

## El Salvador

EquityTool: Released October 24, 2017

Source data: El Salvador MICS 2014

# of survey questions in original wealth index: 44

# of variables in original index: 115

# of survey questions in EquityTool: 12

# of variables in EquityTool: 14



# Questions:

Questions.								
	Question	Option 1	Option 2	Option 3				
	Does your household own:		·					
Q1	a refrigerator?	Yes	No					
Q2	a fan?	Yes	No					
Q3	a non-mobile telephone?	Yes	No					
Q4	a washing machine?	Yes	No					
	Does any member of your household have:							
Q5	a watch?	Yes	No					
Q6	a bank account?	Yes	No					
Q7	What is the main source of drinking water for members of your household?	Bottled Water	Other					
Q8	Where is the main source of water for household activities, such as cooking and washing, located?	Inside the home	Elsewhere					

Q9	What type of toilet facility do members of your household generally use?	Flush toilet to piped sewer	Other	
Q10	What type of fuel is mainly used for cooking in your household?	Wood	LPG	Other
Q11	What is the main material of the roof of your dwelling?	Sheets of asbestos	Other	
Q12	What is the main material of the floor of your dwelling?	Earth/Sand	Cement blocks	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 and urban indices. 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 El Salvador is constructed using the same approach as the DHS Wealth Index. More information about how the DHS Wealth Index is constructed can be found <a href="here">here</a>. Factor weights used in the construction of the El Salvador MICS 2014 EquityTool are available upon request.

## **Level of agreement:**

	National Population	Urban only population
	(n=12,507)	(n=7,350)
% agreement	85.0%	84.8%
Kappa statistic	0.765	0.762

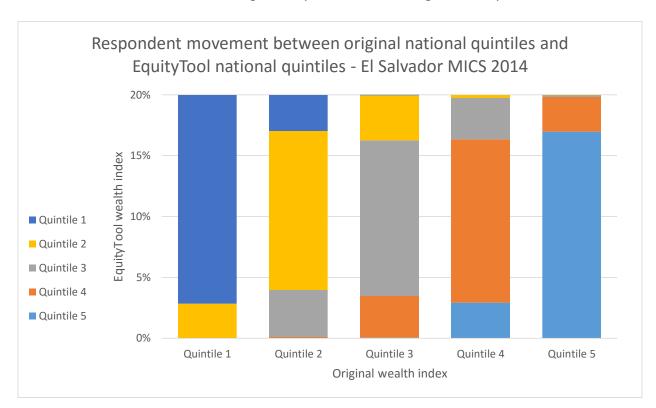
Respondents in the original dataset were divided into three groups for analysis – those in the 1<sup>st</sup> and 2<sup>nd</sup> quintiles (poorest 40%), those in the 3<sup>rd</sup> quintile, and those in the 4<sup>th</sup> and 5<sup>th</sup> quintiles (richest 40%). After calculating their wealth using the simplified index, they were again divided into the same three groups for analysis against the original data in the full MICS wealth index. 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 17.2 % are still identified as being in the poorest quintile when we use the simplified index. However, approximately 2.8 % 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 12 questions produces results that are not identical to using all 44 questions in the original survey.

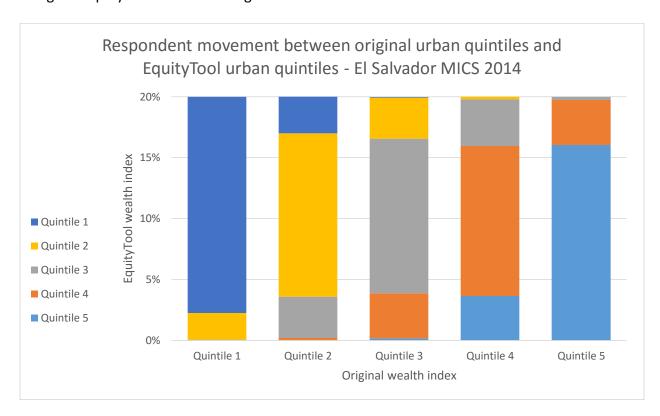


The following table provides the same information on the movement between national quintiles when using the EquityTool versus the original MICS wealth index:

		EquityTool National Quintiles					
		Quintile 1	Quintile 2	Quintile 3	Quintile 4	Quintile 5	Total
Original	Quintile 1	17.2%	2.8%	0.0%	0.0%	0.0%	20%
MICS	Quintile 2	2.9%	13.1%	3.9%	0.1%	0.0%	20%
National	Quintile 3	0.1%	3.7%	12.8%	3.4%	0.0%	20%
Quintiles	Quintile 4	0.0%	0.3%	3.4%	13.4%	2.9%	20%
	Quintile 5	0.0%	0.0%	0.2%	2.9%	17.0%	20%
	Total	20.2%	19.9%	20.3%	19.8%	19.9%	100%



The following graph provides information on the movement between urban quintiles when using the EquityTool versus the original MICS wealth index:



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

		EquityTool Urban Quintiles					
		Quintile 1	Quintile 2	Quintile 3	Quintile 4	Quintile 5	Total
Original	Quintile 1	17.8%	2.2%	0.1%	0.0%	0.0%	20%
MICS	Quintile 2	3.0%	13.4%	3.4%	0.2%	0.0%	20%
Urban	Quintile 3	0.1%	3.4%	12.7%	3.7%	0.2%	20%
Quintiles	Quintile 4	0.0%	0.2%	3.9%	12.3%	3.7%	20%
	Quintile 5	0.0%	0.0%	0.3%	3.7%	16.1%	20%
	Total	20.8%	19.2%	20.2%	19.9%	19.9%	100%

### **Data interpretation considerations:**



- 1. This tool provides information on relative wealth 'ranking' respondents within the national or urban population. The most recent available data from the WorldBank indicates that 1.9% of people in El Salvador live below \$1.90/day¹. This information can be used to put relative wealth into context.
- 2. People who live in urban areas are more likely to be wealthy. In El Salvador, 31.2% of people living in urban areas are in the richest national quintile, compared to only 1.8% of those living in rural areas<sup>2</sup>.
  - a. If your population of interest is predominantly urban, we recommend you look at the urban results to understand how relatively wealthy or poor they are, in comparison to other urban dwellers.
  - b. If the people you interviewed using the EquityTool live in rural areas, or a mix of urban and rural areas, we recommend using the national results to understand how relatively wealthy or poor they are, in comparison to the whole country.
- 3. Some departments in El Salvador are wealthier than others. It is important to understand the country context when interpreting your results.
- 4. 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 shopping mall, 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 <a href="mailto:support@equitytool.org">support@equitytool.org</a> and we will assist you.



<sup>&</sup>lt;sup>1</sup> From povertydata.worldbank.org, reporting Poverty headcount ratio at \$1.90/day at 2011 international prices.

<sup>&</sup>lt;sup>2</sup> From the El Salvador dataset household recode, available at http://www.mics.unicef.org/surveys