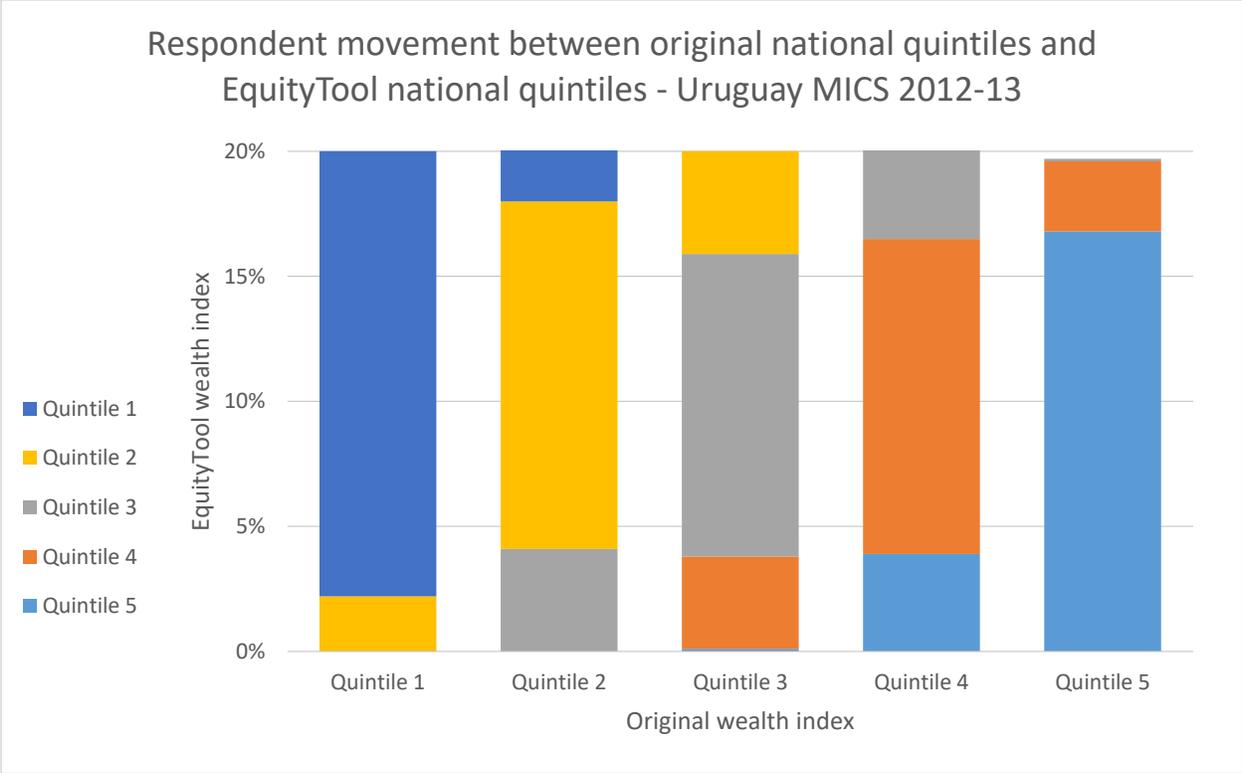
What does this mean?

When shortening and simplifying the index to make it easier for programs to use to assess equity, it no longer matches the original index with 100% accuracy. At an aggregate level, this error is minimal, and this methodology was deemed acceptable for programmatic use by an

expert panel. However, for any given individual, especially those already at a boundary between two quintiles, the quintile the EquityTool assigns them to may differ to their quintile according to the original MICS wealth index.

The graph below illustrates the difference between the EquityTool generated index and the full MICS wealth index. Among all of those people (20% of the population) originally identified as being in the poorest quintile, approximately 89% are still identified as being in the poorest quintile when we use the simplified index. However, approximately 11% of people are now classified as being in Quintile 2. From a practical standpoint, all of these people are relatively poor. Yet, it is worthwhile to understand that the simplified index of 11 questions produces results that are not identical to using all 34 questions in the original survey.

The following table provides the same information on the movement between national quintiles when using the EquityTool versus the original MICS wealth index:

		EquityTool National Quintiles					
		Quintile 1	Quintile 2	Quintile 3	Quintile 4	Quintile 5	Total
Original MICS National Quintiles	Quintile 1	17.80%	2.20%	0.00%	0.00%	0.00%	20.00%
	Quintile 2	2.10%	13.90%	4.10%	0.00%	0.00%	20.10%
	Quintile 3	0.00%	4.10%	12.10%	3.70%	0.10%	20.00%
	Quintile 4	0.00%	0.00%	3.60%	12.60%	3.90%	20.20%
	Quintile 5	0.00%	0.00%	0.10%	2.80%	16.80%	19.70%
	Total	19.90%	20.10%	19.90%	19.20%	20.90%	100%

Data interpretation considerations:
1. This tool provides information on relative wealth – 'ranking' respondents within the national population. The most recent available data from the WorldBank indicates that 3.7% of people in Uruguay live below $5.50/day[1]. This information can be used to put relative wealth into context.
2. Some departments in Uruguay are wealthier than others. It is important to understand the country context when interpreting your results.
3. In most cases, your population of interest is not expected to be equally distributed across the five wealth quintiles. For example, if your survey interviewed people exiting a new car dealership, you would probably expect most of them to be relatively wealthy.

Metrics for Management provides technical assistance services to those using the EquityTool, or wanting to collect data on the wealth of their program beneficiaries. Please contact equitytool@m4mgmt.org and we will assist you.

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[1] From povertydata.worldbank.org, reporting Poverty headcount ratio at $1.90/day at 2011 international prices.